THE MARKETING OF COLORADO FRUITS AND VEGETABLES

L. D. H. WELD, PH.D., Director of Research

THE H. K. McCANN COMPANY
New York City

FOREWORD

The program of the Colorado Association provides for intelligent research by able specialists into the problems confronting the industries of the state, and the building of a sound program for constructive development upon the resultant findings and disclosures. To accomplish this purpose in regard to the agricultural and livestock industry, the President has named an Agricultural Committee of fifty. Dr. Charles A. Lory, President of the Colorado Agricultural College, is chairman of the committee and its membership is representative of all sections of the state and all branches of the agricultural industries.

Through this Committee the Colorado Association seeks to bring to bear upon the problems affecting the industry the concentrated manpower and skill of those best qualified to advise and act, with the expectation of thus determining the facts and developing and carrying out proper constructive programs.

In accordance with this policy, the Colorado Association sought the services of Dr. L. D. H. Weld in connection with the marketing of Colorado farm produce. Dr. Weld is one of the best known marketing experts of the country and is now associated with the H. K. McCann Company of New York.

He was one time professor of Agricultural Marketing at the University of Minnesota, later held a similar professorship at Yale University and before assuming his present connection was director of market research for Swift & Company. As an author, economist and marketing specialist he has attained national renown.

Dr. Weld came to Colorado in November and spent several weeks in widespread investigation of the marketing of Colorado farm produce. He visited the principal producing sections and interviewed scores of growers, shippers, marketing companies, officers of farm marketing organizations and State and Federal officials. A large amount of statistical data was assembled and studied for pertinent and enlightening facts.

This able report gives much material for reflection to every man thoughtful of the future agricultural development of Colorado.

D. W. T.
The Purpose of this Study

This study was made under the auspices and at the request of the Colorado Association, which is vitally interested in the future development of agriculture in Colorado. The state produces many farm products of superior quality. The raising of good products is of no avail if they are not properly marketed. Before deciding definitely upon the most useful policy for its agricultural department to follow, the Association deemed it advisable to have someone from outside the state make an impartial appraisal of the methods of marketing now in use. Accordingly, the H. K. McCann Company, whose Denver Office handles the advertising of the Colorado Association, was asked to have its Director of Research, located at the New York Office of the company, make this study.

This survey does not pretend to be a complete study of Colorado's marketing problems. The investigation consisted of interviews with thirty or forty leaders in agriculture and in marketing throughout the state. These leaders included officials and authorities in the College of Agriculture, the office of the Director of Marketing, the Federal Department of Agriculture, county agents, various cooperative associations, and private wholesale companies.

It is believed that enough has been gleaned from these interviews to determine the weak spots in the present marketing system, and to warrant recommendations which will help in formulating a constructive policy for the development of better marketing and improvement of agriculture.

The study has been limited to fruits and vegetables, largely because these are the products which go through to consumers in their original state, and because they offer the most perplexing marketing problems. Sugar beets are not considered, because they are marketed to nearby factories without the necessity of elaborate marketing machinery. The market for live stock is well organized; likewise the market for wheat and other grain. Dairy and poultry products are not considered because Colorado does not yet have an important surplus to ship to other states. Of course, there are plenty of problems connected with the production and marketing of these important products, and the Association will undoubtedly turn its attention toward them in the future. The principal products covered by this report are, therefore, as follows: potatoes, cabbage, onions and beans; lettuce, celery, cauliflower and peas; apples, pears, peaches and cantaloupes.

It should be explained that the Colorado Association does not wish to duplicate the work of other agencies that are interested in market-
ing problems, such as the Director of Marketing, the Agricultural College, representatives of the U. S. Department of Agriculture, and private shippers. It wants to cooperate with these different agencies, and to use its influence to coordinate their work, so that it will be steered along the lines of greatest usefulness.

A Few Characteristics of Colorado Agriculture

1. Because of its altitude and climatic conditions, Colorado produces many fruits and vegetables of superior quality. Except in the wholesale trade, this fact is not generally known outside the state. The question has arisen whether something could be done to make these products better known, both as a stimulus to agriculture within the state, and as a means of furthering the reputation of Colorado throughout the country.

2. The possible acreage of many of these products is limited by soil, climate and altitude conditions. It is, therefore, necessary to make the most of Colorado's superior products, and to see that the reputation of these products is not injured by poor marketing methods.

3. With two or three exceptions, shipments of the products covered in this survey have not been increasing to any great extent during the past few years. The following charts show the number of car loads shipped each year, from 1920 to 1928 inclusive.*

4. Most of the products discussed in this report are grown in highly specialized sections of the state, and these sections are widely scattered. Each section is, therefore, confronted by its own particular marketing problems. In many cases, these specialized sections are so restricted in area that the volume of production is naturally limited. It is also difficult to develop any centralized or coordinated policy for the marketing of different products from these widely scattered areas.

5. Colorado appears to be particularly successful in the shipping of agricultural products that go to market in concentrated form, so that the freight rate is not a very important factor in marketing cost. Sugar furnishes a good illustration in that it is the condensed product from sugar beets. Sugar beets could not be raised profitably if they had to be shipped hundreds of miles to factories. Live stock represents a concentrated form of the fine grasses and feed grown in Colorado. Canned goods represent fruits and vegetables in concentrated form. Seeds are another illustration of this principle. Butter and eggs are also articles of high intrinsic value, for which freight rates are a relatively unimportant factor, and therefore from this standpoint, they are good products for Colorado to produce more generously in the future.

