OUTLINES OF AGRICULTURAL ECONOMICS

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CHAPTER XXVI

MARKETING FARM PRODUCTS

The problem. Thus far we have studied the economic principles which underlie the activities of farmers in bringing agricultural products into existence. This is usually called the economics of production. We now turn to the problem of marketing.

The term "marketing" as used to-day means more than selling. Although a farmer who hauls wool shorn from his own flocks to the local town and sells it to the local buyer may be said to have marketed his wool, the term has come to take on a much wider significance and is now used to cover all activities involved from the time the product leaves the producers until it reaches the consumer. The term marketing covers not only all these merchandizing activities, but also the problem of a fair division of the proceeds among all who take part in the production and distribution of the product. All that is covered by the question, "Who gets the money?"

Marketing is a productive function because it adds place or time utility to commodities. From another point of view the economics of marketing is a problem in distribution because it has to do with the forces and conditions which determine how a dollar paid by the consumer is divided among those who participate in supplying the article, from the farmer at one end to the retail dealer on the other end of a longer or shorter line of middlemen. We are interested in marketing as a productive activity from the point of view of introducing economies into the system and thus reducing the cost of service to the benefit of all concerned. We are interested in the marketing problem also from the standpoint of establishing a just division of a consumer's dollar among those who participate in all the work involved in producing and delivering the product at the point where a consumer gets it.

Direct sale. Some products are carried by the producer to the consumer. Here the problems of efficiency and fairness are relatively simple. Milk sold in a small city is a good example of direct sale. Potatoes and garden truck are sometimes sold in this way. In some places farmers carry their produce to a market place to which consumers come to make purchases. These sales all imply proximity of producer and consumer and hence are limited to products raised in the neighborhood where they are consumed.

By means of public carriers, such as parcel post, express companies, and railways, farm produce may be carried great distances directly to consumers. In this case there is, of course, one intermediate organization which, acting as an agent, renders a middleman service for a fixed rate of charge.

Each form of direct sale has its difficulties. Where goods are carried directly to consumers the producer and consumer must in some way find each other and come to some agreement as to terms of sale. For example, a farmer who lives five miles from town has a few tons of timothy hay to sell. He telephones to the liverymen, the ice and coal men, the operator of the sand pit, because these men keep large numbers of horses. One liveryman is found who wants one load of hay and the sand man takes one load; but the roads are good, it is early spring before work in the field has begun, and other farmers are anxious to sell hay. So many farmers offer hay at the market price that the buyers believe the market will break. As a result the hay is left on the farm, the wagon stands empty, the horses stand munching hay in the barn, and the farmer turns to his wood splitting. By the next week the fields are dry enough for spring work and the men are pushing themselves and the horses hard to get the oats seeded. Just when a farmer has it figured out that he can finish a given field by Saturday night, the telephone rings and the sand man wants a big load of hay right away at the old price, of course, at which he did not care to stock up when the farmer was free to haul, for he is out of hay and must have a load. The farmer debates the matter in his own mind. Time in the field in oat-sowing is very valuable — possibly as high as two dollars an hour for a man and team. To haul a load of hay will take a man and team five hours, making an opportunity cost of ten dollars to haul the hay; whereas, if the hay could have been hauled when field work could not be done, the opportunity cost would have been no more than a dollar.

The conclusion arrived at is as follows: I can't leave my crop work to haul hay. The number of days I can work in the field is very limited and I have planned all the field work which can be accomplished during the available time. Hence I had better sell the hay for less money and choose my own time for hauling it. But to sell it all and choose my own time, I must have it baled and sell it to the feed man who will keep it in stock and sell it to the sand man when he wants it. Thus, after some experience, the thoughtful farm manager decides to abandon the direct sale of hay, and yet many of his neighbors sell hay direct and deliver it when it is wanted. Many market gardeners have tried hawking their goods on the streets or standing in the market place awaiting customers. The main difficulty is that the time thus spent can be used more profitably by a good gardener working on his land. The result is that the more successful gardeners decide to sell their produce wholesale and devote their energy to the problems of economy in production, leaving the retailing of garden truck to those who are at the same time retailing other things and making a business of it.

The milk business succeeds better on the direct sale basis for the reason that a line of customers can be secured who take about the same amount of milk from day to day. When a farmer's milk wagon starts out each morning, the driver knows where he is going and to whom the milk will be sold. If the route is badly scattered, this becomes an expensive system; but for farmers living near the city there is often profit in it.

