

LEARNING TO COOPERATE
THE ORIGINS OF THE MARYLAND STATE DAIRYMEN'S ASSOCIATION

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PREFACE

When I began this research project, I planned to trace the early history of the Maryland State Dairymen's Association (MSDA), the collective bargaining cooperative for fluid milk formed by Baltimore area farmers in 1918 and continuing today as the Maryland Cooperative Milk Producers. The organization of a viable marketing cooperative in Baltimore was not an isolated event; before 1920, farmers formed permanent fluid milk cooperatives in almost every city in the nation. The study of the attempts made in Baltimore to organize a successful marketing cooperative reveals the conditions common in many large urban milk sheds in the early twentieth century. A combination of several factors in the Baltimore milk shed similar to the situations in other cities influenced the formation of the MSDA. After 1910, a group of dairy farmers achieved the prestige and experience necessary to assume leadership positions in Maryland agricultural organizations. As new health regulations stimulated consumer demand for milk by assuring a higher quality, more Baltimore area farmers recognized dairy farming as a profitable enterprise. Government support for cooperatives increased as the United States Department of Agriculture and the Cooperative Extension Service lent their personnel and official blessing to the new farm marketing groups.

The MSDA made important contributions to the well-being of area farmers and to the development of other fluid milk associations throughout the nation. It survived the depression without changing its

structure or leadership and without experiencing the protests and milk strikes which occurred in other milk sheds, yet the events occurring after the formation of the cooperative were only part of the total story of the MSDA. The background of its leaders, the events influencing the city milk market during the early twentieth century, the actions of milk dealers, and the technological changes in dairying and transportation all contributed to the birth of the cooperative in 1918. While not the first marketing attempt made by Maryland farmers, the MSDA was the first which was successful. Baltimore area farmers learned from earlier unsuccessful experiments in organization and marketing; many events also had to occur in order to convince them of the importance of cooperation. This learning process was a long and difficult one.

Because of the multitude of factors which prompted the formation of the MSDA in 1918, I chose to devote the major portion of this paper to the discussion of these early developments. I will conclude with a brief description of the cooperative's work during the twenties and thirties. I chose this approach because there is a need for detailed studies of rural organizations in the Northeastern states to match the works on the Farmers' Alliance and other groups in the South and Midwest. The development of rural leadership, the interaction between farmers and their customers, the effects of urban growth on farm specialization, and the motivations of farmers who organize cooperatives are all topics which need to be examined.

This project is an attempt to show, through the examination of one metropolitan area, that all of these topics are appropriate in the discussion of the farm cooperative movement of the early twentieth century. One cannot discuss the development of the cooperative and the corresponding economic changes without investigating the effects on the

family farm and on the rural community; however, it is just as true that the economic situation and the changes in the market must be given attention. This need to present a comprehensive description is especially important when discussing Northeastern agriculture where farmers selling milk or truck crops were never too distant from their urban customers to feel changes in consumer demand or purchasing power. They were the first farmers to experience government regulations which forced them to alter their operations. This study of Baltimore and the Maryland State Dairymen's Association explores the tensions and accommodation which city residents and their farm suppliers experienced as they learned to cooperate.

CHAPTER I

"A COW AND A CAN"

In the years immediately before World War I, Maryland agriculture approached the climax of a long period of change which began before the Civil War. Colonial and early nineteenth century Maryland's agriculture had been dominated by the cultivation of tobacco, especially in the southern and Eastern Shore regions. From 1839 to 1859, Maryland was the nation's fourth-largest tobacco producer, following Virginia, Kentucky, and Tennessee; however, after the Civil War, tobacco production became concentrated in only the southern Maryland counties.¹ General farming, brought to the valleys of Frederick and Washington counties by German immigrants in the eighteenth century, spread throughout the Piedmont area of central Maryland during the nineteenth century. As a result, wheat became the major crop in the counties between Frederick and Baltimore. The Germans and other Pennsylvania migrants added the intensive cultivation of hay as dairying became more important.² Beef-feeding also became common in central Maryland as farmers took advantage of the Baltimore export market.³

Farmers on Maryland's Eastern Shore switched from tobacco to

¹ Lewis Cecil Gray, History of Agriculture in the Southern United States, vol. 2 (New York: Peter Smith, 1941), p. 757.

² Ibid., pp. 918-19.

³ W. S. Hamill, The Agricultural Industry of Maryland (Baltimore: Maryland Development Bureau of the Baltimore Association of Commerce, 1934), p. 38.

corn and the extensive farming of truck crops in the late nineteenth century. The extension of railroad lines from Baltimore and Philadelphia encouraged this change to the production of perishable goods in central Maryland, as well. Both sections became sites of a large canning industry, specializing in tomatoes, sweet corn, and peas. By the early 1900s, Maryland led the nation in the total amount of vegetables canned.⁴ Paralleling the growth of truck farming in areas accessible to cities was the increase in livestock-raising and the decrease in wheat production. By 1900, corn, used primarily for animal feeds, replaced wheat as the leading Maryland crop. Hay and forage crops ranked third in value while potatoes were fourth; tobacco dropped to fifth place, grown as a major commercial crop in only five southern Maryland counties.⁵

Certainly the most prosperous farming areas in early twentieth century Maryland were the central counties along the Pennsylvania border, between the Appalachian Mountains and the Susquehanna River. In 1919, Baltimore, Carroll, Harford, Cecil, and Frederick Counties led the state in the value of their agricultural products.⁶ Located in the Piedmont Plateau, an area of rolling hills, stream valleys and productive soils, the region was traditionally one of small family-operated farms. Few farms were larger than 250 acres; in 1910, the average farm

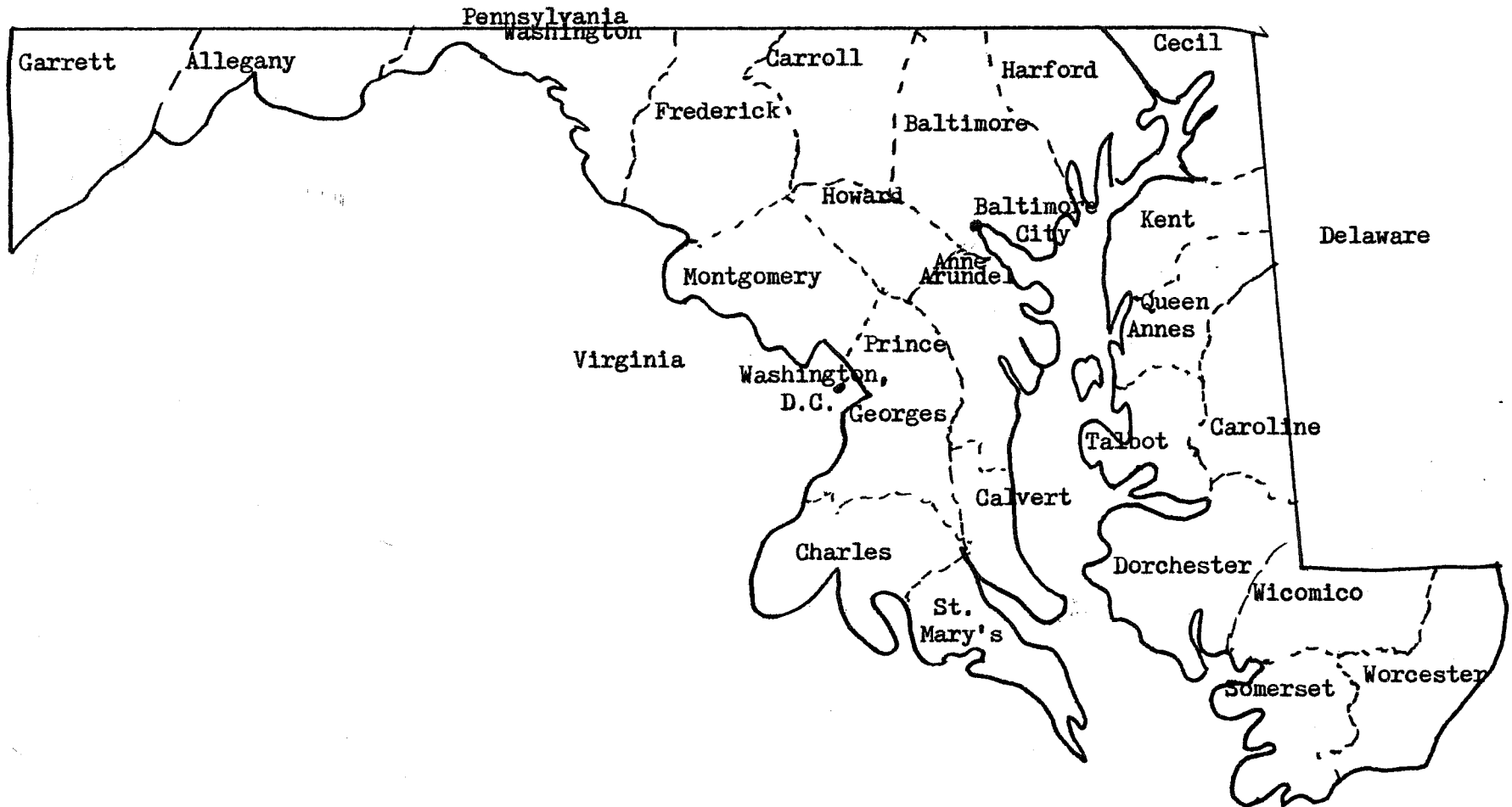
⁴The Aegis (Bel Air, Maryland), 14 December 1906: 3; and Eleanor Bruchey, "The Industrialization of Maryland, 1860-1914," in Maryland: A History, 1632-1974, ed. Richard Walsh and William Lloyd Fox (Baltimore: Maryland Historical Society, 1974), p. 417. In 1910, Maryland canners packed 46 percent of the nation's canned tomatoes, 9 percent of its sweet corn, and 5 percent of the peas.

⁵Bruchey, "Industrialization," p. 401; and Report of the State Agricultural Agent, Maryland Cooperative Extension Service, 1915.

⁶The Maryland Almanac (Baltimore: George W. King Printing Company, 1921), pp. 62-66.

MAP 1

MARYLAND



size was 92 acres, slightly below the state average of 102 acres.⁷ Most farmers in the area were native-born whites and the percentage of tenant farmers was lower than the average for the state.⁸ Most tenant farmers in the region farmed for shares, except in Baltimore County where more rented for cash.⁹ The proportion of tenant farmers decreased in the first twenty years of the century; however, the percentage of share tenants increased in the central Maryland counties and in the state as a whole.¹⁰

The preponderance of share tenancy, usually associated with grain or tobacco farming, could indicate the immaturity of the dairy industry in the early 1900s. Few farmers relied on dairying as the major source of their farm incomes. Most kept a few cows for home use and shipped any surplus milk produced to the city or made butter which could be sold in Baltimore. Very few farmers shipped milk throughout the entire year; most sold only during the spring and summer pasture season after the cows had freshened.¹¹ Farmers who shipped milk

⁷ U. S. Department of Commerce, Bureau of the Census, Thirteenth Census of the United States, 1910: Agriculture, 6: 734-5.

⁸ Ibid.: 734-5, 737-9. In Maryland, 83.1 percent of all farmers were native-born whites in 1910; 13.1 percent were Negroes. In the five counties of the Baltimore milk shed (Baltimore, Carroll, Frederick, Harford, and Howard), native white population averaged 89 percent with highs of 97 percent in Carroll and Frederick Counties. Only in Harford and Howard Counties were there more Negro than foreign-born farmers. An average of 74.7 percent of central Maryland farmers owned their farms, while the state average was 68.5 percent.

⁹ Ibid.: 737-8. In 1910, 76 percent of Maryland tenant farmers rented for shares. The proportion of share tenants in the counties was Baltimore, 27.4 percent; Carroll, 79.2 percent; Frederick, 84.6 percent; Harford, 73 percent; and Howard, 54.7 percent.

¹⁰ U. S. Census, 1920, Agriculture, 6, Part 2: 122-3. In 1920, 82 percent of central Maryland farmers were farm owners while the state average was 71.2 percent.

¹¹ Interview with Wilson A. Heaps, Highland, Maryland, 3 August

continued to depend on wheat, corn, or vegetables to supply a large part of their incomes. This failure of farmers to consider dairying as a full-time occupation may have been partially responsible for the lack of strong dairymen's organizations in Maryland. As long as farmers could depend on corn and wheat for their incomes and until their economic well-being directly depended on the condition of the milk market, dairy farmers had little incentive to create a bargaining organization.

Even the most prosperous regions of Maryland were not always viewed as progressive agricultural areas. County agricultural agents who came to the Baltimore area after 1914 found the farmers to be "thrifty and independent" but resistant to change.¹² P. A. Hauver, the Frederick County agent, claimed that farmers in his county prospered because of the fertile soil, not because of any "superior intellect" among the farmers.¹³

General farming had provided a steady income for generations of central Maryland farmers, contributing to the complacency and resistance to change found by the county agents. The mixture of grains and other feed crops, fruits and vegetables, dairying, and beef-feeding cushioned farmers during depressions and continued to predominate in the early twentieth century. Harford County farmer Joseph Twining, for

1979. Heaps is the son of I. W. Heaps, the first manager of the MSDA. Heaps has been dairy farming in northern Harford County since 1918 and served on the Board of Directors of the cooperative for many years after his father's death in 1938.

¹² G. Kinzy, Carroll County Agricultural Agent Report, 1917. County Extension Agents were required to write detailed annual reports which included surveys of crop-growing and animal husbandry practices, information on farm organizations, newspaper articles on rural activities, and copies of newsletters and other correspondence. They often added their personal impressions of the farmers they worked with.

¹³ P. A. Hauver, Frederick County Agent Report, 1917.

example, followed this pattern, raising thirty-seven beef cattle, fourteen dairy cows, twenty-five heifers, nineteen horses, and twenty-two hogs. In 1908, he planted sixty-five acres of corn, thirty acres of grass, twenty-four acres of potatoes, and thirteen acres of sugar corn and also harvested two hundred tons of hay and three thousand bushels of rutabagas which he used to feed to his livestock.¹⁴ Twining was considered a progressive farmer in 1908, but the type of farming he practiced had changed little from that of the previous generation. James Councilman of Baltimore County farmed 250 acres in 1889 and had a herd of thirty grade Jerseys. He sold butter, pork, eggs, and poultry in his family stall at Lexington Market in Baltimore and also grew hay, wheat, corn, and rye for sale.¹⁵ Typical of the most progressive central Maryland farmers of their era, Councilman and Twining used their land for a variety of crops and divided their labor among several agricultural pursuits.

Because dairying was not their sole means of support, Maryland farmers had little incentive to improve the productivity of their dairy herds. The average number of gallons of milk produced per year in Maryland was 328 per cow in 1890 and 435 in 1900. Yearly productivity in New England was 416 gallons per cow in 1890 and 500 gallons ten years later.¹⁶ Michigan farmers founded the first association to test cows

¹⁴ Aegis, 18 December 1908: 3. An excellent source of information on individual farms, especially the most progressive, is the newspaper articles reporting local farmers' club meetings. Different members hosted the regular meetins and a part of the meeting was always a tour of the host farm. Descriptions of many types of farms can be found in newspaper reports of farm fires. Most reports told not only of the crops and livestock which were lost, but also of what the farmer managed to save.

¹⁵ The Sun (Baltimore), 11 January 1889: 5.