*These figures are taken from "Agricultural Statistics," 1928, Bulletin No. 86, issued by the U. S. Department of Agriculture in cooperation with the Colorado State Board of Immigration.
CARLOAD SHIPMENTS FROM COLORADO

APPLIES, PEACHES, AND PEARS

CARLOADS

4,000

3,000

2,000

1,000

1920 1921 1922 1923 1924 1925 1926 1927 1928

APPLES

PEACHES

PEARS

DATE 1-1-4-3, 1929
PREPARED BY THE H. K. McCANN CO
NEW YORK OFFICE
CARLOAD SHIPMENTS FROM COLORADO

LETTUCE, CAULIFLOWER, CELERY, AND PEAS

CARLOADS

1,000

2,000

3,000

1920 1921 1922 1923 1924 1925 1926 1927 1928

DATE: Dec. 5, 1929.

PREPARED BY T. M. McCANN CO.
NEW YORK OFFICE
CARLOAD SHIPMENTS FROM COLORADO

CANTALOUPES

CARLOADS

5,000
4,000
3,000
2,000
1,000

1920 1921 1922 1923 1924 1925 1926 1927 1928

DATE: Dec. 3, 1929.
PREPARED BY THE H. R. MCCANN CO.
NEW YORK OFFICE.
CARLOAD SHIPMENTS FROM COLORADO

ONIONS AND DRY BEANS

CARLOADS

1920 1921 1922 1923 1924 1925 1926 1927 1928

1,000 2,000 3,000

DRIY BEANS

ONIONS

Prepared by The H. K. McCann Co.
New York Office
CARLOAD SHIPMENTS FROM COLORADO

POTATOES AND CABBAGES

1920 1921 1922 1923 1924 1925 1926 1927 1928
The principal marketing problems occur in connection with products that are marketed in bulk, and these are the ones discussed in this report. The freight rate plays an important part in the marketing cost. Colorado's distance from important consuming markets and the Trans-Continental freight rate structure are, of course, limiting factors in the marketing of Colorado products.

6. As will be observed in the following pages, the extent and location of the marketing territory varies for different products raised in Colorado. The principal factors which determine the marketing territory are as follows: freight rates; competition of other producing sections; and quality of products produced.

Marketing of Individual Products

The following paragraphs give the principal facts connected with the marketing of the products covered in this survey.

POTATOES

Although potatoes are raised to a certain extent in all parts of the state, about one-third of the crop is raised in Weld and Morgan Counties in the north, and another third in four counties in the San Luis Valley. There is another area of considerable importance on the western slope.

Colorado potatoes are marketed principally in Kansas and Missouri and in the South. In 1928 the carload shipments to the leading consuming states were as follows: (1)

<table>
<thead>
<tr>
<th>State</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>2,656</td>
</tr>
<tr>
<td>Colorado</td>
<td>2,307</td>
</tr>
<tr>
<td>Missouri</td>
<td>2,277</td>
</tr>
<tr>
<td>Texas</td>
<td>2,219</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1,506</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1,013</td>
</tr>
<tr>
<td>Tennessee</td>
<td>633</td>
</tr>
<tr>
<td>Illinois</td>
<td>599</td>
</tr>
<tr>
<td>New Mexico</td>
<td>505</td>
</tr>
<tr>
<td>Arkansas</td>
<td>456</td>
</tr>
</tbody>
</table>

Other states that take Colorado potatoes are Oklahoma, Mississippi, and Florida. It is, of course, natural that Colorado potatoes should go southward, in view of the competition of Minnesota and other northern states in supplying the Middle West and East. Colorado sends a good many potatoes to Chicago, however, but these are choice varieties grown

(1) Marketing Colorado and Nebraska Potatoes, Market News Service on Fruits and Vegetables, October, 1928.
principally in the San Luis Valley, that can compete successfully with Idaho and other northern potatoes in the Chicago market. Unfortunately, the potatoes of the northern counties of Colorado are troubled with the Flea Beetle, which injures the appearance of the potato, though not its eating quality. Most of these have to be marketed in the less discriminating markets of the South.

About two-thirds of the potato shipments are marketed by private shipping and wholesale companies, and the other third, by the Colorado Potato Growers' Exchange. The proportion varies somewhat from year to year. The Exchange is an outstanding example of successful cooperative marketing—probably the most important and successful potato marketing association in the country. It was organized under the Colorado Cooperative Law in 1923, an outgrowth of a number of small, local organizations in the San Luis Valley and on the West Slope. There are now about 1,800 members. The Exchange markets from 5,000 to 7,000 cars a year.

Sales are made by the central office of the Exchange in Denver, which keeps in constant touch with over 200 brokers in different markets. About three or four years ago the Exchange adopted the “Côlo­tato” brand for its finest quality of potatoes. They must be of “out­standing No. 1 grade.” In 1928, only about 20 per cent of the potatoes marketed by the Exchange were good enough for this brand, which has become favorably known in the trade, and which brings very good prices. The Exchange has done good work in encouraging grading, and believes that compulsory inspection has been a good thing. It is also trying to get growers to concentrate on a smaller number of varieties, although the most important potato sections have become pretty well standardized in this respect.

CANTALOUPES

Most of the cantaloupe acreage is located in three counties in the Arkansas Valley in the Southeastern part of the state. Rocky Ford is the principal shipping point.