One of the main difficulties in delivering milk from the farm is the production of an even supply of milk for the trade. Some months too much is produced; other months not enough. Disposal of the surplus in the one case and finding means of increasing the supply at another time worries the farmer milkman and, in many instances, makes him glad to leave the distribution of milk to a man who makes that his business. The larger the city and the farther a farmer has to drive in order to get to his customers, the more desirable it is to introduce the milk dealer who is, of course, a middleman.

Where distances are too great for the meeting of producer and consumer, direct shipment may be resorted to. Butter, eggs, poultry, and vegetables have been shipped to special customers. While this method has rarely proved cheaper than other systems because of the smallness of the shipments and the expense of the packages, yet it has proved a means of putting high quality produce into the hands of those who appreciate quality and are willing to pay the price.

Sales to and through middlemen. The development of modern systems of transportation, the growth of great industrial cities, and the expansion of specialized commercial agriculture have brought with them a complex middleman system which needs to be studied carefully with a view to its better organization, greater economy, and more justice.

For some products the market may be said to be world-wide, because the production of the entire world is effective in determining the market price. This is true of wheat, wool, cotton, sugar, tea, silk, and many other staple products in general use. Liverpool has for a long time been the central wheat market of the world. Being a port situated on the outer edge of the wheat-deficit area of western Europe, Liverpool became the objective point of shipments of wheat from all wheat ports of the United States, Canada, South America, Australia, New Zealand, India, and Russia. In each of the countries producing a surplus of wheat, primary wheat markets were established. In the United States these central wheat markets were established at Chicago, Minneapolis, St. Louis, Kansas City, and many other points to which the wheat is shipped from the farmer's local station. Thus there are many stages, many processes, and many middlemen between the wheat producer and the bread consumer. The local grain dealer buys grain at all times in any quantity and of almost any quality a farmer has to sell. He holds it in his warehouse until he has a carload lot and then ships it to a primary market, consigning it to some commission firm at that point for sale. At this point the wheat may be milled into flour and by-products, or it may be cleaned, graded and reshipped in the direction of the wheat-deficit areas of the world. In either case, owing to the great distance, the wheat or flour is sold and resold many times. Consequently while many men handle the wheat, many men also own the wheat, so that there is always some one near who has a proprietary interest in the wheat. Do these men, each in turn, render a service? They do. *Is this service rendered in the most efficient manner and for a just charge?* This question is not so easily answered, and here lies the center of the middleman problem. This is a real issue between the farmer and the middleman, — an issue which has not been well defined as a rule by those who have talked most about it.

During the past ten years the marketing problem has come prominently into the foreground. To some it has appeared that the middleman is in a position to demand that his basket be filled without rendering a corresponding service. To others it has appeared that the present system of marketing is wasteful of human energy because there are too many middlemen. There is truth in both of these suggestions; but, as it is often presented by the cartoonist and by the excitement-loving editor, much besides the truth is conveyed to the reading public. Fortunately, while the earlier farmers' conventions dealing with this problem indulged largely in emotions and sentiments, recent meetings of farmers give primary attention to fact and reason.

The modern marketing problem. Our pioneer forefathers were not confronted with the modern marketing problem. Their agriculture was conducted more largely with a view to the direct satisfaction of their own wants. With cheap freight rates resulting from modern methods of transportation, agriculture has become commercial. A farmer produces primarily for the market, and farmers of different parts of the country give special attention to one or two lines of production. For example, the Dakotas produce wheat; Iowa markets hogs and cattle; Wisconsin specializes in dairy products and potatoes; Texas sells cotton and cattle; and other states likewise have their specialties. Each state produces a large surplus of a few articles and must buy many articles from other states. It is the exchange of these specialties which brings the marketing problem into the foreground.

Those who criticize modern commercial systems as wasteful are certainly not comparing the present system with that of the self-sufficing economy of the isolated pioneer, but rather with some ideal which lies as a possibility of the future. Commercial agriculture — that is, production primarily for the market and buying upon the market many of the articles consumed by the farmer — is more productive because: (1) Each agricultural territory can be devoted to raising those products for which it is by nature especially suited; (2) each man may devote himself to the lines of agriculture in which he is most effective; and, (3) the agricultural classes may benefit by the economies introduced into manufactures by machine methods and large-scale production. To appreciate the economic significance of the change from the self-sufficing to the commercial economy one need only compare the comforts enjoyed by the modern farmer with those of the pioneer.

With this great advantage accruing to farmers as a result of the commercial system, the question properly arises: What are the farmers objecting to? Why are they condemning the middleman who is essential to the commercial system? The answer is that the farmer does not condemn the middleman because he renders a service, but because it is believed that he very often charges too much for the service. This belief is based in part upon truth and in part upon fiction.