¹⁶ Sun, 16 December 1908: 12.

for butterfat and production in 1905. By 1910, there were forty such associations in the United States; Baltimore and Harford County farmers organized Maryland's first in September.¹⁷ Other testing associations, subsequently formed in several parts of the state, involved only a few farmers even though the newly-arrived county agents promoted them. Lack of interest, ignorance about the benefits of testing, or reluctance to discover the unprofitability of their dairying practices kept many farmers from joining a testing association. One Cecil County farmer told his county agent that, "I am afraid that I will have to sell too many cows if I knew what they produce in a year."¹⁸ Before 1920, cow testing associations led very precarious existences, never involving a majority of farmers. Harford County's first county agent, T. E. McLaughlin, estimated that in 1916 less than 100 of the 1700 farmers producing for the Baltimore market belonged to any testing association.¹⁹ Frederick County's first testing association had only fourteen members in 1918 and seventeen members one year later.²⁰ Because it could not find a tester, the Harford County Association, like most others in the state, dissolved during the war and did not reorganize until 1921²¹

The formation of the early cow testing associations indicated that progressive farmers, at least, took their dairy enterprises seriously.

¹⁷ Joseph G. Knapp, The Rise of American Cooperative Enterprise: 1620-1920 (Danville, Illinois: Interstate Printers and Publishers, 1969), p. 419; and Maryland Extension Service Annual Report, 1915.

¹⁸ Quoted in G. F. Marsh, Cecil County Agent Report, 1915.

¹⁹ T. E. McLaughlin, "Figures vs. Guesswork," Kimball's Dairy Farmer, 1 January 1917: 4. Even by 1928, only 600 out of 18,000 cows in Harford County were under herd improvement association test. Aegis, 13 January 1928: 8.

²⁰ P. A. Hauver, Frederick County Agent Report, 1918, 1919.

²¹ H. M. Carroll, Harford County Agent Report, 1924.

The members of the Harford Cow Testing Association, organized in November 1911, paid one dollar per cow each year for the testing service. The association hired a tester who visited each farm monthly to calculate the amount and value of the feed used and to weigh and take a sample of the milk produced by each cow. Through this service, members learned the cost of feed for each cow and, therefore, how much money the cow returned to the owner. With the information from the tester, dairymen could adapt feed rations to individual cows in order to increase production.²² The monthly publication in local newspapers of the names and owners of all cows producing over nine hundred pounds of milk each month provided an added incentive to improved production.²³

As farmers' interest in better milk production increased, some improved their herds by culling poor producers and replacing them with purebred dairy cattle. Shorthorns and other breeds which had been used for both milk and beef lost popularity among dairy farmers who chose cows bred specifically for milk production such as Holstein-Friesians, Jerseys, and Guernseys. Jersey milk, especially, became identified with high quality and was advertised as a quality symbol by dairies which sold it.²⁴ Farmers imported purebred bulls and cows from other states to improve their herds. Those dairymen interested in

²² Aegis, 1 December 1911: 3.

²³ The first monthly report for the Harford Cow Testing Association was published in the Aegis, 23 May 1913: 3. Nine cows, owned by seven farmers, were listed in this report.

²⁴ Sun, 1 January 1902: 1. In its advertisements, the Filston Farm Dairy, for example, stressed the quality of its milk maintained through "continued watchfulness and the use of the Jersey cow, whose product is the richest known."

purebred animals formed breed associations which promoted individual breeds and debated their merits with other organizations. The debates were fueled by the results of the agricultural fairs and the herd improvement association tests, visible indications of the superiority of purebred stock. Breed associations received extra help after 1914 from the county agents who promoted the use of purebred cattle and organized sales of cows and bulls. They also encouraged farmers to purchase bulls cooperatively so that more herds could be improved at less expense. The promotion of purebred cattle had early effects; by 1918, Harford County farmers owned over 1200 purebred dairy cattle.²⁵

Dairy feeding became more scientific in the twentieth century as farmers interested in improving their herd's productivity increased their use of commercial feeds. Dairy farmers in Maryland also used more corn ensilage in order to supplement the commercial feeds. The number of wood, tile, and cement silos being constructed on farms to store the ensilage signaled the growth of dairying in the Baltimore milk shed. B. B. Derrick, Harford County agent, estimated that, by 1921, almost every farm with ten head of cattle had a silo.²⁶ Under the supervision of county agents, the substitution of ensilage and other home-grown feeds for the higher-priced commercial feeds became more common.

Improvements in dairy stock and feeding came faster than changes in other aspects of dairying. Because dairy farmers had to rely on

²⁵ B. B. Derrick, Harford County Agent Report, 1918. Periods of surplus in the Baltimore milk market provided another impetus for farmers to improve their herds by culling poor producers. In the winter of 1908, for example, the Aegis warned dairymen that "to feed dry or inferior cows will be just about as profitable as to feed the rats in one's corn crib." Aegis, 6 November 1908: 3.

²⁶ B. B. Derrick, Harford County Agent Report, 1921.

manual labor to milk their cows, most herds were not large. High-paying industrial jobs drew workers to the city, creating constant farm labor shortages. Milking machines appeared in the Baltimore area as early as 1907 but few farmers used them until after the war. The farm of Joseph Hoopes became the first in Harford County to have electric milkers. Local investors formed the Electric Development Company to supply power for Hoopes and other farmers who wished to install milking machines. Its water-powered plant, built along a natural falls near Hoopes's farm, also furnished light for the stable, barn and house. Hoopes had a herd of sixty Jerseys when he installed the milking machines, each of which milked two cows at once.²⁷ The introduction of the milking machines at the Hoopes farm attracted attention from representatives of Baltimore newspapers and the county press, local dairy-men, and health officials who had been invited by Hoopes to visit the farm. Reports from these visitors stressed the cleanliness of the new machines and their importance as a solution to the labor problem.²⁸ Hoopes found that with the new machines three men could milk his cows in one and a half hours while it had taken four men two hours to milk them by hand.²⁹

Demonstrated at state and county fairs and farmers' meetings, the new milking machines created a great stir in the Baltimore area. Because milking machines needed many mechanical refinements, however, this enthusiasm was a little premature. Despite all the excitement after their installation, Hoopes junked his milking machines after only a few months.³⁰ By 1918, only four Cecil County farmers used milking

²⁷ Sun, 8 August 1907: 14; and Aegis, 15 November 1907: 3.

²⁸ Aegis, 22 November 1907: 3. ²⁹ Aegis, 27 December 1907: 3.

³⁰ Aegis, 12 November 1915: 3.

machines.³¹ More farmers bought them during the war as labor became scarce and as evidence accumulated showing the economic benefits of milking machines. In a milk cost survey conducted in Cecil County in 1918, the farm demonstrator who made the highest profit used a milking machine.³² A 1921 study found that farmers who milked by hand spent an average of 100.44 hours per cow each year milking and caring for the milk and the dairy utensils while with a machine farmers spent only 71.28 hours watching the machine and caring for the cow and the milkers.³³

Despite the favorable publicity given to milking machines, most farmers continued to milk by hand even as they increased the size of their herds. When short supplies caused milk prices to increase, farmers bought more cows to increase their milk shipments. Because they needed no expensive equipment, new shippers could easily enter the market. According to I. W. Heaps, the first manager of the MSDA, "about all a man had to do to get in the dairy business at that time was to have a can and a cow, and that cow might be a sick cow for all anybody knew."³⁴ Most farmers cooled milk in nearby springs or in simple, home-made cooling tanks where cold water flowed around the cans which were placed in the tank. Throughout the first quarter of the twentieth century, dairying remained a relatively inexpensive farming enterprise which

³¹ J. H. Knode, Cecil County Agent Report, 1918.

³² Ibid.

³³ Roger Sutclift, "Milking Machines in Maryland," Maryland Farmer, 1 December 1921: 5.

³⁴ I. W. Heaps, "Suggested Set-up for Collective Bargaining Dairy Cooperatives," American Cooperation: American Institute of Cooperation, 3rd session at Northwestern University, June 20-July 16, 1928, vol. 3 (Washington, D. C.: American Institute of Cooperation, 1927), p. 38.

could be carried out on a small scale by many central Maryland farmers. As late as 1928, small farmers still supplied most of the milk for the Baltimore market; in that year, the daily average milk production on MSDA member farms was only twenty-five gallons per farm.³⁵ In 1920, herds owned by MSDA members averaged less than fifteen cows per herd.³⁶

The transportation of milk was also primitive in the early twentieth century. At the turn of the century, two thirds of all milk arrived in Baltimore by railroad, mostly on the North Central Railroad from the area north of the city.³⁷ In 1915, Baltimore received 76 percent of its milk by railroad; that year for the first time some came by truck. Until 1919, wagons delivered more milk to the city than trucks and, even then, railroads still delivered 70 percent of the milk.³⁸ Most milk arrived in the city between 7:30 and 10:30 A.M., with a few arrivals in the early evening.³⁹ Before trucks picked up milk cans at individual farms, farmers had to arrange their milking schedules to fit those of the train, often starting work very early in the morning. Wilson A. Heaps, a Harford County farmer, described the morning procedure on his farm before the days of milking machines and electric

³⁵ I. W. Heaps, "Control and Disposal of Surplus Milk," American Cooperation: American Institute of Cooperation, 4th session at the University of California, July 9 to August 4 1928, vol. 2 (Washington, D. C., 1928), p. 220.

³⁶ This information is from a compilation of data from membership records of the cooperative. See appendix 4.

³⁷ Sun, 12 January 1900: 10.

³⁸ Henry Trumbower, "Transportation of Milk By Motor Truck," Public Roads: A Journal of Highway Research, USDA Bureau of Public Roads, July 1924: 2.

³⁹ Sun, 15 January 1900: 10.

cooling tanks:

Up in our area, where [the Maryland and Pennsylvania Railroad] started, the train used to leave at 7:00 in the morning. And we'd have to get up and milk the cows and cool the milk in the spring, as a rule. We had no artificial refrigeration, so we had to get up at 4:00 in the morning and get the milking done, and as you milked, you put it in the spring and stirred it to cool it down as best you could.⁴⁰

The trip on the railroad often took several hours as milk cans were loaded and unloaded at each station. This long trip created difficulties in cooling milk during the summer and in keeping it from freezing in the winter. Although the first mechanical refrigeration cars for milk were developed in 1894, Maryland railroads did not use them until the 1920s.⁴¹ The Maryland and Pennsylvania Railroad acquired five refrigerator cars between 1920 and 1928 while the Baltimore and Ohio started using a refrigerator tank car between Frederick and Baltimore in 1923. Most cars simply had refrigerated compartments which were cooled to about 50 degrees, just low enough to meet Health Department regulations; tank cars could only be used to haul milk from receiving stations.⁴² Before the advent of refrigerator cars, milk cans were hauled in baggage or box cars. To keep the milk cold, ice was placed under a horse blanket or canvas covering the cans.⁴³

Not all farmers shipped milk directly to the city. Many creameries existed in the country to which farmers brought whole milk to be separated or the cream they had separated on the farm. Farmers found

⁴⁰ Heaps interview.

⁴¹ Ralph Selitzer, The Dairy Industry in America (New York: Dairy and Ice Cream Field and Books for Industry, 1976), p. 121.

⁴² George W. Hilton, The Ma and Pa: A History of the Maryland and Pennsylvania Railroad (Berkeley: Howell-North, 1963), p. 176; Maryland Farmer, 16 May 1923: 9; and 15 May 1922: 30.

⁴³ Selitzer, Dairy Industry, p. 112.

creameries to be a profitable market for their milk; they could sell the cream and keep the leftover skim milk to feed hogs and poultry.⁴⁴

Most creameries in the Baltimore area were privately-owned, often located on someone's farm. Small creameries only separated the milk, sending the cream elsewhere for sale or manufacture, while larger creameries made the cream into butter. Some area creameries tried cheese-making but most found that this enterprise did not pay. Farmers located farther away from the railroads patronized country creameries when they could not make a profit in other farm enterprises. Creameries paid an equivalent amount to that received by farmers shipping directly to Baltimore who had to pay railroad freight charges.⁴⁵

Although local farmers or merchants owned most creameries in the Baltimore milk shed, some Baltimore milk dealers also built or bought creameries, especially as dairies consolidated and the number of shippers increased. Unlike many other creameries, all of the dealer-owned plants were built along rail lines. Many could cool the milk before shipping, while others could store some surplus milk and cream. Creameries were especially important to large ice cream producers such as the Maryland Ice Cream Company, which owned Fowblesburg Creamery, and City Dairy, which owned creameries in Sparks and Dublin. Baltimore dairies operated country receiving stations and creameries throughout the 1920s and 1930s because they provided a means of storing surplus, saving freight charges, and preventing the spoilage of milk transported greater

⁴⁴ Aegis, 25 August 1911: 3.

⁴⁵ Information on the creameries has been found in the Aegis and the Sun.

distances from the city.⁴⁶ The receiving stations had been built near major state highways as well as railroad lines so that, in the 1920s, dealers could use tank trucks instead of railroads to transport milk to the city.⁴⁷

A small group of creameries in the Baltimore milk shed were owned cooperatively by farmers needing a profitable market for their milk. Often incorporated as stock companies and built on the farm of one member, cooperative creameries did the most of any type of milk plant to encourage quality production. The Darlington Cooperative Creamery, for instance, encouraged farmers to keep business and production records by offering cash prizes. Farmers could receive ten dollars for delivering the most milk during the year or for the highest percent of butterfat, and fifteen dollars for the lowest production cost per pound of butterfat.⁴⁸

Both cooperative and locally-owned creameries were small and frequently short-lived. Creameries often shut-down for some part of the year and frequently changed ownership. An example of the uncertain status of many creameries is found in the history of the Perryman Creamery in southeastern Harford County. It began operation in January 1914 with sixty stockholders and \$6,000 of capital stock. Almost all milk produced in the region was taken to the creamery which began with a weekly capacity of 1,200 to 1,500 pounds of butter. By March 1914,

⁴⁶ Heaps, "Set-up for Dairy Cooperatives," AIC, 1927, p. 44; and Federal Trade Commission, Report on the Distribution and Sale of Milk and Milk Products: Boston, Baltimore, Cincinnati, and St. Louis, 4 June 1936, p. 49 (Hereafter cited as FTC, 1936).

⁴⁷ Maryland Farmer, 1 November 1924: 1.

⁴⁸ Aegis, 8 December 1911: 2.

it received over 2,500 pounds of milk weekly and produced 600 pounds of butter, selling 300 to Baltimore's Belvedere Hotel. In June of that year it made 2,000 pounds of butter each week; however, in 1915, the Middletown Farm Creamery Company bought the creamery for \$1,500 when the mortgage was foreclosed. Forced out of business in late 1918 when the federal government took over most of the surrounding area for the Aberdeen Proving Ground. The creamery was purchased by vegetable canners Parker and F. O. Mitchell to be used as an ice plant and ice cream factory.⁴⁹

The proliferation of creameries in the Baltimore milk shed indicated that dairying had increased in the area. By providing a nearby market, existing creameries further stimulated dairy production. Railroads also opened new areas to the development of dairying by furnishing transportation to the city. New railroad lines, for example, opened Harford County as a dairy area. In 1900, most milk came to Baltimore from Baltimore County over the North Central Railroad, a branch of the Pennsylvania, but by 1918, the Maryland and Pennsylvania's "Milky Way," its early morning train from Harford and York Counties, carried more milk than any other train.⁵⁰ Areas which lacked nearby rail connections like many in Howard County did not develop into dairying regions until state roads were improved after World War I.⁵¹

The disappearance of the city cow stable also stimulated the growth of dairying in the rural areas outside Baltimore. In 1872, there were 1,603 cows in 485 different stables in the city.⁵² Although

⁴⁹ Aegis, 6 December 1913: 3; 23 January 1914: 3; 13 March 1914: 3; 19 June 1914: 3; 11 June 1915: 3; and 14 February 1919: 3.