Colorado cantaloupes are distributed widely throughout the country, the relative amounts going to different markets varying somewhat from year to year. In 1928 the principal states receiving Colorado cantaloupes, with the number of carloads received by each were as follows: (1)

<table>
<thead>
<tr>
<th>State</th>
<th>Carloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>525</td>
</tr>
<tr>
<td>New York</td>
<td>388</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>368</td>
</tr>
<tr>
<td>Missouri</td>
<td>222</td>
</tr>
<tr>
<td>Ohio</td>
<td>217</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>128</td>
</tr>
</tbody>
</table>

The Arkansas Valley has been producing cantaloupes since 1885, when the first shipments were made to Leadville, then prospering as a mining town. The first important shipments eastward were made to Kansas City in 1893. The Rocky Ford melon soon became well known, especially as there were few sections of the country producing melons in commercial quantities in those days. But the melon industry in Colorado has been one of ups and downs ever since the beginning. Good prices in one year would encourage the growers, and they would increase acreage inordinately the following year. Over-production sometimes accompanied by poor quality (caused by unfavorable weather) would result in losses.

Ever since the late nineties there have been spasmodic attempts to develop an effective cooperative marketing association. An association would be formed, live perhaps a year or two, and then break up after a disastrous season. There have been many little informal groups or associations of growers from time to time, which have made deals with commission merchants, and these have improved conditions temporarily; but none of them have been permanent. Many of the associations have been allured by propositions through which they thought they could "beat the market" in some way. There has apparently been no very serious or consecutive effort to build up a growers' association that has tried to do a constructive job in improving quality and in bringing about better grading and packing, except, perhaps, for one fairly successful cooperative association at Ordway. Most of the packing and grading is done on the farm, rather than in central packing houses.

A large part of the melon crop is grown under contract. A commission house agrees with a grower to take his melon crop, often advancing him funds during the growing season, and taking a mortgage on the crop. Growers are also given advances at the time they deliver their melons to the shipper, the shipper selling them in distant markets for what they will bring, and retaining a commission of 15 per cent. Oftentimes, the full market value is advanced in this way, so that the growers receive nothing more after the melons have been sold.

The melon industry operates under handicaps. High freight rates and high production costs are, of course, always to be contended with. But more serious is the competition of other producing areas, especially California and Arizona. In fact, practically all states grow melons to a certain extent, and this is true especially of the market gardeners who surround every large city. And also, Colorado melons reach the market at the end of the summer after consumers have been supplied for several months from more southern states, so that the taste for melons is not so keen as earlier in the summer. Furthermore, "Rocky Ford" melons no longer means melons from Rocky Ford, Colorado. Melons
are called “Rocky Fords” in the principal markets, whatever part of the country they come from.

But the principal trouble with the melon deal is poor packing and grading, and the shipping of melons that never ought to leave the state. Everybody agrees that this is the great weakness in the Arkansas Valley. One of the big wholesale companies that has been marketing Colorado cantaloupes for many years has bought about 2,000 acres of land in the melon district and is growing its own melons. This company claims that it was forced to do this because it could not get good melons from growers. It also claims that the melons which it grows, packs, and grades, bring much higher prices than those packed by the growers.

One or two other well-established companies that have been handling melons for years are thinking seriously of quitting business in the Rocky Ford district, because they cannot get well-packed melons from the growers, and because they have been losing money in handling them.

Until the summer of 1929, Colorado had for several years a law requiring compulsory inspection of cantaloupes. This had apparently been beneficial, though it had not brought about as high a standard of grading as might be desired. During the summer of 1929, this law was declared unconstitutional, on the ground that it did not sufficiently define the grades of melons nor the duties of inspectors. Voluntary inspection is still available, but it was not used to any great extent after the compulsory inspection law was declared unconstitutional.

On the whole, the cantaloupe industry of Colorado is not prosperous, and seems to be at a standstill. The raising of honey-dew melons has helped out some during the past few years, but shippers complain that these also are not packed well. The same is said of Valencia onions, the production of which has been gaining rapidly. As for cantaloupes, there are those who think that farmers use inferior seed, but the best opinion seems to be that the cantaloupes raised in the Rocky Ford district are of just as good quality as they ever were—and perhaps better—when not injured by unfortunate weather conditions. At any rate, good seeds are available. Commercial houses have developed the better strains, and great quantities are shipped out each year to other sections of the country. In fact, most of the melons grown in the Imperial Valley and other important sections are grown from Rocky Ford seeds.

APPLES AND PEARS

Although apples are raised commercially in a dozen or more counties, the principal apple orchards are on the West Slope around Grand Junction and the North Fork. The Grand Junction district is on the wane, due particularly to the depredations of the coddling moth. The North Fork section, which produces the best of Colorado's apples, is
PRINCIPAL STATES RECEIVING COLORADO APPLES
Carloads Shipped from Western Slope - 1928

CLEARTYPE

Copyright 1928 by The United States Government
Outline Map of the United States
Map No. 119

SCALE 278 MILES TO THE INCH
holding its own. Because of the higher altitude and cooler climate, the coddling moth is easier to control.

Denver furnishes the largest individual market for Western Slope apples. Then come Missouri River points and Chicago, with a considerable number going to southern states. Very few are shipped to Eastern markets to compete with apples from the Northwest.