Unfortunately there are men who make it their business to stir up trouble. These men take a few more or less well-established facts and, by the free use of their fertile imaginations, weave a fabrication which appeals to the avarice of men.

But why do intelligent farmers believe exaggerated statements? For a very simple reason. However intelligent they may be when it comes to farming, they are as a rule uneducated on the subject of middleman processes and the costs of the middleman services. That farmers act in good faith in their attitude toward middleman and "middleman swatters" is demonstrated by the gullibility with which they often accede to schemes of unscrupulous promoters who take advantage of their lack of commercial acumen by saddling them with capital stock, extravagant equipment and high promotion fees "for services rendered" in organizing cooperative creameries and packing plants.

Farmers know a great deal about producing cotton and wool and corn and hogs and wheat and cattle and dairy products, but they know little as a class about the functions of the middleman made necessary by the modern commercial organization of industrial society. The farmer takes his cotton or grain, his hogs, his cattle, or his milk to the local market and surrenders his product to the local buyer. Year after year he may see the train pull out of sight around the curve below the corner of his farm without any clear vision of what happens to his products from that point.

In the main, the functions of the middleman are little understood by producers or by consumers. What is in the dark may be evil, and the imagination is prone to draw grotesque pictures of what may happen in the realm of the unknown. Thus it has come to pass that the producer sometimes covets the whole dollar that the consumer pays for his products and looks with disgust at the forty-eight cents which he does receive. Many writers, cartoonists and politicians have played upon this superstitious fear of unknown things in order to make personal capital out of the immense popularity attending discussions of marketing problems. It is only recently that farmers have taken part in this agitation.

The thing that is needed most at the present time is education on this question of middleman processes. It is not the writer's purpose to imply that the producer is wrong in thinking there may be many injustices; but he means to say that the starting point in solving the marketing problem is not what may be imagined about middlemen, but the actual facts about middleman services and middleman charges.

This is a problem which is receiving much study to-day. Research in this field has of late been turning on the light. But we need more study and more light so that all may see the truth. We must carefully study and accurately describe what happens to a product from the time it leaves the farm until it reaches the consumer. In the light of these facts intelligent and safe steps may be taken to improve conditions, whereas legislation striking in the dark stands great chances of doing harm rather than good.

CHAPTER XXVII

MARKETING FUNCTIONS

In recent times territorial division of labor has extended to broader and broader areas and as the distance between producer and consumer has become greater and greater, marketing has developed away from the old order of direct sale. It has been found desirable to introduce a greater number of intermediaries who participate in various ways in moving, storing, and transforming the goods in order that they may be where they are wanted, when they are wanted, and in the form they are wanted. All of the steps discussed in the following pages are not taken in the marketing of every product, but as a whole they constitute the typical process by which our agricultural commodities pass from the farmer to the consumer.

Grading. Grading as a marketing activity consists of classifying or sorting a commodity into groups, no two of which overlap, and in each of which the commodity is of practically uniform kind, size or quality; but a certain range and tolerance are allowed in each grade. Such grading, to be of maximum value, is accomplished through the use of recognized standards. Standardization establishes the permanency of the grades, and does not allow them to change with the market or from year to year. Without such established and uniform standards we have no good basis for buying and selling, no common language for both buyer and seller, and no standard of quality upon which values may be fixed.

The primary economic purposes of grading to standards are to eliminate the necessity for inspection on purchase, to obviate payment of freight, storage, and other marketing costs on goods that may later be sorted out and discarded, and to facilitate financing.

Such grading may be undertaken voluntarily by the farmer, shipper, or dealer, or it may be demanded by associations of their member producers, required by other groups, or necessitated by state or national laws.

Market specialists claim that, compared with the cost of performance, none of the steps in marketing enhances the value of commodities as greatly as this one of grading. Expansion of the market through sale by sample, sale by type, and sale by auction is based on the use of grades. Storage, financing, and the whole system of warehouse receipts are based on the use of generally recognized grades. The question of standardization of agricultural commodities is treated at length in a later chapter.

Packing. Practically all farm products require packing in one form or another in the process of marketing. This is a function which is sometimes performed at the farm and sometimes at a later stage of the process of marketing, but few products escape it altogether. Many must undergo repacking and repackaging several times to meet the requirements of the trade and the consumer. Apples may be packed at the farm either in barrels or boxes, they may be carried to the community packing house, or they may be sold on the tree and packed later by the dealer. Cotton may be ginned and baled on the farm in the case of large plantations, but usually it is carried to a local gin for the process. Potatoes may be bagged at the farm, at the local shipping point, or they may be shipped in bulk and bagged for purposes of city distribution. Wheat may be bagged at the farm and pass through all stages in bags or it may be handled from the farm and through all subsequent stages in bulk.