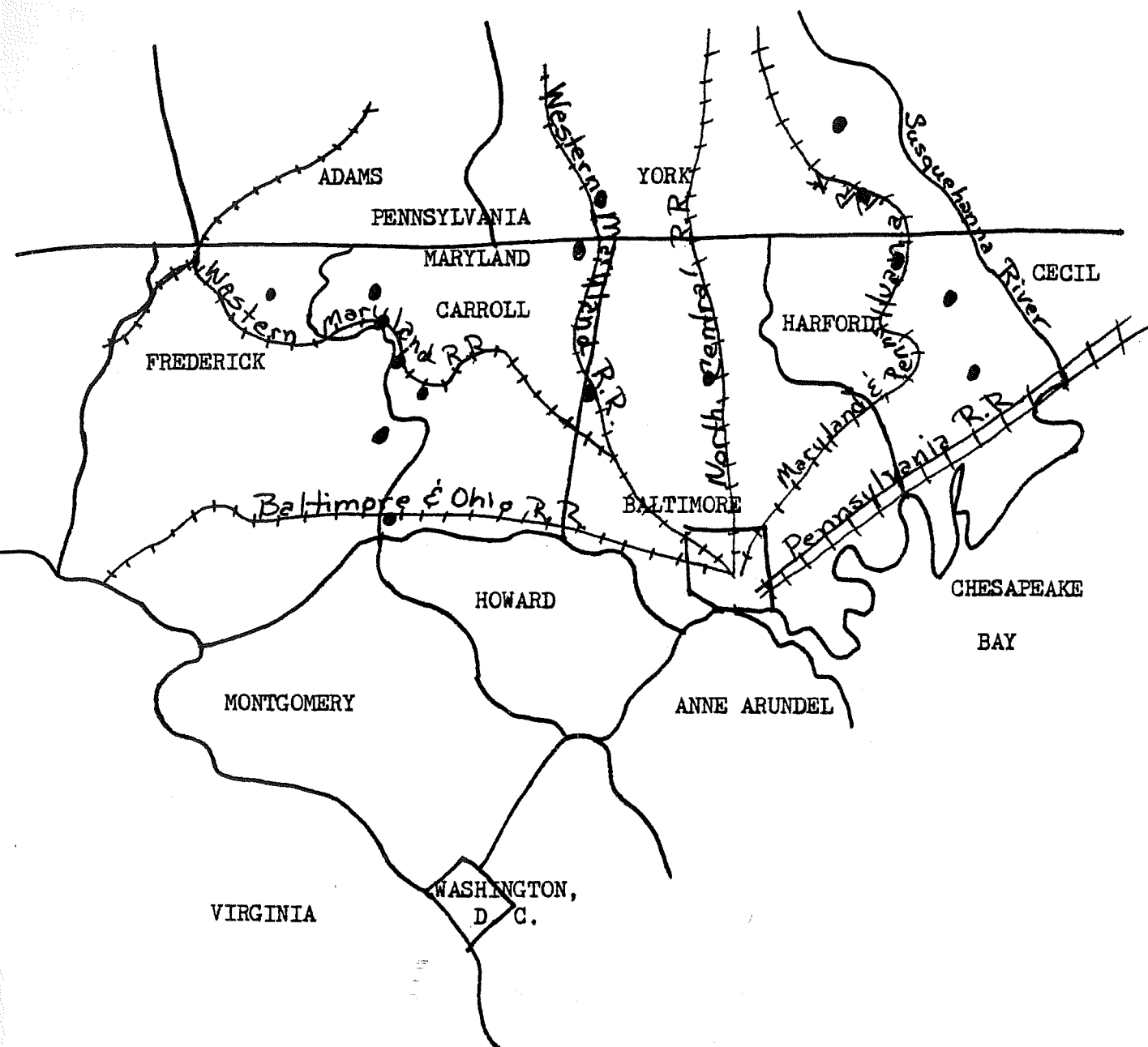
⁵⁰ Sun, 12 January 1900: 10; and 31 August 1918: 14.

⁵¹ E. K. Walrath, Howard County Agent Report, 1924.

⁵² William Travis Howard, Public Health Administration and the

MAP 2

BALTIMORE MILK SHED



● Major Receiving Stations

*Sections of the Maryland and Pennsylvania Railroad were formerly known as the Maryland Central or the Baltimore and Lehigh.

some families kept one or two cows for their own use, most cows were owned by city dairies who sold milk in the poorer sections of town. In the 1890s, from 12 to almost 25 percent of the city's milk supply came from within the city limits; this amount increased during the early years of the twentieth century.⁵³ In 1903, there were 539 herds with a total of 3,314 cows within the city limits.⁵⁴ In the late nineteenth and early twentieth centuries, Health Department officials first tried to regulate better quality production in city stables, but by 1916 they closed all stables within the city limits.

New health regulations forced dealers who owned cows in the city to move their stables to the suburbs or to buy milk from country farmers. The closing of city stables, therefore, increased demand for country milk, encouraging more farmers to enter the market which, at certain periods, could not be supplied by nearby farmers alone. Baltimore dealers often bought milk and cream from Pennsylvania and New York farmers. In 1903, it was one of only seven of the nation's largest cities to receive milk from more than 200 miles away.⁵⁵ Later health regulations would prohibit the importation of milk from outside a fifty-mile radius, but the dealers' practice of buying milk from outside the milk shed often created problems for early farmers' organizations which tried to gain control of the market.

Natural History of Disease in Baltimore, Maryland, 1797-1920 (Washington, D. C.: Carnegie Institution of Washington, 1924), p. 136.

⁵³ Ibid., p. 136 and Sun, 12 January 1900: 10.

⁵⁴ H. E. Alvord and R. A. Pearson, The Milk Supply of 200 Cities and Towns, United States Department of Agriculture Animal Industry Bureau, Bulletin 46, p. 26.

⁵⁵ Alvord, 200 Cities, p. 14. The other cities were New York, Philadelphia, Newark, Jersey City, Memphis, and Lynn, Massachusetts.

Baltimore dealers created many problems for farmers, consumers, and government officials. At the turn of the century hundreds of dealers sold milk in the city; many conducted their entire business from the back of a wagon. In the years before stringent health regulations, entering the market was easy for prospective dealers. As University of Pennsylvania Professor Clyde King remembered in 1927, many of the problems of the previous decades were caused by

a dealer who starts in business today and is out tomorrow, who stole a few cans from another dealer, stole his bottles from a third, and got an old horse somewhere, and a wagon, and started out to sell milk, agreeing with the farmer to pay for his milk at the middle of the following month. He collected every week from the consumer. He had little financial backing of his own, at most an investment in an old wagon and a skinny horse. At the end of six weeks if he succeeded he paid the farmers, and if he did not succeed he went to parts unknown and carried on the same practice again.⁵⁶

The problem of payment remained a serious one for farmers because of the number of small dealers who would sell-out in a hurry if threatened with insolvency or criminal charges. In 1914, there were six hundred milk dealers in Baltimore, but because of consolidations and attrition this number was cut in half in only three years. By 1929, after a series of mergers among dairies, two distributors handled 80 percent of all the milk entering the city.⁵⁷

Because of the small size of many dairy businesses, it is very difficult to learn about the majority of dealers. Few Baltimore dealers advertised in the city newspapers; as late as 1920, only Fairfied Farms Dairy, one of the three largest, advertised weekly in the

⁵⁶ Clyde L. King, "How Dairy Farmers Have Helped Themselves," AIC, 1927, p. 159.

⁵⁷ Sun, 3 April 1914: 16; 18 November 1917: 14; and MSDA membership records.

Sun. Western Maryland Dairy advertised on an average of once per month and City Dairy, the largest dairy, advertised even less. Most dairies used advertisements only when they needed to gain consumer support in disputes against farmers or health officials or when they wanted to explain their reasons for increasing prices. One finds most information about the smaller dairies in accounts of court proceedings. Courts often fined dealers for adding formaldehyde or water to milk, for selling unpasteurized milk, or for other unsanitary practices.

City milk marketing practices were often as backward and unsanitary as farming methods. Before the passage of the Health Department ordinance of 1917 requiring pasteurization and bottling of milk sold in the city, most milk was sold through home delivery from wagons or, in poorer neighborhoods, from corner stores where patrons without ice-boxes could buy two or three cents worth of milk which would be dipped from a large can. Only nineteen dairies with city stables and one using country milk delivered milk in galss jars in 1903.⁵⁸ Stating that, "conditions under which milk was handled and sold at this time contravened every canon of sanitary law and of common decency," William Travis Howard described the circumstances which continued to be typical in 1913:

The provisions for washing bottles and other utensils were meager. The great bulk of the milk was sold from "churns" or metal cans with spigots, and many of these cans were rarely washed. The number of small dairies and grocery stores selling milk in small quantities and dipped from cans numbered hundreds. There were no facilities, or very meager and dirty ones, for refrigeration. The bacterial counts of milk not only at the dairies, but at the stations, remained high, and much of the milk received in the warm months registered high temperatures.⁵⁹

Baltimore milk dealers had no organization which united all for common goals. Conflicts between small and large dealers periodically

⁵⁸ Alvord, 200 Cities, p. 84.

⁵⁹ Howard, Public Health, p. 139.

flared; the sheer number of dealers also hindered organization. Periodic references appear in the newspapers which indicate that dealers attempted to organize as early as 1882.⁶⁰ In 1895, some dealers formed the Dairymen's Protective and Collective Agency with capital stock of \$3,000, and in 1899 another dealers' group fought a new organization of dairy farmers which was formed to raise prices and market milk in the Baltimore area.⁶¹ After 1900, the Milk Bottlers' Exchange was organized as a permanent association primarily to represent the large dealers. In 1917, it had thirty members representing the city's established dealers with operations of various sizes.⁶² Several attempts were made by smaller dairies to organize; however, the unstable financial situation and transience of many dealers made stable organization difficult to achieve. As health regulations became more stringent, it became even harder for small one-wagon dealers to compete with the larger dairies. As large dairies combined, they could decrease production and delivery costs by combining milk routes and eliminating the need for multiple bottling and storage facilities.

Few owners of Baltimore dairies incorporated their businesses. Even when they did, ownership remained in the hands of a few individuals or a family. In 1903, the Gardiner Dairy was one of the earliest to be incorporated, with \$15,000 of capital stock.⁶³ This dairy, with the Western Maryland and Fairfield Farms Dairies, exerted a

⁶⁰ In that year, the Baltimore Dairymen's Association called for the appointment of a city milk inspector. Sun, 23 January 1882: 4.

⁶¹ Sun, 1 January 1896: 6.

⁶² Sun, 19 February 1917: 6. Length of time in the market seems to have been more important than size of operation to the founders of exchange.

⁶³ Sun, 1 January 1904: 8.

major influence on the affairs of the milk market during the early twentieth century. The president and major stockholder of the Gardiner Dairy, Asa Gardiner, Jr. became the most important milk dealer in the city during the period before the organization of the MSDA. For many years Gardiner had his own herd of Jerseys in suburban Baltimore; his interest in these animals prompted him in 1900 to help organize the Maryland Jersey Association, the first dairy purebred association in the state. Gardiner was elected secretary of the association when it was formed.⁶⁴ He also belonged to the Gunpowder Agricultural Club and the Baltimore Agricultural Society as well as other state agricultural organizations. This involvement in farm groups and the special dinners and educational programs he held for his employees and shippers to instruct them in handling and producing clean milk brought him into close contact with other dairy farmers.⁶⁵ Although he was often sympathetic to farmers' problems, Gardiner cooperated with dairymen's marketing organizations only when it served the best interests of his dairy.

Before the incorporation of Gardiner Dairy, Asa Gardiner managed the Filston Farm Dairy in Baltimore County, sending 300 gallons of milk to the city daily in 1899. One of the first dairies to sell bottled milk, Filston Farm also sold ice cream, eggnog, frozen pudding, plum pudding and meringues.⁶⁶ When his dairy merged with Pikesville, Schier, and three smaller dairies to form the City Dairy in 1914, Gardiner became president and general manager.⁶⁷ Fearing price

⁶⁴Sun, 13 December 1900: 10.

⁶⁵Sun, 13 January 1913: 4; and Aegis, 29 June 1917: 3.

⁶⁶Sun, 26 October 1899: 7; and 1 February 1902: 1.

⁶⁷Sun, 1 April 1914: 14.

increases, despite City Dairy promises to the contrary, consumers joined the small milk dealers to protest the merger.⁶⁸ Although some smaller dealers proposed to erect a cooperative bottling plant to fight the cost-efficient larger dairy, this plan was not pursued for several years.⁶⁹ City Dairy led the Baltimore milk dealers until 1921 when it merged with the Western Maryland Dairy, the city's third largest dairy.

While shipping to these large dairies provided some security of payments for farmers, no dealer had a completely satisfactory arrangement with his shippers which would guarantee an adequate supply of milk to the dealer and an equitable price to the farmers. Not bound by their agreements with farmers, dealers, during surplus periods, would often leave unneeded milk on the railroad platforms where it would sour. Dealers who agreed during milk shortages to pay a high price would cut their payments as soon as the supply increased. Faced with this situation in 1911, a Perryman farmer, L. Edmund Michael, sued a Baltimore dealer for breach of contract. Breitenbach, the milk dealer, testified that he had agreed to take all of Michael's milk for a six month period beginning in December 1909, and had originally paid twenty cents per gallon. Breitenbach argued that, while Harford County custom generally held that contracts were for a six-month season, he had agreed to pay twenty cents for an unspecified time and quantity and, therefore, he had the option to change either the quantity he took or the price paid. Other milk dealers testified that, because of fluctuations in the milk supply, they needed to pay higher prices in the fall but that after Christmas when the supply increased they usually reduced prices

⁶⁸Sun, 2 April 1914: 5.

⁶⁹Sun, 3 April 1914: 16.

to about twelve cents per gallon. In this case, the Judge of the Court of Common Pleas decide in favor of the dealer, saying that, custom notwithstanding, the contract gave Breitenbach the right to change his price.⁷⁰

Plagued with many problems which increased the uncertainty of their businesses, dealers like Breitenbach tried to pay farmers the lowest-possible prices in order to compete successfully in the crowded market place. Fluctuating consumer demand as well as uneven supplies from farmers complicated their financial calculations which, because of the limited funds possessed by most dealers, had to be exact. Emory Cook of the Maryland Ice Cream and Fruit Producers Co. described the frustration of many dealers and ice cream manufacturers in 1913:

In no business that I am familiar with is depreciation so enormous as in the ice cream business. Your cans and tubs will disappear once in three or four years, your horses and wagons once in three to five years, and your automobiles will depreciate 40 per cent the first year, 10 percent the next, and their value entirely disappears in from two to three years thereafter. Your machinery will depreciate 5 to 10 per cent a year and all this comes after an enormous yearly expense for upkeep. The difference between your material cost and your selling price must be at least 40 cents a gallon, or you cannot possibly meet the requirements of your very exacting business. You have five months in which the revenue from your business is at its height, three months in which it is an even break under the best of conditions and four long months in which you starve. At the present prices of ice cream in Baltimore the only way you can leave an estate is to die in the last of September and have your affairs administered before the frost catches them, and in that case, if your widow is a good manager and handsome, she may have enough left out of it to last her until she can get another husband, but she will have sense enough not to take another ice cream man who is willing to sell his goods at 60 cents.⁷¹

Farmers' failure to produce a constant supply throughout the year caused many problems for both dealers and other farmers. Those

⁷⁰ Sun, 21 April 1911: 7; and Aegis, 28 April 1911: 3.