The principal states of destination for Western Slope apples in 1928, with the number of carloads absorbed by each, were as follows:*

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Carloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>444</td>
</tr>
<tr>
<td>Nebraska</td>
<td>270</td>
</tr>
<tr>
<td>Kansas</td>
<td>252</td>
</tr>
<tr>
<td>Missouri</td>
<td>150</td>
</tr>
<tr>
<td>Illinois</td>
<td>149</td>
</tr>
<tr>
<td>Texas</td>
<td>80</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>57</td>
</tr>
</tbody>
</table>

The tendency has been to ship more and more Colorado apples in bushel baskets or in bulk. The proportion of apples, packed in boxes varies from year to year, depending on quality, but probably averages somewhere between 30 and 40 per cent. The North Fork district boxes more than other sections, but the percentage for this district is low in 1929, because hail storms injured the crop. The reason for shipping so many apples in baskets and in bulk is that experience has shown that they net more to the growers when shipped in this manner. The best market is found in smaller cities and towns in nearby states and in the South, where demand is not particularly discriminating. The writer was informed that there is a tendency in Idaho and other Northwestern states to pack apples less in boxes and more in bushel baskets. Nevertheless, the finest apples and those that bring the highest prices in Eastern states are those that are carefully graded and packed in boxes. Relatively few apples in Colorado can compete successfully with the fanciest from Washington and Oregon, and it is commonly said that even when Colorado apples are packed in boxes, they are not wrapped individually, and are not graded so carefully as Washington apples.

Colorado apples are marketed cooperatively and through private shippers. Some of the local associations are not strictly cooperative, in that their ownership has fallen into the hands of a few individuals. Several of the local associations and shipping companies reach terminal markets efficiently through the Federated Fruit and Vegetable Growers, a large cooperative wholesale company, which has headquarters in New York, with sales offices and brokerage connections in other cities, and a shipping office in Grand Junction.

Pears are raised successfully on the Western Slope, and they have taken the place of apples to a certain extent around Grand Junction. The principal markets for Colorado pears are Denver, Omaha, Sioux City, Kansas City, Minneapolis. A few find their way to Chicago and even to New York, and some go to Texas. It was suggested at Grand Junction that local shipping conditions might be improved through the organization of a cooperative pear growers' association.

PEACHES

The production of peaches is concentrated in two districts on the Western Slope. About 60 to 65 per cent of the state's crop is raised in the very limited, highly specialized, Palisade District. Most of the remainder come from around Paonia.

Although Denver is the most important single market, Colorado peaches are marketed principally in the Middle West. Very few find their way to Eastern markets. The principal states to which Colorado peaches were shipped in 1928 were as follows: (1)

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Carloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>213</td>
</tr>
<tr>
<td>Nebraska</td>
<td>166</td>
</tr>
<tr>
<td>Minnesota</td>
<td>133</td>
</tr>
<tr>
<td>Illinois</td>
<td>133</td>
</tr>
<tr>
<td>Missouri</td>
<td>104</td>
</tr>
<tr>
<td>Iowa</td>
<td>78</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>78</td>
</tr>
<tr>
<td>Canada</td>
<td>36</td>
</tr>
<tr>
<td>Kansas</td>
<td>34</td>
</tr>
</tbody>
</table>

Colorado peaches are of very good quality and are well packed and graded. Most of the Palisade crop is marketed through the United Fruit Growers' Association, a strictly cooperative association, which has been in existence for several years, has been well managed, and has built up a good financial surplus. This association markets in terminal markets through the Federated Fruit and Vegetable Growers. Growers pack their peaches on the farm. The crop comes to market in such a short time—about two weeks around the first of September—that it would be difficult to handle the packing in a community packing house. In spite of the good work by the cooperative association, there is complaint that growers want to ship off-grade fruit to market, and that such stuff hurts the reputation of all Colorado peaches. Although inspection is voluntary, the United Fruit Growers have every carload inspected. There is another, smaller association, that handles

peaches. On the whole, the peach business of Colorado is in highly satisfactory condition. The possible peach acreage is limited, however, and it is not likely that this fruit can ever be raised in great quantity.

LETTUCE, CAULIFLOWER, PEAS, AND CELERY

Lettuce is grown principally in the San Luis Valley, Middle Park, and in valleys of the high altitude regions in the central and northwestern parts of the state. The so-called "mountain lettuce" of Colorado is of superfine quality. The areas on which this can be raised are more or less restricted and lettuce is a fairly difficult crop to grow, so that operations on a very large scale are not possible. It is said that some of the best soil for lettuce has been partly exhausted.

Colorado lettuce finds a very broad market. In 1928, the Federal Market News Service reports shipments to 35 states and to Canada. Lettuce is also shipped in mixed carloads of vegetables, so that carload shipments recorded below do not give a complete picture. The principal states that received carload shipments in 1928 were as follows:*  

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Carloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>632</td>
</tr>
<tr>
<td>Illinois</td>
<td>505</td>
</tr>
<tr>
<td>Missouri</td>
<td>444</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>106</td>
</tr>
<tr>
<td>New York</td>
<td>105</td>
</tr>
<tr>
<td>Ohio</td>
<td>58</td>
</tr>
<tr>
<td>Nebraska</td>
<td>33</td>
</tr>
<tr>
<td>Indiana</td>
<td>27</td>
</tr>
<tr>
<td>Kansas</td>
<td>25</td>
</tr>
<tr>
<td>Minnesota</td>
<td>24</td>
</tr>
<tr>
<td>Michigan</td>
<td>23</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>22</td>
</tr>
<tr>
<td>Tennessee</td>
<td>22</td>
</tr>
</tbody>
</table>

Although Colorado produces some very fine lettuce, the situation in the marketing of this crop is by no means what it should be. Perhaps the best indication of the unsatisfactoriness of the situation is that California and Arizona lettuce brings from $1.00 to $1.50 a crate more in Eastern markets than does Colorado lettuce. Such freight difference as Colorado enjoys to certain Eastern markets is more than wiped out by the lower prices received.