The primary economic purposes of packing are (1) to facilitate handling, (2) to reduce freight, (3) to reduce storage costs, (4) to reduce other marketing costs, (5) to prevent shrinkage and deterioration, and (6) to make products more attractive. The baling of cotton, for example, tends to accomplish all of these purposes. It facilitates handling by placing the cotton in solid, compact, covered forms, securely wired to withstand handling by hooks; it reduces charges for freight because the condensed form of the baled product allows many bales of cotton to be loaded in one car; it reduces storage charges because bales are more readily handled than bulk cotton and baled cotton takes up less space; it facilitates financing because the commodity is a standardized, easily-quotable, protected unit; and it retards deterioration because the increased density produced by the baling process and the covering supplied at that time decreases the exposure of cotton to moisture and "country damage."

Practically all packing facilitates handling. Apples in the box, potatoes in the bag, hay in the bale, are all more readily moved and handled than are the same commodities in bulk. To get still more benefit in the way of freight and water rates, and even in storage, the cotton bales are compressed. The canning of fruits and vegetables in glass and in tin and their drying and dehydration are processes developed expressly for preservation, but they also conserve space and the resulting packages are readily handled. Loans are not readily obtainable on advantageous terms, if at all, on products in their original state, whether cotton in the field or apples on the tree. Properly harvested and reduced to acceptable marketing units, as bales, boxes, and carloads, they become valuable farm collateral.

The whole extensive industry of western fruits is built around standardization and the attractive package. Oranges, apples, and cherries from the West are displayed in such tempting forms and packages in eastern markets that many purchasers turn to them in preference to the fresher local fruits so often placed on the market in less attractive form.

Packing and packaging, therefore, is a distinct service to farmers, to dealers, and to consumers. In fact, the baling and compression of cotton, the canning of fruits and vegetables in symmetrical and uniformly arranged packs, the packing of fresh fruits and vegetables in appropriate and attractive containers, the crating of eggs and many other forms of packing have come to be regarded as essential factors in marketing.

Assembling. The bringing together of carloads of products for shipment to the large markets by local buyer, whether independent or acting for a cooperative association, constitutes "assembling" as generally recognized by the farmers and the trade, and it is in this shipment by carload lots that assembling effects its greatest economic saving.

However, the assembling function, or the adjustment of quantity to the demands of the process of marketing, or of the consumer, may take place at the farm or at any of several later stages. The farmer may assemble and ship his peaches by the box, dozens of boxes, or by the carload. If he sells less-than-carload lots during the height of the season, it is probable that the buyer will consolidate the lot with similar purchases and form a carload for shipment. This carload is often combined with several others in the same region so that, in Georgia, for instance, whole trainloads of peaches move out from one shipping point on a single day. It takes many carloads of grain to make up a transatlantic cargo and the packing house needs many carloads of cattle and hogs for one day's operation.

This larger form of assembling to complete large transactions in agricultural products is a function essential to the middleman except in cases of unusually large, well-organized and strongly financed producers' associations.

Processing. Processing is almost as prevalent as packaging. The farmer sells cattle, grain, hides, and cotton; the consumer buys meat, bread, shoes, and clothing. Between the time the products leave the farm and the time they reach the ultimate consumer, cattle must be converted to steaks, grain must be reduced to flour and made into bread, hides must be transformed into leather and then into shoes, and cotton must be made into cloth and then into garments. In each case the intermediate steps of the process are necessarily many. Processing has almost entirely left the farms and been withdrawn from city dwellings. The resulting large-scale operations have made great average savings possible; but, if both farmer and consumer leave the task to others, the others must have fair compensation.

Processing is essential to economic marketing whether done by farmers or by middlemen for: (1) Economy is secured by the conversion of raw materials into finished products. The consumer, for instance, cannot manage a whole, or even a half, carcass, but must have his steaks, chops, and sausages; (2) production of bulk in relation to value aids in economic distribution; and (3) processing makes possible the conservation of the surplus during the height of producing seasons for use during other parts of the year. To provide consumers with the kinds of food and clothing when and where wanted during the year and to stabilize markets for farmers, processing is necessary.