⁷¹ Quoted in Selitzer, Dairy Industry, pp. 249-50.

shippers who produced milk during the winter received a premium from dealers who also had to import milk from outside the milk shed at high prices. Dealers passed these high prices onto consumers, also recouping their losses by paying very low prices to farmers during the spring and summer. The dual problems of even supply and guaranteed payment for milk would be two of the most important issues faced by the MSDA.

CHAPTER II

"CLEAN MILK FOR THE CHILDREN"

During the early twentieth century, no development in the Baltimore milk shed had a greater impact on the city's dealers than the formulation of municipal health regulations dealing with milk. Health regulations mandating tougher marketing and sanitation procedures reduced the number of city dairies by driving many dealers out of business and forcing others to merge. The new edicts caused conflicts between large and small dealers and between dealers and consumers. From the farmers' point of view, the reduction in the number of dealers altered existing business relationships, forcing many to find new distributors for their milk. By improving the quality of milk, the city health regulations aided new dairy farmers. Health officials slowly convinced consumers that milk produced under the new regulations was safer to drink; therefore, demand increased, creating the incentive for more farmers to enter the market. As new milk producers entered the milk shed, health officials shifted their focus to make individual farmers as responsible for milk quality as the city dealers.

Although the achievement of milk quality was the goal of health officials and civic leaders throughout the nineteenth and twentieth centuries, the difficulty of ensuring the quality of milk sold from hundreds of city stables and country farms was enormous. Since most of the nation's milk was produced for local consumption, state and local

rather than federal laws were needed to regulate fluid milk and cream quality and distribution. Both the city Health Department and the Maryland Board of Health regulated the Baltimore milk supply, with the city assuming most of the responsibility for setting quality standards. The food given to cows, the temperature at which it was kept on the farm or transported to market, the sanitary conditions of dairies and farms, animal and human diseases, and the extent of adulteration all affected milk quality. While poor sanitary conditions or transportation problems were often unavoidable for farmers and dealers, the adulteration of milk was usually deliberate; therefore, Baltimore health officials chose to focus initially on this most serious and unethical deterrent to good quality. Farmers and dealers added water to their milk so that the amount could be stretched and reap a higher price and they used formaldehyde or other preservatives to slow the spoilage of old milk.

Enacted in May 1855, Baltimore's first health regulation concerning milk quality set a fine of twenty dollars for each sale of adulterated milk. Like a similar ordinance passed in 1879, this law did not provide money to hire the personnel to inspect the milk and enforce the regulations.¹ In the crusade against adulteration, dealers received the brunt of the criticism from health officials and consumers even though officials could not always determine exactly who had altered the milk. Dealers using milk from the country had to trust farmers to send a pure product which had not been tampered with. Most critics of the dealers recognized this problem as well as the need to educate consumers on the value of good milk. Some observers commented that, because the consumer was more interested in a good price than quality, he must

¹Howard, Public Health, p. 75.

share the blame for the poor quality of milk sold. Commenting in the 1920s, University of Maryland President Dr. A. F. Woods said that the public's attitude in the era before stringent health regulations were enacted was, "Send in any old thing and we will boil it and drink it."² Reformers believed that the inspection of milk and stables to catch violators of the adulteration ordinances was the only way to protect consumers. As early as 1882, the members of the City Dairymen's Association called for the appointment of a city milk inspector to stop adulteration by the more unscrupulous dealers.³

Necessary for thorough milk inspection was the creation of state and local agencies which had both the power and the personnel to enforce milk ordinances. At the state level, milk and stable inspection became part of a larger campaign to ensure pure food. Although primarily interested in preventing and isolating animal diseases, the Maryland Livestock Sanitary Board, founded in 1888, also established statewide control over all stables and buildings where milk was kept or sold. In 1890, a state law gave the Maryland Board of Health the power to inspect many types of food and to prohibit the sale of diseased or adulterated milk.⁴ In its first effort to control quality at the farm level, the state legislature required the Livestock Sanitary Board in 1898 to register all cows producing market milk and to inspect farms annually to enforce building and sanitary standards. An absence of an adequate inspection staff and enforcement powers forced the board to rely on voluntary compliance despite the provision for a twenty-dollar

² Maryland Farmer, 1 December 1923: 1.

³ Sun, 23 January 1882: 4.

⁴ Howard, Public Health, p. 82; and Alvord, 200 Cities, p. 84.

fine.⁵

Because the task of inspecting all stables and farms and of enforcing pure milk laws was so enormous, state officials decided to transfer some of their responsibilities to the local level. In 1894, the state legislature authorized the mayor and city council of Baltimore to enact regulations governing the sale and inspection of milk and other foods.⁶ Quickly assuming this new responsibility, the city council authorized the city chemist, an employee of the Health Department, to study the existing condition of the market and to recommend changes in milk standards and enforcement. The practices uncovered by the chemist indicated that previous efforts to raise the quality of milk had been unsuccessful. He found that only four out of the sixty-eight milk samples taken at railroad stations, delivery wagons, and stores were clean when examined under a microscope. Of the 6,658,100 gallons of milk sold in the city during the previous year, over 800,000 gallons had come from stables in nearby suburbs. Many of the cows kept in city stables, especially those owned for family use, were kept near the family privies at the back of houses. In the cellar of one city milk and poultry dealer, the chemist saw chickens perched on the rims of open cans filled with milk. Milk from the country was often in a equally horrible state; the chemist found blood, live frogs, dead mice, leaves, and decomposing vegetables in the milk received at the railroad stations. By tracing twelve cases of typhoid in the city to milk, the study also documented the link between milk and disease. Unaware of the danger, one dealer had given a spongebath to his child who was sick with typhoid.

⁵ Alvord, 200 Cities, p. 83.

⁶ Ibid.

The dealer then milked his cows and placed five uncovered milk cans filled with fresh milk within fifteen feet of the sick child. Officials later traced several typhoid cases to milk sold by this dealer.⁷

The 1894 study resulted in a series of ordinances which set firm quality standards and provided for increased inspection and stricter enforcement. In May 1894, an ordinance was passed by the city council which increased the size of the inspection staff and gave the city health commissioner the responsibility to inspect all food sold in the city. It also established the first quality standards for milk sold in the city. Only pure, unadulterated milk from healthy cows could be sold. Skimmed milk and buttermilk could be sold if properly labeled or if the dealer advised the purchaser of its character. Milk should contain at least 12 percent solids, 3 percent butterfat, and a specific gravity of 1.029. The new standards and techniques such as the Babcock test, which measured butterfat content, would make the detection and prosecution of violators of the ordinances easier for health officials. The ordinance authorized officials to confiscate or spill all milk in violation of the regulations which, for the first time, included a temperature standard requiring that milk had to be cooler than 60 degrees to be sold.⁸

After the election of Republican reform mayor Alcaeus Hooper in 1895, the promotion of pure milk legislation increased in conjunction with the drive for other reform measures. Mayor Hooper appointed physicians and other qualified experts to oversee the Health Department in an attempt to rid it of political influence.⁹ In 1896, another ordinance

⁷ Howard, Public Health, pp. 136-7.

⁸ Ibid., pp. 75, 136; and Alvord, 200 Cities, p. 84.

⁹ James B. Crooks, "Maryland Progressivism," in Maryland: A History, p. 636.

focused more attention on the conditions in city stables and on the care of dairy animals. In an effort to fight the spread of disease, it required that diseased cows and workers be reported to the Health Department immediately; the department would inspect milk from these diseased herds before it was sold.¹⁰

Although inspectors found an increase in the amount of butterfat and solids as well as a decrease in the presence of the foulest types of foreign materials after the enactment of the 1894 and 1896 ordinances, many experts believed that the standards were still too low to completely protect the consumer.¹¹ The city chemist reported in 1900 that the standards for solids were low enough that four gallons of milk could be diluted to make five and still pass inspection.¹² Progressive farm members of the statewide Farmers' League of Clubs urged increased inspection of farms by city officials, claiming that the lax inspection made it possible for a farmer to make up for his losses from milk condemned one day by adding water to the next day's shipment.¹³ At a meeting of the Maryland Public Health Association in 1899, a Baltimore physician reported on the conditions still existing in the approximately five hundred city stables. In one section of the city, inspectors found cows in a dark shed behind a sweatship, fed only refuse from breweries. The increased activity by milk inspectors who checked an average of 120,000 gallons each month during 1899, however, indicated that some progress had been made.¹⁴

In 1900, a new state law, introduced in the Senate by John

¹⁰ Howard, Public Health, pp. 75-76.

¹¹ Ibid., p. 137.

¹² Sun, 21 January 1900: 12.

¹³ Sun, 29 January 1902: 7.

¹⁴ Sun, 22 November 1899: 7.

Beasman, a Carroll County farmer, brought the standards for milk sold in the entire state in line with those in effect in Baltimore.¹⁵ By 1902, health officials checked milk regularly at stables, grocery stores, and railroad stations, spilling milk which did not meet the standards. Because the arrest and prosecution of violating dealers remained a problem, Health Department inspectors relied on the disposal of sub-standard milk as their major means of punishment.¹⁶ The spread of disease through the handling of milk by sick dairy employees remained a common problem for health officials who depended on dealers' voluntary compliance in reporting outbreaks of disease.¹⁷ Adulteration of milk continued, stated another Health Department report in 1901. In the corner grocery stores which supplied most of the milk for Baltimore, 50 percent of the milk had been watered and 10 percent contained formaldehyde. Illegal preservatives were found in 57 percent of the milk in delivery wagons. Officials blamed the high incidence of milk adulteration, occurring even after the enactment of harsher regulations, on the old problems of lack of inspection and difficulties in enforcing compliance from dealers and farmers.¹⁸

Health officials increased their pressure on the stable owners. In a successful attempt to drive out the worst of the stables, a 1902 ordinance required even more improvements for city dairies, including better drainage of stables and more space and air for cows.¹⁹ Inspections

¹⁵ Sun, 2 March 1900: 12. This law would have a greater effect in Baltimore due to its existing inspection system; the smaller cities and towns still had no effective health departments to enforce the state regulations.

¹⁶ Alvord, 200 Cities, p. 84.

¹⁷ Sun, 15 February 1900: 4.

¹⁸ Sun, 16 January 1906: 12.

¹⁹ Howard, Public Health, pp. 76, 137.

of stables by the city veterinarian increased; in 1903, city officials tried to compel all farmers shipping to Baltimore to abide by city regulations, inspecting 220 of the 1500 dairy farms outside the city.²⁰

After 1900, Baltimore health officials joined a growing national movement advocating even more milk quality reforms. For the first time, the U. S. Department of Agriculture worked with reformers to promote the sale of pure milk in urban areas. In its 1903 report, The Milk Supply of 200 Cities and Towns, the USDA compiled statistics on milk production and sales, the number of dairies and cows supplying the market, and the consumption of milk in the cities. The report also included descriptions of the existing health regulations pertaining to milk, the number of health personnel, and the amount spent on inspection. By 1900, all United States cities with populations of over 100,000 had some type of regulation; however, they had not solved the problem of inadequate enforcement. Not ready in 1903 to create national regulations, the USDA preferred to advise state and local agencies by furnishing examples of regulations used by many cities.²¹

Table 1 shows how Baltimore, with a population of 508,957, compared with other cities with more than 100,000 residents. One of twenty cities to inspect all of its city stables at least once during the year, Baltimore spent less than the average amount for milk inspected. Its officials collected over thirty thousand samples for analysis, compared to the national average of seven thousand. Per capita consumption lagged far behind the national average, indicating that Baltimore consumers had not become convinced of the value of milk. Of the eighteen northeastern cities with populations over 100,000, only the

²⁰ Alvord, 200 Cities, pp. 84-85.

²¹ Ibid., p. 10.

TABLE 1

MILK STATISTICS FOR BALTIMORE AND 38 LARGE CITIES, 1903

	U. S. Cities over 100,000 population	Baltimore
Daily per capita milk consumption	.61 pints	.39 pints
Daily milk consumption	30,930 gals.	25,000 gals.
Daily skim milk consumption	2,152 gals.	5,000 gals.
Daily cream consumption	1,273 gals.	4,000 gals.
No. of milk stores	968	2,530
No. of residents per store	1,176	201
No. of milk wagons	550	525
Farthest distance from city where milk obtained (range)	8 to 527 miles	200 miles
No. of herds within city limits	297	539
No. of cows within city limits	2,260	3,314
Herds inspected in past year within city	124	539
No. of farms beyond city	686	1,500
No. of farms inspected beyond city	114	220
Retail price per quart: summer winter	5.8¢ 6.5¢	5 to 10¢
No. of "Model dairies"	---	3
Total solids required (range)	11.5% to 13%	12%
Total butterfat required (range)	2.5% to 3.7%	3%
Annual cost of milk inspection	\$2,953	\$2,300
No. of fulltime inspectors	3	3

SOURCE: Alvord, Milk Supply of 200 Cities and Towns, pp. 26-29.

District of Columbia and Allegheny, Pennsylvania had lower consumption rates. Some of the interesting information in the study is on the larger number of milk suppliers per capita for Baltimore than the nation as a whole. This large number of stables, wagons, farms, and especially, grocery stores contributed to the difficulties faced by health officials.

There are signs that, after 1900, both consumers and some dealers placed more interest on quality. Probably the first dealer to stress the quality of his milk, Asa Gardiner learned early to use the new health regulations to his advantage as he reminded his customers in 1900 that his milk was pure because his stables had passed city inspection.²² Gardiner's ads stressed the pure, natural condition of his Jersey milk which did not need to be doctored "with artificial color and chemical thickening."²³ Other dairies learned Gardiner's techniques; a 1906 advertisement from the Western Maryland Dairy stressed the results of a study of the Baltimore milk market conducted by the Chicago Journal of Health which named its milk the best in the city.²⁴

At the end of 1905, civic groups joined health officials in an educational campaign to increase public support for pure milk regulations. The campaign officially began in January 1906 when Dr. John Fulton outlined his plan for a series of weekly public lectures to the women of the Arundel Club.²⁵ The State Board of Health encouraged regulation of the milk supply in its milk exhibit which it presented in 1906.²⁶ But educational campaigns alone could not prompt the city

²²Sun, 5 February 1900: 1.

²³Sun, 1 January 1902: 1.

²⁴Sun, 8 January 1906: 14.

²⁵Sun, 16 January 1906: 12.