The whole trouble is that Colorado lettuce is poorly packed and graded. Poor lettuce is shipped in the same car with good lettuce. Some of the lettuce is sprinkled with mud and dirt which could be

easily washed off. The shipment of poor lettuce hurts the reputation of the good market. It is reported that Eastern buyers are rarely willing to buy Colorado lettuce F.O.B. at Colorado points, because they have little confidence in its quality or condition, whereas they buy large quantities of California lettuce F.O.B. California points. They know that California lettuce is better graded and standardized.

Colorado lettuce is marketed almost entirely through private wholesale companies, who have packing sheds and buying representatives in the producing areas. There are two or three small cooperative growers' associations which market their output through one of the big wholesale companies. In fact, this wholesale company helped the farmers to organize. The wholesale companies, although they are trying hard to improve the quality of shipments, are themselves partially responsible for the selling of poor lettuce, because of the competition among themselves to get enough lettuce to make up solid carloads.

Inspection service on lettuce is voluntary, but shippers frequently have their lettuce inspected, purely as a proof to farmers that their product is of inferior quality. Of the cars inspected, a relatively small proportion grades U.S. No. 1. When farmers have poor lettuce to sell, they insist that it be marketed, even though they get nothing out of it and hurt the reputation of all lettuce from Colorado. Although the present voluntary system of inspection undoubtedly does some good, it does not remove the evils described above. It seems to be the opinion of those in the lettuce trade that compulsory grading and standardization is the only thing that can improve the situation. The best growers admit this, but many growers are afraid of compulsory standardization because it may interfere with the selling of their off-grade product.

The situation is entirely different with regard to cauliflower. The raising of cauliflower is increasing rapidly and future prospects are good.* A reputation has been built up for Colorado cauliflower in the best Eastern markets and it is said that it brings a premium over Long Island cauliflower in New York City. There is little trouble in the grading and packing of this product and practically all of it grades U.S. No. 1.

The principal markets for Colorado cauliflower are New York, Chicago, Philadelphia, St. Louis, Pittsburgh, Cincinnati and Kansas City. (1)

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*Commercial shipments of cauliflower have increased from 101 cars in 1923 to 843 cars in 1928.

Green pod peas are another product that has rapidly come to the fore. In 1925 there were 35 carloads shipped from the state, and this increased to 348 carloads in 1928. The principal markets are New York, Chicago, and Philadelphia. Peas are difficult to ship and they are harder to grade than cauliflower. But the situation is good, and Colorado peas are of very fine quality.

Another distinctive product of Colorado is its celery, especially "Pascal" celery, which is transferred from the growing field to trenches and goes to market during the winter months. The production of this celery is an expensive hand process, and most of it is shipped by express, because it deteriorates rapidly. This is a product of which Colorado may well be proud, and it is probably possible to develop greater production and a broader market.

CABBAGE, ONIONS, AND BEANS

Cabbage is a fairly important crop but shipments have been falling off somewhat in recent years. This is a cheap vegetable which is shipped in bulk and there is some criticism to the effect that it is injured by rough handling both on the farm and in loading into cars, thus marring the appearance. Cabbage goes principally to Southern markets, such as Houston, Dallas, New Orleans, Oklahoma City, Fort Worth, and Jacksonville.

As for onions, they are produced in three different sections: the Western Slope, Northern Colorado, and the Arkansas Valley. The two first named sections produce yellow varieties; the Arkansas Valley is showing a sharp increase in the production of "Valencia" or sweet Spanish onions. It has already been pointed out that these Valencia onions are not properly graded and packed. Colorado onions have a wide distribution, with Chicago and New York as the two principal markets. Other Eastern cities as well as Middle Western and Southern cities take large quantities.

Beans are produced pretty generally throughout the Eastern half of the state. The bulk of the crop consists of the Pinto variety. This is a speckled bean that brings a lower price than white beans grown in Michigan and other states. It finds its way to the less discriminating markets of the South. It is a question whether a demand could be built up for this bean in Eastern markets. The best way to find this out would be to make a sales and advertising test in one or two markets. A part of the bean crop is marketed through the Colorado Bean Growers’ Association with headquarters in Denver.
The Wholesale Trade

The great bulk of Colorado's fruits and vegetables is marketed through private wholesale companies, many of which have been in existence for years, and have built up efficient organizations. They have been responsible for the development of such markets as Colorado now enjoys, and they will undoubtedly continue to act as the principal agencies for marketing Colorado's products.

These private wholesale companies may be grouped into three classes as follows:

First, small, fly-by-night operators, who appear at shipping points during the harvesting season. Some of these outfits do business on a shoestring, and they often make extravagant promises to growers, to lure them away from the old, established companies. Oftentimes, these companies fail, and cause losses to growers. The enforcement of the Commission Merchant Law is helping to reduce the depredations of these companies, but farmers still need to be taught to steer clear of small operators that have no financial rating.

Second, there are local Colorado wholesalers who have buyers and packing sheds at various shipping points in Colorado, but whose organizations do not extend to the big, consuming markets in the South and East. They market principally through reliable brokers, with whom they are constantly in touch by telephone and telegraph. Most of them are doing a good, sound, and efficient marketing job.

Third, there are various national organizations which have their headquarters in such cities as New York, Pittsburgh, and Cincinnati, with selling offices in other Eastern markets. Some of these companies maintain permanent buying offices in Denver, or Pueblo, or other Colorado points, and send representatives around to small shipping points during the shipping season. These companies, together with the reputable state and local buyers, furnish the backbone of Colorado's marketing system. Some of the perishable products they buy outright, for cash, but most of them they have to sell on a commission basis, the commission varying with the product. They commonly make advances to growers when they bring their crops to local shipping points. They also frequently furnish packing boxes, and other materials at cost, and give advice to individual farmers as to methods of growing, packing, and shipping. In other words, their service is a very broad and helpful one.