Costs of processing vary, but as a general rule they are relatively large and it is here that one must look for a considerable part of that margin between what the farmer receives for his produce and what the consumer pays, even though speaking generally, by doing this work on a large scale many improvements can be made. Large output usually means a reduced cost per unit; large amounts of raw material used by a large establishment usually mean well-established grades; use of superior equipment and highly specialized workers by a large firm usually results in great improvement in quality and appearance of production over that produced on the farm; and large-scale operations make possible greatly increased utilization through the development of profitable by-products from material previously considered as waste.

Selling. The act of selling may occur but once during the marketing process, or it may occur many times. The farmer may sell direct to the consumer at the farm, on a public market, or from his wagon at the consumer's door. He may sell to the country buyer or carlot assembler, to the grain elevator or creamery, or he may ship by consignment or on sale to a commission firm in a large market.

The country buyer or carlot assembler may sell to a commission man, a packing house, or a centralized creamery. The commission man or packing house may sell the same material, perhaps in another form, through jobbers or direct to retailers. The retailers sell to the ultimate consumers, the family buyers. There are other methods of sale to fit other conditions or demands. Jobbers, brokers, traveling salesmen, agents, auctioneers, advertisers, all contribute services in various methods of sale.

Selling in one form or another is essential and, as all intelligent selling requires experience and knowledge, it is an activity in itself that deserves compensation. In its more complex forms, occurring in the case of products that must be processed or that follow intricate channels of trade, it demands expert knowledge, skill, and salesmanship of considerable ability.

To sell advantageously on large markets a salesman must have one kind of knowledge and skill; to sell to individual customers in retail trade requires entirely different qualifications. The first demands extensive information regarding supplies, actual and potential, quantities, qualities, conditions, trends and competition; the second demands a knowledge of human nature in all its variations and contradictions. As salesmanship becomes more highly specialized it obviously becomes more high-priced.

So far as salesmanship and advertising expand sales solely for the benefit of the producer they are not productive, but if they are of an educative nature, if they tend to improve standards of living, by introducing and extending the use of desirable products and by overcoming the inertia of the buyer, they are socially beneficial and should be accorded a fair return.

Transporting. All farm products that enter marketing channels are transported. If disposed of at a local market, the hauling may be performed by the farmer himself, who thus takes time from the active work of his farm and expects to receive some compensation for this fact. If the products go to distant markets, they must be transported by rail or by water and usually enter interstate commerce.

Recent discussions of transportation rates make emphasis on the cost of rail carriage unnecessary, but it is not generally known that studies show local hauling to be also relatively expensive. Good roads and good equipment may lessen this apparent cost, but they too are expensive in initial investment and in upkeep and may be considered indirect costs of transportation. Such studies as have been made have shown this cost of hauling to average five per cent of the farm value of the crops marketed. Actual costs have a wide variation—from 2 to 9 per cent.

The expense of this hauling and the educative publicity given to transportation matters through the operation of the Interstate Commerce Commission have provided farmers and the public with a basis from which they can form some idea of the expense inherent in the transportation of agricultural products over the long distances that usually occur between our regions of commercial production and our large centers of consumption.

Many factors enter into this expense. High or low value in proportion to size or weight, length of haul, perishability or necessity for special protection from heat or cold, are only a few of them. As the factors vary so must rates vary. At various times rates may seem to be high or low, but studies show the freight costs to average over a period of years approximately 6 per cent of the farm value of the products shipped, although the range is great, much greater than in the case of the costs of local hauling.

Market preferences, much more potent than most consumers realize, result in cross freights and unnecessary work and cost. In New York City only dark-colored cranberries sell well, while in cities further West, like Pittsburgh and St. Louis, lighter-colored berries are in sole demand. In Boston dealers can handle only dark eggs advantageously; in New York City the white egg is the favorite. Shippers of large quantities often find it desirable to ship past their nearer markets in order to reach markets where their particular variety is especially wanted.

It is generally believed that much improvement can be brought about in this step of the marketing process. Extension of hard roads suitable for hauling in all kinds of weather, better loading methods, more thorough understanding of the principles involved in successful transportation of perishables to reduce waste from breakage and spoiling, and many other lines of possible improvement which may be aided by both farmer and carrier are promising lines of study.

Storing and warehousing. Production is essentially seasonal, but consumption is relatively uniform during the different periods of the year. Obviously, therefore, some adjustment is necessary between the harvesting of the crops and the feeding of the people. To meet this continuous and more or less uniform demand by consumers, the function of storage becomes a vitally important step in marketing. Products may be stored on the farm, at shipping points, along the route to market, or in the large market centers. If a farmer stores his crop he naturally expects to receive for it on sale the price at harvest plus at least the cost of storing. Similarly, if he sells at time of harvest, leaving to others the task of storing a large part of his output and of supplying it to consumers when they want it, he must expect to see a larger margin between the price he receives and the price the consumer pays.