²⁶Crooks, "Maryland Progressivism," p. 636.

council to enact a tougher milk ordinance; new occurrences of typhoid and infant cholera traced in 1907 to carelessly-handled milk galvanized the public to call for city action.²⁷ In the late summer of 1907, the connection between typhoid and the milk supply was one of the most discussed topics in the city. The Enoch Pratt Library supplied a list of books to the Sun so that its readers could learn more about the subject. Officials urged dealers to keep their operations cleaner and to handle the milk with greater care and warned consumers to boil all milk before using it during the typhoid outbreak.²⁸ A Baltimore Grand Jury recommended that, to make identification of persons responsible for contaminating or adulterating milk easier and to prevent contamination during distribution, all milk be shipped in labeled, sealed containers.²⁹

Taking advantage of the public agitation for increased enforcement of pure milk standards, Baltimore's Health Commissioner asked the city council to increase the budget of the department enough to hire five more milk inspectors for 1908, bringing the total number of inspectors to eleven. The Commissioner also wanted the power to grant licenses to dealers who could gain permission from their farm suppliers for health officials to inspect the farms.³⁰ While they expected the State Board of Health to toughen its regulation of the handling of milk on farms, city officials had become convinced that they needed the power to inspect farms in their milk shed.³¹

Health officials, concerned citizens, and dealers introduced a new ordinance to the city council in January 1908. Designed to eliminate

²⁷ Ibid.

²⁸ Sun, 17 September 1907: 4, 9.

²⁹ Sun, 7 September 1907: 9.

³⁰ Sun, 17 September 1907: 14.

³¹ Aegis, 20 September 1907: 3.

milk contamination at its major sources through an extension of city inspection, the ordinance identified five potential causes of contamination between the farm and the consumer: unclean milkers or cows, dirty cans, the trip from the farm by wagon and railroad, the dealers' practice of opening milk cans to taste the milk at the railroad depots, and the processing by dairies.³² The ordinance required permits for all dealers, provided for dairy farm inspection, excluded the feeding of distillery slops to cows in city stables, required the thorough cleansing of all farm and dairy utensils, and also raised the standards for solids to 12.5 percent and butterfat to 3.5 percent.³³ Milk from the country would be tested for cleanliness and adulteration at the railroad depots by the new corps of health inspectors.³⁴

For the first time, a city ordinance affected all dealers selling milk in Baltimore and, through its licensing requirements, also the farmers supplying milk to those dealers. The higher standards and the licensing requirement created opposition among many dealers, especially those who would be immediately put out of business by the prohibition against feeding distillery slops to cows in the city. Despite the evidence against the use of distillery slops, the dealers who used them had the support of several councilmen, especially from East Baltimore where many of the worst stables were located. Reluctant to submit their farms to inspection by city officials, some farmers also disapproved of the new regulations. Because they believed that milk prices were not high enough to make extensive farm improvements mandatory, farmers claimed that the regulation of dealers should continue to be the city's

³² Sun, 29 September 1907: 20.

³³ Howard, Public Health, p. 76.

³⁴ Sun, 29 September 1907: 20.

first priority.³⁵

The supporters of the ordinance mobilized a wide cross-section of the city and state's population. The USDA and the State Board of Health sent their representatives to council meetings to testify in favor. Other supporters included the Sun, the Federation of Labor, the Women's Civic League, and other reform clubs such as Baltimore's Federated Charities, operator of the Babies Milk and Ice Fund.³⁶ The most important city charity, the Babies Milk Fund furnished milk, ice, and nursing care to low income mothers and children during the hosummer months. For the Sun and other supporters of the charity to solicit contributions to the fund, it was necessary that the milk it gave the children was of high quality. After it was endorsed by Democratic boss John J. Mahon, the city council voted to pass the ordinance.³⁷

After passage of the 1908 city ordinance, emphasis on lowering the bacterial content of milk increased. As measured by health officials, the bacterial content of the milk decreased from 5,800,000 units of bacteria per cubic centimeter (about $\frac{1}{2}$ teaspoon) in 1907 to 3,400,000 in 1908.³⁸ Community groups continued their campaign for pure milk; in 1911, the Women's Civic League began a series of public meetings to call attention to their goal of "clean air to breathe, clean water to drink, clean milk for the children, and clean streets and alleys."³⁹

³⁵Aegis, 20 September 1907: 3. ³⁶Howard, Public Health, p. 138.

³⁷Crooks, "Maryland Progressivism," p. 637.

³⁸Howard, Public Health, p. 138. Under current Health Department standards, the acceptable limit for bacteria is 50,000 per milliliter ($\frac{1}{5}$ teaspoon). According to the Maryland Cooperative Milk Producers' Quality Program Policy pamphlet, farmers can be suspended if three out of their last five counts, taken about every fifteen days, are above 100,000.

³⁹Sun, 1 April 1911: 8.

In 1912, they took their educational campaign to the country, urging farmers to cool milk to at least fifty degrees before shipping in order to reduce the bacterial content.⁴⁰ The Civic League also wanted to completely cut off the Health Department from political connections. As in other reform efforts of progressives, the Baltimore reformers wanted the city's bureaucracy to be staffed by experts and not by political appointees. Mayor James H. Preston, who managed to support some reform measures while maintaining allegiance to the Democratic machine, defended the political appointment of milk inspectors at a meeting with the Civic League; however, he claimed that they should be competent enough to "know the difference between a cow and a horse."⁴¹

Health Department officials and the Women's Civic League asked Mayor Preston and the city council for more regulations and for extra, qualified milk inspectors.⁴² Despite protests from farmers who depended on springs which could cool milk only to about 55 degrees, the Health Department urged for a temperature requirement of 50 degrees.⁴³ While the department had been doing some bacteria testing, the council now required it to add this practice to its inspections. In order to coordinate efforts of state and city health officials, the State Board of Health deputized city inspectors to visit dairy farms and work with farmers to improve the quality of the milk they shipped to the city.⁴⁴

The council enacted the regulations at the end of 1912 primarily as a reaction to news that an outbreak of septic sore throat during the

⁴⁰Sun, 1 October 1912: 11.

⁴¹Crooks, "Maryland Progressivism," pp. 636-7; Howard, Public Health, p. 140; and Sun, 19 November 1912: 14.

⁴²Sun, 19 October 1912: 10.

⁴³Sun, 3 October 1912: 6.

⁴⁴Sun, 19 November 1912: 14.

previous winter had been traced to milk from a large dairy whose pasteurizer had broken down. In February and March, between one and three thousand cases of the disease occurred in the city, resulting in at least thirty deaths. Although the U. S. Public Health Service said that the milk which caused the outbreak had come from infected cows from one of the dairy's supply farms, it never found evidence of a mastitis epidemic among the farms.⁴⁵ The press and consumers attacked dealers for not keeping a careful watch on their supplies and reminded them that "the milk trade exists for the service of mankind primarily and for the profit of the dealer secondarily, and not vice versa."⁴⁶ The city and state Health Departments increased their cooperation to stop the entrance of milk from farms with cases of communicable diseases.⁴⁷

Primarily because most milk was not pasteurized, the 1912 regulations were not very effective at stopping the problems of contamination of milk and the subsequent spread of disease. Commercial milk pasteurization had been introduced in Baltimore in 1893 but few dealers used it during the first decade of the twentieth century.⁴⁸ Although some dealers began to pasteurize their milk after the passage of the 1912 regulations, by 1916, only 60 percent of the milk sold in the city was pasteurized. Much of this milk had not been properly pasteurized because dealers failed to heat milk at high enough temperatures for a long-enough period to kill the bacteria. Pasteurization equipment was often primitive and, as was found in the 1912 septic sore throat epidemic, was not always properly cleaned or maintained.⁴⁹

⁴⁵Sun, 25 November 1912: 14; and 10 September 1916: 5.

⁴⁶Sun, 2 July 1913: 6. ⁴⁷Howard, Public Health, p. 138.

⁴⁸Selitzer, Dairy Industry, p. 131.

⁴⁹Howard, Public Health, p. 139; and Sun, 5 September 1916: 6.

In 1913, pasteurization remained a secondary concern for city officials who continued attempts to end contamination of milk from city stables. They excluded cows from the built-up sections of the city and ordered dealers to stop the sale of milk from swill-fed cows; however, some East Baltimore stable-owners obtained a court injunction to prevent the enforcement of the regulation. The case was still pending in 1916 as some dealers continued to feed distillery slops to their cows.⁵⁰ Observers estimated that between one-fourth and one-third of the city's total milk supply came from slop-fed cows. While health regulations had prohibited the feeding of slops to the remaining cows within the city limits and had forced many stables to close, they had not barred the sale of milk from these cows. Forced out of the city, stable owners set up shop in the eastern and northeastern suburbs and continued to supply milk from, according to one observer, "cattle whose health is questionable, from stables which are filthy."⁵¹

The injunction against the ordinance was one instance of a growing protest by some dealers against the health regulations. The most vocal protests came from owners of small herds in city and suburban stables who did not have the financial resources to make many of the required improvements. They felt threatened by the press and reform groups who, according to one dealer, had convinced many consumers "that only high-priced milk can be good milk." They attacked the larger dairies whose emphasis on quality in their advertisements drove their customers away.⁵²

⁵⁰ Howard, Public Health, p. 139; and Sun, 30 September 1916: 14.

⁵¹ Sun, 21 January 1917: 14; 28 September 1916: 16; and 30 September 1916: 14.

⁵² Sun, 20 July 1913, sec. 4: 8; and 2 November 1916: 6.

As state and city health officials increased their efforts to improve the quality of milk shipped by farmers, the protesting dealers could often find rural allies in the campaign against the regulations. One farmer, in a letter to the Sun, agreed with the dealers that the agitation by reformers had made consumers "afraid to touch milk" and complained that the decreased demand forced the affected dealers to cut back on the amount of milk purchased from farmers. To this farmer, the villians were the city and state health officials who stirred up unnecessary consumer fears about bacteria. Speaking to the editor of the paper, the farmer said:

I imagine you can remember when you never heard anything about bacteria in milk or cream, and you can no doubt remember how well we as children and our forefathers as well thrived on this bacteria. Now, neither of us believe in this humbug about all of this bacteria, but the scientific gentlemen that are employed in the city Health Department and also by the state must make a showing in order that the taxpayers may think that they are earning their money and are on the job.⁵³

In their protest against the bacteria standards, farmers often described how healthy their own children were and how generations of their families had grown up drinking milk from their farms.

Claims about the purity of milk by farmers and dealers could not combat increasing evidence collected by the Health Department linking the milk supply to disease. In August 1916 it reported 108 typhoid cases in the city, tracing 5 cases to one dairy which was already under investigation. Health officials ordered another dairy to close after they found that milk it sold caused 14 cases.⁵⁴ In all,

⁵³ Sun, 11 February 1915: 6.

⁵⁴ Sun, 2 September 1916: 12. The second dairy reopened by the beginning of September after its new owner had sterilized all the wagons, cans, and utensils. Sun, 3 September 1916: 4.

the Health Department proved that the milk supply caused 34 cases, out of a yearly total of 774 cases of typhoid; 24 of these cases occurred in August alone. In 1917, the total number of typhoid cases in the city decreased to 544; however, 43 were traced to milk.⁵⁵

The typhoid scare of 1916 increased public awareness of the inadequacies of the current regulations. The poor who had no iceboxes were urged to buy only small amounts at a time and to make sure that ice was available to keep the milk from spoiling.⁵⁶ Reformers from civic groups and the press asked the Health Department to investigate dairies and farms to discover which dealers pasteurized milk and which farmers kept sanitary dairy operations. Recognizing that increased prices may be necessary with more stringent regulations, the Sun, however, believed that "of more importance than the price of milk is the question of its purity, and the consumer has the right to demand of both country shippers and city dairymen that every possible precaution shall be taken to prevent his buying typhoid in the shape of milk."⁵⁷

In response to the typhoid epidemic and to the evidence of the failure of the current regulations to require pasteurization and to ban all milk from slop-fed cows, a broad coalition of supporters for tougher ordinances organized to fight for required pasteurization. Following a meeting on 29 September 1916 with representatives of the Health Department, the Milk Bottlers' Exchange, and the Maryland and Pennsylvania Milk Producers' Association, a new organization of milk shippers, Mayor Preston announced that he would introduce an ordinance to the city council which would require pasteurization as well as stop all sales of

⁵⁵Howard, Public Health, p. 263; and Sun, 19 February 1917: 5.

⁵⁶Sun, 30 September 1916: 14.

⁵⁷Sun, 5 September 1916: 16.

milk from refuse-fed cows.⁵⁸

As they debated the provisions of the new ordinance, two opposing camps emerged with the Women's Civic League, Federation of Labor, large dealers, and most farmers in favor of the regulations and the small dealers and suburban stable owners in opposition. Owners of small dairies who had managed to stay in business despite previous regulations protested that they could not afford the estimated \$500 cost of pasteurization equipment. The city Health Commissioner recommended that the city build a pasteurization plant at Lexington Market; however, the established dealers of the Milk Bottlers' Exchange refused to support the plan because it would be too expensive for city funds. Their preference for individual pasteurization plants angered many small dealers and some city officials who encouraged them to share in the purchase and operation of pasteurization equipment.⁵⁹ These small dealers launched an extensive campaign attacking the ordinance as a plot by the Health Department and the larger dairies, such as the City Dairy, to force them out of business and raise prices.⁶⁰ Asa Gardiner and other members of the Milk Bottlers' Exchange countered with a letter of support to Health Commissioner Blake stating that even the exchange members who did not currently pasteurize or bottle their milk supported the ordinance.⁶¹ The Sun sided with the Exchange, saying that the protection of the milk supply should receive higher priority than the

⁵⁸Sun, 30 September 1916: 14.

⁵⁹Sun, 28 September 1916: 16; 29 September 1916: 14; and 21 January 1917: 14.

⁶⁰Sun, 25 January 1917: 8; and 2 November 1916: 6.

⁶¹Sun, 4 October 1916: 16.

protection of the small dealers. Its editors also believed Gardiner when he said that the ordinance would not raise prices or decrease competition among dealers.⁶²

Opponents of the ordinance also sought support by casting doubts on the value of pasteurization. Some claimed that the equipment would become dirty and that continued use would spread typhoid, polio, and other diseases. Others felt that the ordinance was forced on a public which did not want its milk "tampered with."⁶³ One dealer believed pasteurization to be an unnecessary precaution if consumers properly cared for milk at home. He cited his seven healthy children and his twenty-year record of no diseases traced to his dairy as evidence for his contention that pasteurization would not be needed if women would simply continue the traditional practice of boiling milk before serving it. Attacking the modern Baltimore housewife, he said that, at one time,

when milk was delivered to the house it was poured from the measure into the cook pot, kept especially for that purpose, and boiled and it would keep for two days or more, but nowadays it is too much trouble for some housewives to boil their milk. Therefore, I say that the pasteurizing of milk is upholding a lot of thriftless women in thriftlessness.⁶⁴

This dealer echoed the belief shared by other opponents of the ordinance that nothing in the regulations would force milkers to wash their hands or dealers to see that their milk bottles were clean.

While the small dealers were probably the most vocal participants in the debate over the milk ordinance, farmers also played an important role. The Maryland and Pennsylvania Milk Producers' Association had been formed in the summer of 1916 by farmers in the Baltimore milk shed in an effort to gain higher milk prices. Its president, David G. Harry, and

⁶² Sun, 25 October 1916: 6.

⁶³ Sun, 25 January 1917: 6.

⁶⁴ Sun, 21 February 1917: 6.

I. W. Heaps, chairman of the Milk Price Committee, represented the association at Mayor Preston's initial meeting concerning the pasteurization issue. As the ordinance was drafted, Harry and R. S. Snader, the association's vice-president, testified before the committee about farm and milk inspection procedures and helped work out the procedure for dealing with violating farmers. They also assured the public that the members of the association would produce an adequate supply to make up for the milk lost from the prohibition on distillery slops.⁶⁵ While some farmers would criticize the new ordinance, most recognized that, for the first time, farmers had been consulted about city milk regulations.