Cooperative Marketing

With two or three exceptions, cooperative marketing has not made remarkable headway in Colorado. The Director of Marketing, who has
charge of the operations of the Colorado Cooperative Law, has given out the following list of strictly cooperative associations in Colorado:

**Statistics Concerning**

**THE COOPERATIVE MARKETING ASSOCIATIONS OF COLORADO**

Based on Reports to the State Director of Markets

<table>
<thead>
<tr>
<th>Association and Place of Business</th>
<th>Territory Served</th>
<th>Number of Members</th>
<th>Gross Annual Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Bean Growers Association, Denver</td>
<td>All Colo.; two points in Utah</td>
<td>1,800</td>
<td>$380,000.00</td>
</tr>
<tr>
<td>Colorado Cooperative Lettuce Association, Buena County Vista</td>
<td>Montrose and Delta Counties</td>
<td>65</td>
<td>60,000.00</td>
</tr>
<tr>
<td>Colorado Onion Growers' Exchange Locals, Denver</td>
<td></td>
<td>100</td>
<td>125,000.00</td>
</tr>
<tr>
<td>Colorado Potato Growers' Exchange, Denver</td>
<td>All Colorado</td>
<td>2,000</td>
<td>3,500,000.00</td>
</tr>
<tr>
<td>Colorado Poultrymen's Exchange, Denver</td>
<td>Pueblo, Fremont, Denver Boulder</td>
<td>200</td>
<td>300,000.00</td>
</tr>
<tr>
<td>Colorado Turkey Producers, Inc., Grand Junction</td>
<td>Western Slope</td>
<td>730</td>
<td>166,000.00</td>
</tr>
<tr>
<td>Colorado Wool Marketing Association, Denver</td>
<td>All Colorado</td>
<td>140</td>
<td>319,000.00</td>
</tr>
<tr>
<td>Conejos County Vegetable Growers' Cooperative Association, Romeo County</td>
<td>Conejos County</td>
<td>300</td>
<td>75,000.00</td>
</tr>
<tr>
<td>Del Norte Vegetable Growers' Cooperative Association, Del Norte</td>
<td>Rio Grande County</td>
<td>225</td>
<td>85,000.00</td>
</tr>
<tr>
<td>Intermountain Poultry Producers' Cooperative Association, Grand Junction</td>
<td>Mesa County</td>
<td>110</td>
<td>175,000.00</td>
</tr>
<tr>
<td>Montrose and Delta Cooperative Poultry Producers' Association, Delta Counties</td>
<td>Montrose and Delta Counties</td>
<td>410</td>
<td>255,000.00</td>
</tr>
<tr>
<td>Mountain States Beet Growers' Marketing Association, Greeley Northern</td>
<td>Colorado Northern</td>
<td>3,800</td>
<td>(a) 12,670,000.00</td>
</tr>
</tbody>
</table>

(a) This association makes contracts covering beet prices in all Colorado territory of the Great Western Sugar Company. The gross figure shown represents payments ONLY to members of the association.
Association and Place of Business | Territory Served | Number of Members | Gross Annual Business
---|---|---|---
Mountain Vegetable Growers' Cooperative Association | Costilla County | 20 | $10,000.00
Plateau Creamery Association, Collbran | Mesa County | 133 | 
Pueblo Vegetable Growers' Cooperative Association | Pueblo County | 150 | $18,000.00
Western Colorado Honey Exchange, Grand Junction | Slope | 80 | $60,000.00

TOTAL MEMBERSHIP COLORADO CO-OPS... | | **10,263**
TOTAL GROSS ANNUAL BUSINESS | | **$18,198,000.00**

To this should be added the United Fruit Growers of Palisade, with 350 members and with a gross annual business of between $500,000 and $600,000.

It will be observed that over two-thirds of the gross annual business of these cooperatives is furnished by the Mountain States Beet Growers of Northern Colorado. This is not strictly a marketing organization, but rather a negotiating body, which deals with the sugar manufacturing interests on matters relating to the production as well as the sale of the sugar beet crop. As already pointed out, the Colorado Potato Growers' Exchange is an outstanding example of successful cooperation. Through its Denver Office, it markets about one-third of Colorado's potatoes through brokers in distant markets. The United Fruit Growers of Palisade is also a very successful cooperative association.

There have been any number of attempts to develop cooperative associations, which have failed, especially in the cantaloupe industry. The principal reason why cooperation has not made greater progress is probably the fact that growers are of a more or less heterogeneous character, consisting of many different nationalities, many of whom are not experienced farmers, and many of whom are shifting about from place to place. Many cooperative associations have failed because they expect too much. They have been misled into thinking that through cooperation they could in some way get higher prices than the market really affords. Disillusionment has resulted in disintegration. Others have made the common mistake of hiring inexperienced managers at low salaries. As a matter of fact, successful management of a cooperative association probably requires a higher degree of skill than does the management of a private corporation, because in addition to the
marketing job, the manager must have sufficient diplomatic ability to handle disgruntled members who are continually interfering and making suggestions.

Cooperative marketing has resulted in great effectiveness in other states, and it will undoubtedly develop in Colorado. One of the greatest forces toward the growing of better crops and more uniform grading and packing has been the local cooperative association. Growers' associations could undoubtedly improve conditions at many shipping points in Colorado. When it comes to cooperative marketing at distant terminal markets, Colorado farmers must move with extreme caution in entrusting their shipments to such organizations until they know that they are soundly organized. It takes years of experience for a cooperative organization to match the knowledge and ability that have been acquired by the big wholesale companies in reaching distant markets.