Storing is a service to the farmer and to the consumer. It expands the market for the farmer and increases the supply for the consumer. It tends to stabilize supplies and prices to the advantage of both. It prevents much deterioration and spoilage and thus prevents loss for both. One of its greatest benefits to the farmer is the accredited warehouse receipt which supervised storage furnishes and which may be used as safe collateral. Many improvements are possible in this part of the marketing process, but its importance is not to be minimized. Through organization and well-developed business methods farmers may hope to store for themselves in large quantities and thus gain more of the benefits of storage than they now receive, but as long as we have territorial division of labor in production and the resulting commerce, we must have storage in more or less highly organized and efficient form.

Financing and risk-taking. Financing often begins before the crop is harvested,—when the farmer borrows from his local bank to defray harvesting and threshing expenses,—and continues until the crop has been distributed and is in the hands of the consumer. The interest accounts along the way are a necessary part of the cost of marketing and are added to the other legitimate expenses incurred between the producer and the consumer.

The market season begins when the farmer sells his first load of grain after harvest, and from that time interest charges begin to accumulate until the grain movement becomes sufficiently advanced so that money from the crop returns to the country stations from flour and grain sold in the East or for export. Not until then has the circle been completed and the tension ceased which was caused by drawing money from the eastern centers to move the crops.

During the height of the crop-moving season, commission houses pay out large amounts on grain drafts, often to the full extent of the line of credit extended to them by their banks. Sometimes losses result to the commission houses through advancing money on consignments, as when an unreliable shipper, who is not financially responsible, misrepresents the grain and draws for it more than it is worth.

If the car of wheat shipped from the country station is bought by a terminal elevator company when it arrives at the market, it is put with millions of bushels of other wheat into storage bins to be held until wanted by mills. This involves not only a storage charge but an interest charge as well. Terminal elevator companies are heavy borrowers when they fill their houses with wheat. They borrow with warehouse receipts as collateral. "Grain paper," as their notes are called, is regarded by bankers as of the highest class. Grain paper from western terminal markets is sold to banks throughout the central states and in the eastern money centers.

In other marketing transactions, financing and risk-taking in one form or another are as important as in the marketing of grain, although they are often not evident to the casual observer. In most systems of marketing someone must take chances on changing market conditions, deterioration, loss by fire, and other damage.

Insurance and hedging are among the aids utilized in this combined function of financing and risk-taking, which is closely linked with several of the other steps in marketing, notably with storage. Even the consumer occasionally carries some of the risk when he stocks up far in advance of his need of household supplies and takes the risk of deterioration and later decline in price.

Since most agricultural commodities must be carried over long distances before final consumption and since most of the staples must be held for comparatively long periods of time, it is evident that financing or carrying the burden and risk of the unconsumed foods is a vital factor in marketing. Whether assumed by farmer, intermediaries, or the final consumer, some compensation is due the one who carries this inconvenient and hazardous burden.

Dispersing. Throughout the assembling stages of marketing, quantities handled by successive agencies have been increasing in volume. The country buyer made up a carload of apples that looked large to the farmer, but the warehouseman required many carloads of apples for successful operation. During the winter, however, the demands from the trade reach him in the terms of relatively small quantities—fifty boxes, perhaps, at a time. These the wholesaler deals with, selling them to the retailer in even smaller quantities, for, as householders cannot and will not go long distances to buy at concentration points, many of the retail stores must be located in business or residence neighborhoods where rents are high and space at a premium. Here the retailer finally sells the apples by the half-dozen or the half-peck. Thus the work of the farmer in collecting his apples, of the country buyer or packing house in forming carlots, of the storage man in concentrating trainloads, which was first broken into by the wholesaler in dealing in dozens of boxes, is finally undone by the retailer in order to fill the specific demands of his customers.

Changing conditions in location of population, in growth of cities, in methods of housing, in working habits of individual members of families have brought about an increasingly intricate system of distribution to fill individual demands. Partial reaction against this complexity is seen in the development and popularity of the cash-and-carry stores, but there are always large numbers of persons who cannot or will not undertake the work that these stores shift to the purchaser and who, therefore, virtually insist on the wider margin between farmers' and consumers' prices.

Improvements undoubtedly can and must be made in this stage of the marketing process which is the most expensive and the most perplexing of all the stages. It presents a peculiarly baffling problem for study because it is so intimately interwoven with changing conditions especially in relation to consumer demand, and because here, more than at any other stage of the marketing game, the human element, with its varieties and contradictions, enters in.