Introduced to the city council on 29 January 1917, the new ordinance proposed that milk be graded according to standards recommended by the National Commission on Milk Standards. It divided milk into four classes: selected raw milk, selected pasteurized milk, standard pasteurized milk, and low standard milk. The bacteria levels of these classes were the only new milk standards which were added; butterfat and solids requirements remained the same. Most of the provisions of the ordinance concerned the handling of milk at the dairies; however, it subjected all farms, pasteurization plants, and dairy employees to inspection. All cows would be tuberculin tested and all milk except raw and certified raw milk had to be pasteurized to be sold or manufactured into ice cream. The ordinance prohibited the sale of milk from cows fed distillery slops and stated that milk should be bottled and labeled according to its class, the date it was pasteurized, and the date it was produced. Bottling and capping would be done by machine with no hands coming in contact with either the milk or the cap. Unless milk cans were

⁶⁵Sun, 21 January 1917: 14.

damaged, no milk could be transferred from one container to another on the streets, in wagons, or at railroad depots. All persons employed in dairies selling selected raw milk were required to pass a medical examination. To decrease the growth of bacteria in the milk on the farms and in transport, the ordinance required dealers to sterilize all milk cans before returning them to farmers. It also set maximum temperature limits for milk of fifty degrees in the dairy and sixty degrees during delivery.⁶⁶

By putting dealers under stricter city supervision, the permit provisions of the new ordinance gave the city some control over the entrance of new dealers into the market. Dealers would pay ten dollars for a permit to establish a milk plant, to pasteurize or bottle milk and cream, and to manufacture and sell ice cream or butter. A two-dollar fee was charged for a permit to sell milk, cream, or other dairy products.⁶⁷ The debate continued during city council hearings on the ordinance in March. Accused by the Sun of persuading the council to "chloroform" the ordinance, small dealers who opposed the ordinance had a great deal of influence with some of the council members, especially those from East Baltimore.⁶⁸ Asserting that only a stricter ordinance could eliminate typhoid, the Sun believed that the major question in the

⁶⁶ Howard, Public Health, p. 140; and Sun, 21 January 1917: 14. Selected raw milk contained no more than 50,000 bacteria per c.c. as it came from the cow and was the only class which could be sold without pasteurization. Selected pasteurized milk contained no more than 200,000 bacteria before pasteurization and 30,000 after. Standard pasteurized milk had no more than 1,500,000 before and 100,000 after pasteurization. Low standard milk was everything in excess of the above classes and could not be sold for fluid consumption. Also included in the standards established by the ordinance was the provision for a class of certified raw milk which had a bacteria count of only 10,000 as it left the cow. This class would only be established when enough high quality milk was produced; none was produced in Maryland in 1917.

⁶⁷ Sun, 30 January 1917: 4.

⁶⁸ 28 February 1917: 6.

debate was as much related to city politics as to milk quality, that is, "whether a few small milk dealers should be protected in the right to peddle what may contain disease poison, or whether more than a half million people should be protected in their right to life and health." Convinced that the people could rally the councilmen to the cause of pure milk, the Sun's editor stated that "in the end it will be found that clean milk is better politics than dirty or dangerous milk."⁶⁹

The emergence of the Milk Dealers and Ice Cream Manufacturers Association indicated the gravity with which the small dealers viewed the consequences if the ordinance became law. The association, made up of the approximately two hundred small dealers who opposed the regulations, bought advertisements in the newspapers, stating that the expenses of compliance with the ordinance would force small independent dealers out of business and create a milk trust which would increase prices to consumers without giving any more money to farmers. The small dairies sought to win farmers' support by emphasizing the increased "meddling" by city officials who would be given the power to inspect farms. The lack of competition created by the formation of the milk trust would eventually force farmers, as well as small dealers, out of the market.⁷⁰

Responding to the statements that prices would rise with pasteurization and that the poor, who depended on milk dipped from wagons and grocery store cans, would be left without a source after all milk was bottled, supporters of the ordinance cited studies that showed that the price of pasteurized milk in the city was no higher than that of unpasteurized. Health Commissioner Blake planned to find a maker of one-third

⁶⁹ Sun, 19 March 1917: 6.

⁷⁰ Sun, 10 March 1917: 4; 18 March 1917: 4; and 20 March 1917: 7.

pint bottles which could be used to supply the poor who usually bought only two-cents worth of milk at a time.⁷¹ Supporters of the ordinance continued to stress its importance in fighting disease, linking it with an overall anti-typhoid campaign which included examinations of all food-handlers, filtration of city water, and the closing of all private wells.⁷² They sent letters to the councilmen stressing how previous regulations and increased inspection had rid the city of bad milk from city stables, had prompted an increase in pasteurization and bottling, and had helped to decrease the occurrence of infant cholera.⁷³ They appealed to the civic pride of the councilmen, stating that Baltimore needed the regulations to maintain its prestige with other cities.⁷⁴ Speaking for the Women's Civic League, Johns Hopkins Hospital pathologist Dr. William Welch described how other cities had lowered typhoid and infant deaths through increased regulation of their milk supplies. Baltimore's failure to ensure the sanitary quality of its milk, he concluded, would tarnish its reputation.⁷⁵

The most vocal supporters of the ordinance, members of local women's clubs appealed to both the logic and emotions of the public. Representatives of the 2300-member Women's Civic League, the Maryland State Federation of Women's Clubs, and the Cooperative Civic League, the organization of Baltimore's leading Negro women, appeared at the hearings to testify that the ordinance was needed to protect the poor and all of the city's children. Raising the spectre of dying children, the women urged people who loved their babies to attend the milk hearings and tell

⁷¹Sun, 19 February 1917: 5; and 4 March 1917: 16.

⁷²Sun, 4 February 1917: 15. ⁷³Sun, 9 March 1917: 4.

⁷⁴Sun, 18 March 1917: 4. ⁷⁵Sun, 13 March 1917: 13.

the councilmen that "if we do not pass the bill, we will realize some day that we have killed a great number of children."⁷⁶

Because of the hard work done by the supporters of the ordinance, the city council passed it on 28 May 1917 with only one dissenting vote. As a sop to the small dealers, officials agreed to delay enforcement until November. The Health Department recognized that dealers would need more time to purchase the necessary equipment and hoped that the five-month extension would enable small dealers to build joint bottling plants.⁷⁷ By 5:00 P.M. on 31 October, only 900 of the approximately 2,000 dealers and store owners had bought the necessary permits.⁷⁸ On 3 November, the department gave dealers who had not installed pasteurization equipment five days to submit written explanations for their failure. Stating that each case would be considered on its own merits, Health Commissioner Blake recognized that a few dealers might not have been able to get the equipment or enough bottles because of the war; however, he reminded them that they had already received a five-month grace period.⁷⁹

Although some shippers tried unsuccessfully to fight the ordinance in the courts, Health Department inspectors began on 8 November to spill milk sold in violation of the ordinance. While most stores and restaurants complied with the rules, some dealers tested the department's threat to spill milk by continuing to sell loose milk from wagons.⁸⁰ These dealers quickly recognized the practice of spilling milk belonging to violating dealers as a means of turning public opinion away from the

⁷⁶ Sun, 13 March 1917: 16; and 26 March 1917: 6.

⁷⁷ Sun, 3 June 1917: 6; and Aegis, 1 June 1917: 3.

⁷⁸ Sun, 1 November 1917: 14. ⁷⁹ Sun, 4 November 1917: 13.

⁸⁰ Sun, 9 November 1917: 5.

ordinance. Dealers invoked wartime patriotism and concern for children when they criticized the spilling of milk as wasting food. Samuel Imwold, president of the protesting Milk Dealers Association, said that inspectors spilled thirty gallons of milk from his dairy because it had not been bottled. He and other dealers stirred up consumer fears of a milk shortage, hoping to arouse enough protests to force the Health Department to cut back on its enforcement. Imwold told how mothers had called him asking for the milk that he could not deliver because the health inspectors had spilled it.⁸¹ Dealers sarcastically described how starving children would not have to worry about typhoid. One dealer stressed the incongruity of the Health Department policy with the nation's wartime campaign to conserve food:

The campaign for the saving of food being instituted in a city where the Board of Health is wickedly destroying great quantities of milk, the most valuable food nature provides for the human family, is ridiculous enough to make the starving babies in Belgium weep and the sneering devils in Germany laugh with sardonic glee.⁸²

In reaction to the protests by dealers and consumers, the Health Department ordered its inspectors to stop spilling milk and add rennin to it instead. While the rennin would coagulate the milk so that it could not be sold to consumers, the milk could be fed to livestock without harm.⁸³

As temperatures warmed with the arrival of the summer of 1918, health officials realized that their enforcement efforts had not resulted in total compliance with the ordinance. During July, an epidemic of infant dysentery claimed over forty lives each week. Officials traced many of these deaths to milk which had not been pasteurized or properly

⁸¹Sun, 17 November 1917: 6.

⁸²Sun, 19 November 1917: 4.

⁸³Sun, 18 November 1917: 12.

refrigerated or which was put in unsanitary bottles. Public health nurses found that over one-half of the babies who died had been fed only cow's milk; one-third were fed sweetened condensed milk while only 17 percent were breast-fed. They urged mothers to breast-feed their babies or boil all milk because cow's milk could be unsafe and because condensed milk did not contain all of the nutrients found in either cow's or mother's milk.⁸⁴

Health Department inspectors found continued violations of the ordinance by as many as one-third of the city's dealers. Some dealers watered the high butterfat milk they purchased from the country, charging equal prices to those charged by honest dealers.⁸⁵ And while forty pasteurization plants operated in the city, many did not function properly. The department also had to prosecute violators and, more importantly, stop them from selling milk. Dr. Marion Hopkins, chief of the department's milk division, cited the example of one dealer who continued to sell milk after receiving twelve indictments.⁸⁶ Violating dealers had their permits revoked; however, many applied for and received new permits in only a few days. Many continued to sell milk without permits and others simply disappeared before they could be prosecuted.⁸⁷

City officials and the press urged the Health Department to increase its efforts to rid the market of unscrupulous dealers. Mayor Preston told the department that, "No influence, no false leniency, no personal consideration should be allowed to stand in the way of a vigorous enforcement of this ordinance."⁸⁸ A Sun editorial demanded

⁸⁴Sun, 21 July 1918: 16; and 16 July 1918: 16.

⁸⁵Sun, 17 July 1918: 14. ⁸⁶Sun, 20 July 1918: 7.

⁸⁷Sun, 18 July 1918: 14; 20 July 1918: 7; and 19 July 1918: 14.

⁸⁸Sun, 16 July 1918: 16.

that the Health Department put all of these dealers out of business once and for all:

Any dealer who will deliberately imperil the health of human beings, especially of helpless little children wholly dependent upon milk for their sustenance, is a criminal and a Herod at heart. He is guilty of worse than Prussian barbarism, because the Prussians at least do not make war on their own.

In response to the protests, the Health Department increased the size of its inspection force and its efforts to prosecute violators of the ordinance. Even the City Dairy, which had been accused of promoting the ordinance to drive the small dairies out of business in order to raise prices, did not escape prosecution. It was forced to award \$5,000 to a woman who had been injured when she drank milk from a bottle containing glass particles.⁹⁰

Effects of increased enforcement were finally seen when, in 1918, no cases of typhoid in Baltimore were traced to the milk supply.⁹¹ By 1919, the Health Department could add the promotion of milk consumption to its duties which, in the past, had only involved enforcement of regulations. It stressed how the cleanliness of milk had improved since the 1917 ordinance and urged people to use more milk, aiding dairy farmers and easing pressure on the city's meat supply.⁹² A report issued by the department in 1920 contained concrete evidence that the quality of the milk sold in the city had improved. The average bacterial content of milk after pasteurization decreased from 650,000 per c.c. in 1918 to 52,000 in 1919 and 11,000 in 1920.⁹³ Consumer consumption of milk also

⁸⁹Sun, 17 July 1918: 6.

⁹⁰Sun, 21 July 1918: 10; and 25 August 1918: 11.

⁹¹Sun, 6 April 1919: 13. ⁹²Sun, 9 March 1919: 12.

⁹³Sun, 8 May 1920: 7.

began to rise. From the level of only .39 pints in 1902, per capita consumption rose to .42 pints in 1912 and .46 pints in 1928.⁹⁴ While Baltimore continued to lag behind other eastern cities, it made significant improvements because of the milk ordinances and promotion campaigns by the Health Department and farm and civic groups.

This improvement in milk quality had not come easily. The increased operating expenses for dealers caused by the need for new equipment rose even higher because of wartime inflation. Members of the Milk Bottlers' Exchange reported that costs increased an average of 22 percent from the summer of 1918 to March 1919. While their operating margin rose 21 percent, problems with new equipment increased repair costs by 50 percent and the need for bottles and caps increased the cost of supplies by 25 percent. In the same period, labor costs rose 15 percent.⁹⁵ The costs of dairy operation combined with the prohibition on distillery slops as cattle feed to decrease the number of dealers serving the market. By 1919, the seventeen members of the Milk Bottlers' Exchange controlled 79 percent of the milk distributed.⁹⁶ While farmers had supplied hundreds of dealers with milk at the turn of the century, the members of the Maryland State Dairymen's Association dealt with only 107 dealers in 1920. The new regulations forced some dairies out of business, but others managed to survive the increased

⁹⁴ Maryland Farmer, 15 January 1924: 2; and Health Department figures, MSDA historical file.

⁹⁵ Sun, 7 March 1919: 16.

⁹⁶ Sun, 1 March 1919: 14. The general decrease in the number of dealers in the city affected even the established dealers who were members of the exchange; it lost thirteen members in the two years after the pasteurization ordinance was enacted.

expenses by sharing pasteurization expenses. Six small dairies paid four cents per gallon to cover the expenses of a plant which pasteurized milk and sterilized, filled, capped, and refrigerated the milk bottles.⁹⁷

While most attention centered on the effects of the health regulations on dealers and on their compliance, farmers also were increasingly affected by the Health Department ordinances. The rules governing cooling milk and testing cows for tuberculosis became the most immediate concerns. The need for milk to come from tuberculin-free herds had been recognized for many years but farmers resisted subjecting their herds to testing until the state and federal governments promised to pay part of the cost of cows which had to be destroyed. Even before the passage of the 1917 ordinance some dealers encouraged testing by paying premiums for milk produced in tuberculin-free herds.⁹⁸ County agents aided state testers in promoting tuberculin tests on farms; however, the state focused most of its early efforts in the Washington milk shed where herds needed to pass tuberculin tests before their owners could receive permits.⁹⁹ Baltimore officials decided to relax their enforcement of tuberculin-testing requirements until state officials could test all herds. After an extensive campaign in 1920, over one-half of Harford County's herds had been tested for the first time and by 1928 the tuberculosis eradication plan was finally concluded in the milk shed.¹⁰⁰

⁹⁷ Sun, 27 November 1917: 16.

⁹⁸ T. E. McLaughlin, Harford County Agent Report, 1917.

⁹⁹ Maryland Farmer, 26 November 1920: 10.

¹⁰⁰ Sun, 2 August 1920: 8; B. B. Derrick, Harford County Agent Report, 1920; and I. W. Heaps, Twenty Years of Cooperative Milk Marketing in Baltimore (Baltimore: By the Author, 1938), p. 43.