Inspection of Colorado's Products

The policy with regard to inspection has undergone several changes. In 1921 and 1922 there was a law requiring compulsory inspection of all products shipped, but this was repealed because of the opposition of certain growers, who felt that the marketing of their inferior products would be interfered with. As already pointed out, there was a law requiring compulsory inspection of cantaloupes until it was declared unconstitutional in 1929. At present the law requires compulsory inspection of only three products—potatoes, cabbages, and onions. Inspection of other products is voluntary.

Inspection is carried out through cooperation between the State and Federal Government, each paying part of the salaries of inspectors. As a matter of fact, the fees charged for inspection are more than sufficient to pay all salaries of inspectors. So far as the State of Colorado is concerned, the inspection service is under the supervision of the Director of Marketing with headquarters in the State Capitol. During 1929, the inspection service inspected about 24,000 carloads of produce, or about 66 per cent of the total shipments from the state. Out of 15,000 cars inspected in 1928, there were only about twenty reinspections called for at terminal markets, and only six reversals of the inspection made in Colorado.

During 1929 the percentage of the total shipments of various products inspected is about as follows:

- Apples ........................................ 15%
- Pears ........................................ 60%
- Peaches ...................................... 75%
- Head Lettuce ................................ 35%
- Cauliflower .................................. 60%
- Peas .......................................... 65%
The percentage of apples inspected in 1929 is low because of damage by hail. The percentage usually runs about 40. After the law requiring compulsory inspection of cantaloupes was declared unconstitutional on August 30, 1929, practically no inspections were called for on cantaloupes during the rest of the season. The inspection service believes that there is a crying need for compulsory inspection on cantaloupes.

The inspection service employs an average of about 35 men throughout the year, but has had as many as 85 inspectors at one time during the shipping season. It is a difficult matter to find and to concentrate a sufficient number of expert inspectors at certain shipping points during short harvesting seasons, and there have been some complaints that incompetent inspectors have been employed in the Rocky Ford district and at certain lettuce shipping points. On the whole, however, there is no doubt but that the inspection service has been extremely efficient. In spite of difficulties in obtaining competent inspectors, the situation is improving each year and it may be said that it is eminently satisfactory. The growing number of professional inspectors that move about the country from one growing region to another as the season advances, is helping out. An extension of the present inspection service together with a law requiring standardization of grades holds the greatest possibility for the improvement of the marketing of Colorado's products.

Conclusions and Recommendations

No attempt is made here to outline a complete program for the improvement of agriculture and agricultural marketing. The Colorado Association will, of course, cooperate with the College of Agriculture, and the Experiment Station is improving methods of farm management, in eradicating pests, and in the many other activities that are necessary in building up agriculture. The only danger is that the Association may be tempted to scatter its activities to such an extent that it may not have definite or substantial results to show for its effort. It would be better for the Colorado Association to concentrate for the next year or two on one or two projects which will yield the greatest benefits to Colorado's agriculture. This brief survey of the marketing situation clearly points to certain constructive activities on which the Association might well concentrate its activities during the next year or two.

I. Need of Better Grading.

The greatest weakness in Colorado's marketing methods is poor packing and grading, and the shipment of inferior goods that should not leave the state. Numerous instances have been pointed out in the foregoing pages where the marketing of inferior products has impaired
the reputation of Colorado's farm output, and where Colorado products have been excelled by similar products from such states as California and Arizona. Many of these competing states have compulsory grading laws, and Colorado is a step behind in this respect. The present inspection service of Colorado is doing excellent work and everybody agrees that compulsory inspection of potatoes, cabbages, and onions has been beneficial in the marketing of those commodities.

My principal recommendation, therefore, is that the Colorado Association's Agricultural Department should center its energies on the passage of a grading law at the next session of the Colorado Legislature, January, 1931. The details of such a law are not suggested in this report, but the law should make it compulsory that every carload of fruits and vegetables (and possibly of other farm products) should be definitely marked as to its grade. If possible, this mark should appear on every individual package. U. S. standard grades would probably be the best to adopt, with such changes or additions as may be necessary because of special or peculiar characteristics of any Colorado products. Those who have given this subject the most thought believe that such universal grading could be brought about without compulsory inspection of every single carload of produce shipped. It would probably be better not to use the word "compulsory" in the title of the law.

To bring about the passage of the right kind of law involves two things, as follows:

(a) A study of grading and standardization laws of other states and their experiences in carrying out these laws. As a result of this study, the very best kind of a law for Colorado should be framed within the next six months. Possibly a committee should be appointed for this purpose. The cooperation of the College of Agriculture and members of other educational institutions in Colorado should be sought. The Federal Department of Agriculture would be glad to help. It would be a great mistake to let this matter slide and to frame a law at the last minute which might prove to be unconstitutional and which does not cover all the details necessary. This project should be started immediately, and pushed with vigor.

(b) Educational work to insure a favorable attitude toward the proposed law. It is possible that enough growers and shippers are already in favor of an effective grading law to insure its passage. But there are many growers in certain parts of the state who are still opposed. A last minute agitation on the part of a minority might spoil the chances of its passage. There should be more than a simple majority in favor; there should be such a widespread public opinion demanding this law that it will not only pass, but that it will have substantial support. This means that the Colorado Association must definitely organize at once a thoroughgoing educational campaign
through the College of Agriculture, through cooperative associations, through federal authorities and county agents, through newspapers, legislators and key men throughout the state. Addresses should be made at farmers’ meetings. Literature should be distributed, pointing out to farmers the harm they do themselves and the State of Colorado by shipping inferior and poorly graded products. This educational work should not be carried out in hit-or-miss fashion. A definite program should be laid out under a responsible manager or committee. Someone should begin at once to assemble the right kind of material to be used in this educational work, including specific instances of low prices caused by the marketing of poor-quality products.