Marketing functions must be performed. Considering the country as a whole, these steps in marketing are needed. Individual farmers may form contacts with individual consumers, but in this case the work, responsibility, and expense of packing, transporting, selling, and delivering the product and collecting payment devolve on the farmer or the consumer, or both. Such direct sale, as a rule, is practicable only where short distances are involved. A dairy farmer living near a city may bottle his own milk, carry it to town by wagon or truck, and deliver it at the consumers' doors, making his own selling agreements in advance and making his own collections at the end of the month. Another dairy farmer living at a considerable distance from the same city, however, finds that he cannot get his milk to town in time for morning delivery. He must ship and sell to the distributing plant in the town where the milk is processed for later use or he may sell to a milk-collecting station in his neighborhood for shipment to a distant city.

Associations of farmers may market larger quantities of farm products and may even in rare instances carry them through distribution in large cities and may do it efficiently; but here again, while only one or two agencies may be engaged in the processes, the steps are practically the same. In many methods of marketing, agencies may be eliminated but not the essential functions.

The middleman issue. A survey of the work of the middleman which would show how to replan the route from producer to consumer in such a manner as to shorten the line and reduce the number of stops and the amount of rehandling, would be acceptable to every one concerned. The wise middleman would be the first to accept the new economies. There is clearly no issue here between the middleman and the endman. *The real issue between the farmer and the middleman relates to the fairness of the charge for the middleman service.*

This is an important issue from the farmer's point of view. When considering the prices of the supply of farm products on hand at the end of a given harvest, the farmer may be looked upon the residual claimant. He gets what is left after all charges are paid. Every expansion of middleman charges, without added service for which the consumer pays, cuts the farmer's income; every reduction in cost increases the farmer's profits.

When the consumer pays the retailer a dollar for potatoes, the dollar goes into the retailer's cash register. The retailer may have to take eighty-three cents out of the till and pay it to the wholesale dealer. Other parts have to be taken out to pay store rent, clerks, taxes, delivery, etc., but we shall omit the details and follow the main course of the remnant of the dollar which works back from one middleman to another until the farmer is greeted with his *residual share.* The wholesaler takes out seven cents and passes seventy-five cents over to the jobber, who pays eight cents to the railway company and keeps five cents for his own service. This leaves sixty-two cents, which is forwarded to the potato dealer in central Wisconsin, who takes ten cents for the material furnished (sacks, car linings, and heat) and services rendered. The cash register rings out 52 cents to the farmer, and the transaction is closed, and the question, Who gets the money? is answered for one specific case. Are all these charges fair? This is the real issue and, of course, the burden of proof is on those who raise the question, What is a fair charge? That, in itself, is not an easy question to answer, but equally difficult tasks should carry equal compensation as nearly as possible whether it be to farmer, manufacturer or merchant. It is usually considered that where free competition exists, prices tend to become fair, but free competition is not so prevalent as some classical economists would have us think.

Special instances may be mentioned where unfair charges are likely to occur: Along the railway lines in the grain-growing regions of the United States there are many country stations where one elevator can easily handle all the business. This elevator may be owned and operated by an independent grain buyer, interested in maximum returns for his services. It may be owned by a line elevator company and operated by a hired manager, or it may be owned by the farmers who load grain at the station and be operated by the employee of the farmers' company. Either of these methods will usually provide the necessary elevator service. And it may happen that the same man will handle the grain in either case. The question that interests the farmers is, How can we get this service performed satisfactorily for the lowest cost? Such a local elevator partakes of the character of a natural monopoly. If the independent operator is in charge, he can make a monopoly profit that looks large to the farmer and that attracts the attention of the grain merchants at the central market.

To introduce competition into the charge made for this service, the independent operator is replaced by an employee who works for a competitive wage. Who, then, gets the monopoly gain which formerly went to the operator? The employer, of course. If the line elevator company is the employer, the monopoly charge may be increased because of the elimination of the tendency for the operators at different stations to compete for the trade in the middle zone between the railway stations. On the other hand, if the elevator is owned by the farmers, and they operate it efficiently, the monopoly gain is eliminated, local prices are increased, production is stimulated, increased supply tends to lower prices to consumers, and thus the benefits of cooperative elevators are divided between the farmers and the consumers.