Farmers recognized the necessity of health regulations and accepted the Health Department officials' inspection of their farms. Some progressive farmers even urged the department to increase its enforcement, claiming that, since the pasteurization ordinance had gone into effect, farmers felt less need to keep their milk clean.¹⁰¹ Increased enforcement and new Health Department regulations broadened the department's control over farming operations. During the 1920s, the MSDA cooperated with the city in formulating regulations governing the production and transportation of milk. Electric cooling machines, required after 1928, became more vital as inspectors rejected inadequately-cooled milk. The increased investment required for the cooling equipment and barn improvements necessary to produce high quality milk made entrance into dairying more difficult for new farmers and, in the long run, by decreasing the shipments of milk from part-time dairymen and unsanitary farms, stimulated the increase in farmers specializing in dairying.

Health regulations in the first quarter of the twentieth century, therefore, benefited both progressive farmers and the large dairies. By guaranteeing the quality of milk, the regulations increased consumer demand for a year-round supply. These regulations encouraged farmers to give priority to their dairy operations and to improve their farms. This increased emphasis on dairying made commitment to the MSDA more essential and strengthened the bargaining position of the association. The decrease in the number of dealers also affected the farmers because dealers who possessed the financial resources to make all the improvements required by the health ordinances seemed more willing to work with

¹⁰¹ Sun, 16 November 1917: 6; and Maryland Farmer, 26 September 1919: 5.

farmers to stabilize prices and improve the quality of milk. The smaller number of dealers made cooperation between the MSDA and the dealers easier. The MSDA could guarantee an adequate supply of milk from its members at a good price to dealers who, by 1924, no longer felt the need to rely on sources outside the milk shed for milk. In that year both dealers and the MSDA supported an ordinance which prohibited the sale of milk from outside the milk shed except in emergencies. A similar ordinance for cream was passed in 1927.¹⁰² By granting permits only to those farmers whose operations could be inspected by city health officials, these ordinances permanently ended the dealers' practice of lowering the price of local milk by importing milk from far-off areas.

¹⁰² Maryland Farmer, 1 April 1924: 1; 1 August 1924: 12; and 1 April 1927: 1.

CHAPTER III

"SOLDIERS WITHOUT A LEADER"

Farmers' cooperatives were successful after World War I because their leaders profited from the experiences of earlier rural organizations. Important in the development of rural leadership and organization, the years before the war were also a period of experimentation with new solutions to rural problems. The farm groups formed in central Maryland during the late nineteenth and early twentieth centuries included local farmers' clubs, the Grange, agricultural societies, the Farmers' Alliance, dairy breed associations, and special interest groups such as the road leagues. Farmers also made several tentative attempts to form cooperative marketing groups. The history of rural organizations in Maryland can be divided into two periods with 1900 as the mid-point. By 1900, many farm groups had failed in their organizational and marketing experiments, the state Alliance was dead, the Grange had reached the lowest point in its history, and many county agricultural societies were no longer sponsoring annual fairs. After the turn of the century, farmers revived many groups and formed new ones. New leaders emerged whose organizational efforts culminated in the formation of permanent marketing groups and in the founding of the Maryland Farm Bureau Federation, the first statewide farm organization to represent the majority of farmers.

Maryland farmers had a long tradition of leadership in various

agricultural organizations. Among the first in the nation to organize in order to promote the marketing of their product, tobacco farmers formed planters' clubs as early as 1728 which continued during the first half of the nineteenth century.¹ In the 1830's, they held tobacco conventions to promote the reduction of foreign duties on American tobacco.² A state agricultural society was established in 1840 and the first state fair was held in 1848.³ County agricultural societies soon followed, holding local exhibitions which stressed scientific farming for increased productivity. They also supported the establishment of a state department of agriculture, and, in the 1880's, a state experiment station. In 1856, the Prince Georges County Agricultural Society founded the Maryland Agricultural College, purchasing the original 400 acres for the college in College Park and securing a charter from the legislature. When the school opened in 1859, it was only the second agricultural college to be founded in the United States. Prior to the passage of the Morrill Act of 1862 which set up nationwide provisions for a system of state land grant colleges, the college was administered by the farmers who were members of the agricultural society.⁴

Agricultural societies involved the most influential farmers as well as rural businessmen and professionals.⁵ They held annual

¹Gray, Southern U. S., p. 782.

²Ibid., p. 763.

³Ibid., p. 786.

⁴David Rankin Barbee, "Pioneering in Maryland Agriculture: The Vansville Farm Club and its Record of Accomplishment," The Baltimore Sun Magazine, January 4, 1931: 14.

⁵These professionals were described by journalists as "engaged agricultural pursuits," meaning that farming was more of a hobby than a full-time occupation for them. They experimented with purebred

agricultural fairs which included animal shows, machinery and home-making exhibits, and horse races. Elected annually by the stockholders, a typical county board of directors would include a doctor, at least one lawyer, a member of the state legislature, a local businessman, an editor of a country newspaper, and several full-time farmers. All would be active in other rural or community organizations and most would be involved in politics at some level of government. Membership on the board of directors brought aspiring rural leaders in contact with other important community members and with the public during society races and exhibitions.

Generally, the state's oldest agricultural societies were found in central Maryland, also the home of most members of the Maryland Agricultural Society. Montgomery County's society was formed in 1845 while Frederick's began in 1862. Despite the continued interest in some parts of the state, many societies experienced problems by the end of the century. At the 1901 annual meeting of the Harford County society, stockholders found it difficult to persuade people to serve as directors because many felt that agricultural fairs had outlived their usefulness.⁶ The society held a fair in 1901 but folded within a few years. Not until Extension Service personnel arrived in the counties after 1914 were many county fairs revived.

Agricultural societies often promoted other rural organizations. In one of the earliest attempts to organize farmers on a regional basis,

livestock and new farming methods on their old family farms or plantations which were usually cared for by tenants. "Practical" farmers, on the other hand, were those who depended on full-time farming for their livelihood.

⁶ Sun, 29 January 1901: 8.

the agricultural societies of Baltimore and Harford Counties sponsored an educational convention in 1884. Beginning the next year the new State Farmers' Association, made up of representatives of agricultural societies, farmers' clubs, Granges, and specialized groups such as the Maryland Horticultural Society, sponsored conventions. These meetings featured educational programs with speakers from the Maryland Agricultural College and the U. S. Department of Agriculture who read papers on farm topics such as animal diseases, fruits and vegetables, fertilizers and entymology. They also provided forums for discussions on roads reform, railroad rates, property taxes, and the tariff.⁷

In addition to efforts to improve farming techniques, the State Farmers' Association pledged to organize all Maryland farmers for the first time. Not only did it hold state conventions, the association also sponsored county educational meetings which exposed even more farmers to scientific methods and to the experience of working together. The association lobbied for legislation by sending letters to legislators and by mobilizing broad support for its proposals through the county associations. It helped to secure the funding of the state experiment station in 1888 and established study committees on tenancy and other farm issues.⁸ Less effective at motivating farmers to recognize the value in continuing a state organization or in establishing strong grass-roots support among the large mass of farmers, the State Farmers' Association failed because it could not reconcile the differences of

⁷ The proceedings of the conventions can be found in: Sun, 24 February 1885: 2; 25 February 1885: 1; 26 February 1885: 1; 14 January 1886: 1, 3; 18 January 1886: 6; 13 January 1887: 5; 14 January 1887: 3, 4; 10 January 1889: 6; 9 January 1890: 3; and 19 January 1890: 3.

⁸ Sun, 14 January 1887: 3.

farmers from the various regions. The problems of small farmers raising wheat, vegetables, and livestock in central Maryland differed from those of the tobacco planters of southern Maryland. Even though the Farmers' Association continued to function, it was plain to many by 1889 that Maryland farmers needed stronger ties. Colonel William Allen, principal of a rural private academy in Baltimore County and chairman of the convention, decried the lack of a state organization which could unite all farmers:

We are like soldiers without a leader--everybody fighting on his own hook. A sort of guerilla warfare may be carried on by good soldiers without organization, but the results will be insignificant.⁹

The State Farmers' Association never involved a majority of the state's farmers. Members of the rural elite, most leaders of the association also belonged to agricultural societies and were active in politics. While they saw flaws in the current government and economic systems, they believed that farmers could achieve change through perseverance. According to their gospel of self-help, farmers would survive through economy, hard work, and the adoption of scientific farming methods.

After the demise of the State Farmers' Association, agitation increased for a state-funded series of farmers' institutes. Institutes had been held in other states during the 1880s; Maryland's first institute was sponsored in 1890 by the experiment station and the Brighton (Montgomery County) Grange.¹⁰ The faculty of the college also began to sponsor educational meetings on an irregular basis beginning with an Eastern Shore horticultural meeting held in Salisbury in

⁹ Sun, 10 January 1889: 6.

¹⁰ Mary and Eben Jenkins, The First Hundred Years: Maryland State Grange, 1874-1974 (Maryland State Grange, 1974), p. 31.

1890.¹¹ Interest in establishing a regular system of institutes grew, and in 1896 Harford County farmers petitioned the state legislature for a department of farmers' institutes supported by the college and experiment station and managed by a state director of institutes.¹² In order to raise support for the institutes, speakers from the college, the experiment station, and the USDA presented a sample program at an educational meeting for farmers and legislators in Annapolis.¹³ The legislature granted the appropriation and hired William L. Amoss, a Harford County farmer, as director. Beginning in the winter of 1897, these institutes brought details of the latest farming methods to every Maryland county, replacing the haphazard system of county associations which depended on the voluntary organization of educational meetings by local farmers. State control of the institutes took the planning of meetings out of the hands of the local elites who, in some counties, had regularly sponsored winter educational meetings through their farmers' clubs or Granges. The state discouraged any organizational work at institutes, forcing farmers who wanted to form a permanent county organization to wait for other opportunities.

Farmers' institutes remained the most important means for the transmission of new farming methods to farmers until the Cooperative Extension Service was firmly established after 1916. In addition to their participation in the institutes, personnel from the agricultural college and the experiment station also cooperated in other educational ventures. With the Maryland and Pennsylvania Railroad, they sponsored

¹¹Sun, 1 December 1890: 4.

¹²Sun, 6 January 1896: 2.

¹³Sun, 15 January 1896: 6.

a corn demonstration train which traveled through parts of Baltimore, Harford, and York Counties in 1905 and succeeding years. "Corn specials" had first been used in Iowa to explain the selection of proper seed corn and growing techniques, but Maryland was the first eastern state to sponsor an educational train.¹⁴ In 1906 and 1907, the college sponsored a "dairy special", designed both to teach farmers how to produce better-quality milk and to promote increased dairy production in the Baltimore area.¹⁵

All institutes and special programs emphasized education as the means of improving rural conditions. Self-help through education was also the goal of local farmers' clubs and dominated their discussions throughout the nineteenth and early twentieth centuries. First formed in Montgomery County in 1844, by the 1880's farmers' clubs existed in many counties, performing both social and educational functions.¹⁶ Farmers' clubs were independent, chose their own discussion topics, and set membership requirements. Membership in the Montgomery Senior Club was hereditary while Harford County's Deer Creek Farmers' Club, one of the most well-known Maryland clubs, elected its new members.¹⁷ This club met each month at the home of a different member who chose the discussion topic and whose wife provided dinner for the group. Devoting one part of the meeting to an inspection tour of the host's farm, members then held a discussion of the selected topic which dealt with new agricultural practices, road problems, or other rural concerns.

¹⁴ Aegis, 24 March 1905: 2; Sun, 25 March 1905: 4; and 4 May 1905: 7.

¹⁵ Sun, 25 January 1906: 7; and Aegis, 18 October 1907: 3.

¹⁶ Jenkins, Grange, p. 4. ¹⁷ Sun, 13 January 1882: 1.

While farmers' clubs involved many leaders of the rural community, including doctors, merchants, and lawyers, they usually required all members to own farms. Because members wanted not only to improve farming techniques but also rural conditions, they participated in many community activities. The clubs often sponsored educational meetings in the years between the demise of the State Farmers' Association and the introduction of state institutes. Often these county conventions provided the only opportunities for farmers to meet at the county level. Agricultural experts at Harford County conventions attracted audiences of over two hundred farmers during the 1890s.

Although the county and local meetings sponsored by farmers' clubs seldom had political overtones, farmers' clubs often worked in the political arena. The most important cause championed by farmers' clubs was that of roads reform. In most counties, road repairs were subject to the whims of political appointees; for example, the Harford County commissioners levied an annual sum for roads and apportioned it among the road supervisors in each election district. The real control of the system, however, was in the hands of the 850 road menders who often overbilled or accepted more money than they were entitled for securing workers.¹⁸ Following meetings between the county commissioners and farmers' club representatives, the county adopted a more efficient plan to handle road funds. To implement this and similar plans throughout the state, a State Roads League was formed in 1893. The league gained widespread support and is indicative of the success which could be achieved by special interest rural groups working for specific goals. Although it was formed by a combination of farmers, bicycle

¹⁸Sun, 4 January 1893: 6.

enthusiasts, businessmen, and lawyers, farmers dominated both the state league and the county and town subsidiaries. The first president of the state organization was Henry O. Devries of Howard County, the business agent of the Grange sales agency and future master of the state Grange.¹⁹

In addition to road improvement, farmers' clubs focused on other local concerns. Seeing the need for a national bank to aid farmers and to attract new businesses, members of the Deer Creek Farmers' Club started two banks during the 1880s. Clubs also sponsored insurance companies and solicited funds for new railroad lines. While other farm organizations declined around 1900, farmers' clubs continued to provide an important means of involvement for the rural elite and of education for anyone who could read the reports of their meetings in local periodicals. Farmers' club members were often the first to follow new scientific methods which gradually would be adopted by other farmers. Clubs attracted some of the brightest of rural talent, voting in those farmers most interested in scientific farming. They maintained contact with the personnel of the agricultural college and the experiment station and, by providing a forum for favored politicians and their friends, could indirectly influence government decisions. Because of their local outlook, farmers' clubs did not experience the problems of unifying diverse farming and political factions. They also could forget about partisan politics and focus on education and scientific farming in their home areas.

Not faring as well at the turn of the century was the Maryland State Grange. First appearing in 1873, the Grange was popular in a few counties and almost non-existent in others. The largest Grange strongholds

¹⁹Sun, 11 January 1893: 8; and 13 January 1893: 3.

were Montgomery, Howard, Anne Arundel, and Baltimore Counties, while the lower Eastern Shore and western Maryland had almost no members. Harford County, home of the most active farmers' clubs, had only one small subordinate Grange until the early 1900s.²⁰ The Grange reached a high of 154 subordinate and Pomona (county) Granges in 1876, only to drop to 13 by the close of the century.²¹ The same type of active rural leaders found in Harford County farmers' clubs joined the Grange in Baltimore County. Rural editors, doctors, and lawyers who were also active in roads leagues and county agricultural societies participated with farmers in the Grange. Like the men who belonged to farmers' clubs, Grange members were primarily middle-class farmers interested in agricultural education and better farming methods.

At the local level of the subordinate Grange, the social and educational aspects were probably most important. In their community halls--financed by members' donations or the sale of stock--Grange members held plays, lyceums, and other entertainments. At their monthly meetings, members or guests read papers or held discussions on agricultural topics. In areas where it was strongest, the Grange, like the farmers' clubs, joined with USDA and agricultural college personnel to conduct farmers' institutes. Often politically active, county Granges provided the leadership for tax-protests and roads leagues; however, Grange leaders often created new groups with their own officers, by-laws, and growing pains instead of working through existing organizations to deal with these issues. This type of action was especially common in Baltimore County where Grange members formed tariff-reform leagues, roads leagues, and other ad-hoc groups.