II. Utilization of Culls and By-Products.

The right kind of a standardization and grading law ought to prevent the shipment of inferior products from the state. It may be impossible from a legal standpoint to prevent the shipment of poor products, provided they are fit to eat. On the other hand, every effort should be made through a regulatory pest law and through the Pure Food Laws to keep inferior products off the market. This would undoubtedly lead to the problem of utilizing culls and other rejected shipments. In the case of some products, this may be difficult or impossible. But, a survey should be made to determine the possibilities of utilizing sound fruits and vegetables in canning factories, pickle factories, cider and vinegar mills, etc., especially in the leading shipping sections, where volume may be sufficient to support such enterprises.

III. Organization of the State’s Agricultural Activities.

In surveying the marketing situation in Colorado, the writer was struck by the fact that the various activities of the State Government that relate to agriculture and to marketing are more or less scattered. There is no department of agriculture with a secretary of agriculture, such as may be found in most other states. The reason for this lack of centralization of agricultural activities is probably due to the fact that when the state was organized, it was interested primarily in mining. The agricultural possibilities of the state were not given serious consideration. As a result, different departments of the state have been added from time to time, without having one central department which could properly supervise and coordinate the various activities.

At present, the agricultural and marketing activities of the state fall under two separate departments or jurisdictions. The State Board of Agriculture has supervision over the College of Agriculture, the Extension Service and the Experiment Station, the State Horticulturist,
the State Forester, the Seed Laboratory, the Pest Inspector and others. The Director of Marketing has charge of the cooperative law, the inspection service, and the enforcement of the Commission Merchant License Law.

The State Board of Agriculture, composed as it is of earnest and able men, is doing good constructive work, but the members of the Board receive no salaries and meet only once a month. It is admirably constituted to pass on matters of general policy but cannot possibly attend to the day-to-day supervision of the various activities that fall under its jurisdiction. Likewise, the Director of Marketing is doing excellent work in spite of a very meager appropriation.

This whole problem of state organization might well be studied by the Colorado Association. Off hand, the writer would recommend that such study be made in the direction of centralization of all agricultural and marketing activities under a state department of agriculture, possibly continuing the State Board of Agriculture to act as the governing board of the College of Agriculture and its associated activities. The writer realizes that there are many intricate problems involved in this suggestion. The possibility of a constitutional convention is one to be considered. The present civil service law is said to stand in the way of constructive state legislation. If there should be a constitutional convention within the next year or two, the Colorado Association should help in the formulation of clauses which have to do with the organization of agricultural activities. If it develops that there is no chance of revising the present constitution, an effort should still be made, possibly through a constitutional amendment, to provide for adequate centralization of authority for agriculture and the marketing of agricultural products. It is not too early to submit this whole subject to careful study, possibly through a commission appointed for this purpose.

IV. A State Brand.

It has been suggested that in order to make Colorado's products better known outside of the state, there should be adopted a state brand, which shippers would be allowed to put on packages containing products of very high quality. This brand could then be advertised, both in the general magazine advertising of the Colorado Association, and in specific markets where Colorado products would be naturally used. It would not be the intention to get shippers and associations to give up their own private brands. The state brand could be super-imposed over the existing brands, just as the name "Sunkist" is used in addition to the brands of the local associations that form the California Fruit Growers' Exchange. There are also private brands like "Blue Goose" which are used by private wholesale companies on commodities of superior quality in addition to local brands.
Colorado is not yet ready to adopt such a brand. An effective standardization and grading law must come first. After this is accomplished, and after proper machinery has been developed for rigorous supervision of the state grading law, a state brand would be possible. It would be beneficial in the following ways:

1. It would broaden the market for Colorado's best products and result in higher prices to farmers.

2. It would be good publicity for the State of Colorado as a whole.

3. It would act as an incentive to farmers to produce only the best products.

Although Colorado is not yet ready to adopt a state brand, it is something that the Colorado Association could well be studying. Provision for a state brand should be included in the grading and standardization law. Possible designs and wordings of such a brand could be experimented with.

In the meantime, it would do no harm to mention—and even to feature—some of Colorado's products in the general advertising of the Association. The State of Florida, through its Department of Agriculture, is now advertising Florida vegetables in New York newspapers. There is a line at the bottom of each advertisement that it is authorized by the Florida State Legislature.

V. Cooperative Marketing.

The Colorado Association should cooperate heartily with the Director of Marketing in the promotion of cooperative shipping associations, where need for such associations is apparent and where there is sufficient volume to make them successful. On the other hand, the Colorado Association should also cooperate heartily with wholesale dealers and commission merchants in improving marketing methods. It would be poor economics for the Association to espouse the cause of either cooperative or private marketing exclusively. The Association should stand for the best form of marketing applicable to each case as it comes up. Beneficial as cooperative marketing has been in the past, and will be in the future, the bulk of Colorado's farm products is marketed through honest and efficient wholesale organizations, which are sincerely interested in better grading and better methods of marketing.
The Colorado Association
An Organization of Citizens and Institutions Interested in the Sound Development of the State

514 Sixteenth Street
DENVER

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