Another example of what often appears to be an excessive charge for local middleman services is found at the local stations in the districts from which potatoes are shipped. Upon visiting one of these loading stations one is first impressed with the fact that there are very many warehouses at each station and for this reason may assume that monopoly charges are impossible. As a matter of fact an excessive number of warehouses and potato dealers, as well as an excessive number of grocers in a small town, may result in price agreements which give a basis for monopoly charges for services rendered. It is believed by many that a condition of this kind has at times existed in the potato district of central Wisconsin. The method of eliminating this monopoly has been the introduction of the farmers' warehouses where the service is performed by an employee of the farmers working for a competitive wage.

It is well established that, wherever there is a tendency toward a monopoly charge for a middleman service locally performed, where the farmer comes in contact with the warehouse and the man performing this service whenever he sells his products, cooperation is the natural and effective method of eliminating the monopoly charge and distributing the benefits widely through society.

But there are other middleman functions which are not under the eye of the farmer. These are in operation at the central markets and beyond, and for brevity in this discussion will be called central-market functions. Examples of the central-market functions are the elevator business at the primary grain markets, the packing business, and the distribution of potatoes, dairy products, and poultry. The problem of securing the services of the middleman in the central market at a fair price has not been so nearly solved as has that of the local market.

Two methods have been tried, each with some degree of success. The one method is state regulation or control, and the other method is cooperation. Cooperation may be that of the consumers who organize to reach out after their product, or that of the producers organized to reach out with their produce beyond the central market with a view to securing a higher price for their product.

Where there is a well-organized system of marketing capable of absorbing all of the product whenever shipped, as is true of the grain business and the meat packing business, it would seem that state or Federal regulation is the best method of establishing fair play in the central market. These are big businesses requiring much capital and special skill and are carried on at such a distance from the farmer that he cannot supervise the work. He must trust the supervision to others. He may not have any too much confidence in the government, but experience will teach him that the government is at least as trustworthy as any comprehensive organization which he can build to perform this function of securing fair play.

When there is no well-organized central market which will absorb all the product and send it on to its final destination, the local cooperative company often finds it necessary to reach out long distances for a market. The potato market will serve as an example. The farmers' produce company is in competition with the big line companies both at the local stations and in the various cities throughout the country where the potatoes are consumed. The farmers' company can handle the potatoes at the loading station appreciably cheaper than can the line companies, but in finding a market for the limited number of cars handled by one warehouse, in competition with the line companies that are handling from twenty-five to fifty times as many cars in a year, the saving is largely lost. It is believed, therefore, that the federation of local companies for the purpose of finding a market is a necessary step if local cooperation is to reap its reward in the marketing of potatoes. In general it is believed that where there are no well-established central markets subject to government supervision, farmers will have to look to federated local companies in order to compete successfully in the distribution of their products.

In any case there is plenty of work for the state to perform in solving the marketing problems. Local cooperative companies would prosper better under state supervision, especially with respect to the auditing of accounts. Farmers' federated companies are doubly in need of aid and supervision in order to succeed in their more difficult task. But a still more important function for public authority is the regulation and control of private corporations dealing in farm products in the central markets and beyond.

It should not be assumed, however, that all charges are unfair and require regulation. Whenever middleman services are performed for a fair charge, and it is believed that this is true of a great part of the middleman functions, regulation by farmers or by government is but sand in the wheels of industry.

The question of who shall perform the marketing functions resolves itself into a question of efficiency of service rendered and fairness of charge for such service. This is the only real issue between farmers and middlemen. In our present complex civilization we need middlemen, who, by rendering expert service at a reasonable charge, set free farmers and consumers (who also may be producers of another sort) for further work of the kind for which they are peculiarly fitted and trained. Division of labor between the producers and the distributors of agricultural products is vital to the efficiency of both undertakings. The middlemen may be employees of the farmers, as managers and salesmen of large cooperative associations, or they may be men who are in the business on their own account. In the first case the association usually takes the risk of loss and benefits by gain. The middlemen working independently carry alone these chances of loss or gain. If, in either case, there is danger of monopoly gain, social justice requires that competitive outlets be developed.

It should be recognized that middlemen rendering efficient services at a fair charge are really producers and are worthy of their salaries or their legitimate and reasonable profits, but we do not need, and must sooner or later free ourselves from, those intermediaries who are not so articulated with the marketing process as to render distinct and necessary service efficiently, or those who charge, in one way or another, undue toll for their services. Such inefficiency or apparent unfairness may be eliminated in more ways than one. Inefficiency may result from ignorance or inexperience and may be susceptible of much improvement under education and guidance. Unfairness may be possible because of limited knowledge on the part of those who produce and those who consume, in which case education may eliminate this opportunity for illegitimate gain. In other cases unfair charges may be based upon monopolistic privileges. Here education is the basis of legitimate control through legislation.