²⁰ Jenkins, Grange, p. 119.

²¹ Ibid., p. 18.

At the state level, the Grange lacked clear priorities, reflecting confusion from the multitude of activities at the county and local levels. Many regarded education as the primary objective; the Grange supported state appropriations for an experiment station as early as 1880.²² In 1896, Master H. O. Devries still believed that education should be the major priority for farmers: "Farmers are apt to look after the finances first and education afterward, but this is putting the cart before the horse."²³ The Grange also resisted being pulled too far into politics while at the same time maintaining strong positions against the tariff, unequal property taxes, and poor roads.

The state Grange invested most of its energy toward improving the financial situation of its members through its cooperative agencies. Formed in 1876 with Henry Devries as agent, the state agency sold fertilizer and other merchandise on the cash-only Rochdale plan used nationally by Grange cooperatives. In its first year of operation, it also marketed grain worth \$74,390 and \$49,950 worth of tobacco for members.²⁴ Although local cooperative stores flourished for a time, all Grange agencies experienced financial difficulties because of their reliance on cash sales. In an effort to raise needed funds, the Grange converted its state agency to a stock company in 1894, capitalized at \$20,000.²⁵ This action, following on the heels of the depression of the early nineties, failed to ensure the health of the agency. It collapsed in 1896. Local stores also experienced problems in the nineties; often their collapse would be accompanied by the disbanding of the supporting local Grange.²⁶

²² Sun, 9 January 1890: 3.

²³ Sun, 3 January 1896: 6.

²⁴ Jenkins, Grange, p. 224.

²⁵ Sun, 1 January 1895: 6.

²⁶ Jenkins, Grange, p. 160.

The Grange began its decline in the early nineties, dropping from a membership of 2,000 in 1889 to 1,500 in 1894.²⁷ One cause of the decline of the Grange was its inability to support the cooperative agencies it had promoted as its major attraction. The cash-only scheme made the use of the Grange stores impossible for many farmers. A second reason for its decline was the lack of clear priorities which could be identified by both members and non-members as official Grange policies. Although Grangers worked effectively for several causes, the organization did not capitalize on its success. Like the State Farmers' Association, the Grange also failed to recruit a mass following and to achieve unity among the diversified types of Maryland farmers.

Another reason for the decline of the Grange in the 1890s may have been the switch of some Grangers to the Farmers' Alliance. Organized on a state level in 1889 with 234 members, the Alliance moved quickly to expand its membership by promising solutions to the problems of many farmers. It made its largest inroads in southern Maryland and the Eastern Shore, areas still suffering from the labor upheavals which followed the emancipation of slaves after the Civil War. Aside from forming local alliances in Howard County and gaining a few individual members in other counties, it did not penetrate the general-farming counties of the Baltimore area even though local farmers were sympathetic to its aims. While it never gained a foothold in Harford County, the cooperative program of the Alliance was viewed sympathetically by members of the Deer Creek Farmers' Club who felt that farmers could be united under the Alliance if it remained out of politics.²⁸ One

²⁷Sun, 11 December 1889: 4; and 25 January 1894: 6.

²⁸Aegis, 3 October 1890: 3.

observer at an Alliance meeting in Howard County seemed surprised to find "not an assembling of the so-called masses but of representative men with their families."²⁹

At its annual meeting in 1890, Alliance delegates representing 2,000 members decided to use all of their resources to establish a state exchange which would have branches in each county.³⁰ Membership declined, however, and the Alliance raised only \$3,800. Abandoning the idea of a separate exchange, Alliance officials urged the delegates at the 1893 convention to join the Grange and patronize its agency.³¹ Without the exchange, the excitement present at the organization's founding could not be maintained. While some local alliances had temporary success with cooperative canneries, the programs of most locals became indistinguishable from those of the Grange or farmers' clubs. They survived by providing practical farm discussions, social opportunities, and local marketing assistance.

By the turn of the century, rural organizations such as the Alliance and the Grange had declined in membership and influence in Maryland because they had failed to reconcile the varieties of Maryland farming with clear-cut goals. The depression of the early nineties spelled the end for the Alliance and many Grange locals; farmers who left these groups remained unorganized until the twentieth century. The local Granges which survived, such as Baltimore County's Centennial Grange, had stressed the educational and social aspects of the organization more than the economic ones even during the successful years; therefore,

²⁹ Sun, 28 August 1890: 4.

³⁰ Sun, 13 August 1890: 2, 6; and 14 August 1890: 6.

³¹ Sun, 9 August 1893: 8.

their fate was usually not tied to the fortunes of a cooperative store. Farm organizations also failed because they could not attract a majority of the state's farmers. In 1890, the total number of farmers in Baltimore County, alone, equalled the combined state membership of the Grange and the Alliance. In Harford County, only 10 percent of all farmers belonged to a farm group at any time between 1880 and 1900, and half of these only belonged to one organization.³²

The decline of farm organizations at the end of the nineteenth century was also caused by the changes occurring among the rural leadership. In the nineteenth-century groups, a large number of rural professionals served not only in the agricultural societies but also in the Grange and the Alliance. Doctors, lawyers, teachers, and merchants were interested in new farming techniques, in community organizations, and often in improving their political fortunes. Their election to high positions in the farm organizations is evidence of the respect held for them by the full-time farmers who were members of the groups. By the end of the century, the participation in farm groups by the elite part-time farmers was declining. Rural lawyers and doctors were selling their purebred cattle and renting or selling their old family farms. Perhaps this group was aging and was no longer able to supervise both a farm and a professional practice or maybe their interest in farming was waning as they became more involved in specialized professions. Whatever the reason, their withdrawal from farm organizations left a void which may account for the inactivity of these groups in the few years surrounding

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It must be remembered that I have been speaking only of white farmers in this chapter; I found no evidence of any organization for black farmers in Maryland. The above figures were compiled from an examination of local newspapers and membership lists of organizations. See appendix 1 for the complete data.

the twentieth century. Time was needed for the "practical" full-time farmers to gain the prestige and leadership skills held by the old elite.

The old elite's final attempt to form a statewide organization occurred in November 1900. Twenty representatives of farmers' clubs met in Baltimore to petition the director of farmers' institutes to form farmers' clubs to be united in a state group known as the Farmers' League of Clubs. The most distinctive feature of this meeting was the absence of delegates from the Eastern Shore and southern Maryland. Of the twenty-two farmers' clubs in the state, all but five were in the five counties near Baltimore. The president of the new group was a doctor from Montgomery County and a farmer from Baltimore County was elected secretary. The executive committee included William Amoss, the Harford County dairy farmer who directed the state farmers' institutes; John D. Worthington, dairy farmer and editor of the Harford County Aegis; and Asa Gardiner, manager of the Filston Farm Dairy in Baltimore County.³³ Of this group, only Amoss had been active in nineteenth-century farm organizations. Whereas tobacco planters from southern Maryland and vegetable growers from the Eastern Shore had been active in the old state organizations, much of Maryland's new rural leadership would come from the Baltimore area. The Farmers' League of Clubs carried on the old tradition of agricultural education in the early twentieth century, supporting increased appropriations for the agricultural college and farmers' institutes. While it only represented the 350 members of 20 clubs, it also used its influence to persuade state and local governments to improve country roads.³⁴ Because it represented the general

³³ Sun, 13 November 1900: 7.

³⁴ Roads improvement remained the major interest of farmers' clubs during the first decade of the century.

farmers of the Baltimore area, the improvements it sought and the programs it planned were designed with these farmers in mind.

Although education and roads improvement remained important to the farmers' clubs, their members were no longer content with only these interests. By 1903, the Deer Creek Club was discussing farmers' cooperation in marketing and purchasing at some of its monthly meetings. While many members continued to be skeptical of farmers' ability to trust each other and give up some of their independence, they also believed that, if started on a modest scale, cooperatives would be helpful to area farmers.³⁵ Ten years later members were purchasing fertilizer regularly through the club.³⁶ Other clubs also purchased seeds and feeds for their members.³⁷

Cooperative purchasing also became an activity of the newly-revitalized Grange. By 1899, only one subordinate Grange remained in Baltimore County where, several years before, ten active Granges were spread throughout the county.³⁸ The Grange had never been successful in Harford County and had only limited impact in Carroll County where it established a few stores along the Baltimore and Ohio Railroad. These stores, as well as those in Frederick County, folded before 1900. Recognizing the need to halt the decline which had reduced the number of Granges to only thirteen, members of the most active remaining subordinates in Montgomery and Prince George's counties appointed a committee to reorganize dormant Granges and form new ones.³⁹ Organizers moved first into Carroll County and then into Harford; by 1908, seven Granges had

³⁵ Aegis, 16 January 1903: 3. ³⁶ Aegis, 28 March 1913: 3.

³⁷ Sun, 12 March 1909: 8; and Aegis, 24 February 1911: 3.

³⁸ Sun, 8 December 1899: 7. ³⁹ Sun, 1 November 1900: 8.

been formed there. The growth of the Grange in Harford County was phenomenal given the former disinterest of its farmers. Local Granges built community halls, held fairs, picnics, and educational meetings. By 1916, six hundred farmers belonged to seven Granges in the county; one thousand farmers were members by 1920.⁴⁰ Most of these members lived in the northern sections of the county which had been untouched by the farmers' clubs. Many farmers had taken advantage for the first time of the improved roads and extended railroad lines completed in the preceding years to expand their farming operations. As they became more involved in their businesses, they found new incentives to join farm organizations such as the Grange. An important vehicle for increased involvement in the rural community, the Grange local provided many farmers with their first leadership experience. It propelled members into other county and state agricultural affairs as well as political activities.

The Grange in many Baltimore-area counties increased its cooperative purchasing of feeds, seeds, fertilizer, and other agricultural products in the years before World War I. The Howard County Grange also purchased coal and groceries for its members.⁴¹ As cooperative purchasing became more familiar to farmers, some organized special cooperative clubs to expand into new areas of cooperation. In Howard County, the Farmers' Cooperative Club originally purchased fertilizer and feeds. In 1911, it decided to purchase registered Guernsey cattle to upgrade members' dairy stock.⁴² Farmers in Baltimore and Harford Counties formed the Farmers' Cooperative Exchange in 1914, authorizing the

⁴⁰ Aegis, 8 December 1916: 3; and Sun, 28 August 1920: 3.

⁴¹ J. L. Fidler, Howard County Agent Report, 1918.

⁴² Sun, 13 March 1911: 11.

sale of capital stock worth \$10,000. It arranged to supply seed potatoes, clover seed, and fertilizer to anyone who paid the yearly membership fee of one dollar and also agreed to sell potatoes and other produce for its members on a commission basis. The association rented a warehouse in Baltimore and planned to build a fertilizer mixing plant and an electric light plant to bring electricity to the area.⁴³ These ambitious plans were not realized, however, as the farmer-stockholders of the exchange were forced to ask that a court appoint a receiver for the association in 1917. Low prices for produce were given as the reason for the association's failure to pay farmers for the products it sold. Even the sale of 700 bushels of potatoes to the city of Baltimore for resale to the poor did not solve the financial problems of the exchange. At the time the receiver was appointed, the association owed one farmer \$347.14 for sales it made for him from 1913 to 1915.⁴⁴

The experience of the Farmers' Produce Exchange indicated to many farmers that they were not yet ready for cooperative marketing or purchasing on a large scale. At the time of the failure of the Exchange, farmers at the opposite end of Harford County had begun a new experiment in cooperation. Protesting excessive hauling charges, milk shippers from Churchville formed the Farmers' Cooperative Company to haul milk and other farm supplies to and from Baltimore. With \$25,000 raised from the sale of stock, the cooperative purchased two trucks and the milk routes of their former hauler.⁴⁵ Beginning operation with one truck on

⁴³ Aegis, 30 January 1914: 3; and 20 February 1914: 3.

⁴⁴ Sun, 3 February 1917: 12; 24 February 1917: 12; and 25 February 1917: 16.

⁴⁵ Aegis, 26 January 1917: 3; and 2 February 1917: 3.

1 April 1917, the company was the first successful hauling cooperative in the nation. In addition to hauling milk to the city, the cooperative's trucks hauled freight for local merchants and individuals on their return routes.⁴⁶

The infant cooperative movement in central Maryland received a boost from the newly-arrived county agents. Extension work started in the tobacco areas of Southern Maryland in October 1911 and was established in all the Baltimore metropolitan counties by 1916. County agents immediately gained a privileged place in the rural communities, were inducted into local Granges, and invited as honored guests to the meetings of the elite farmers' clubs. As the local representatives of the agricultural college, agents usurped many of the educational functions of the director of farmers' institutes. They maintained close contact with college specialists who often traveled to the counties to present special programs.

As one of their first duties, the new county agents assessed the current agricultural needs and the status of farm organizations in their counties. Agents in central Maryland found themselves in the midst of the state's leading dairy region, a prosperous area where the strength of farm organizations varied. Harford and Baltimore Counties were the most extensively organized with large active groups which had some experience in the cooperative buying of fertilizer, feeds, and seeds. The Grange had strong county organizations in both of these counties as well as in Frederick; however, Frederick and Carroll County groups had not engaged in cooperative purchasing. Carroll County had the weakest organizations--its agent complained in 1918 that its Granges suffered

⁴⁶ Aegis, 30 March 1917: 3; and Maryland Farmer, 27 February 1920: 7.

from a lack of members because of little cooperation and boring meetings. In all counties, the Grange was the most important organization and the one to which the county agents first turned to find members for county Advisory Boards and demonstrators for the new farming methods they planned to teach.⁴⁷ Agents such as P. A. Hauver of Frederick County believed that the Grange benefited the entire rural family by increasing the "opportunities for social intercourse, amusement, entertainment, and greater contentment with farm life."⁴⁸ County agents worked hard to organize new Grange locals and to strengthen the programs of old ones.

By the early 1920s, however, agents felt the need to expand their clientele to include farmers who were not Grange members. Because county agents believed that the Grange had become more interested in its social diversions than in agricultural education, they worked with their advisory committees to organize a new group known as the Farm Bureau. The American Farm Bureau had been officially formed on 20 March 1920 and the Maryland group was organized in January 1923 with seven thousand members in thirteen counties.⁴⁹ While local Farm Bureaus had been formed as new organizations throughout the state, the state group took over the functions of an existing organization, the Maryland Agricultural Society. The society was formed in 1915 as the direct descendent of the Farmers' League of Clubs which had gradually expanded to include representatives of all Maryland farm groups. Each winter, the

⁴⁷ County agent reports, 1916-1920.

⁴⁸ P. A. Hauver, Frederick County Agent Report, 1917.

⁴⁹ Joseph G. Knapp, The Advance of American Cooperative Enterprise: 1920-1945 (Danville, Illinois: Interstate Printers and Publishers, 1973), p. 12; and Maryland Farmer, 1 February 1923: 1; and 1 October 1923: 2. Most of these members were from the central Maryland counties.

society and its affiliates--the state Horticultural Society, Crop Improvement Association, Dairymen's Association, Beekeepers' Association, Vegetable Growers' Association, and Sheep Growers' Association--held a week-long educational meeting and exhibit in Baltimore known as Maryland Week. Beginning on a small scale in 1898, these meetings reached their peak just before World War I. During the week, each association held its annual meeting and sponsored special educational sessions for its members. The society also held general meetings where participants could discuss broader agricultural topics.

Like many earlier farm organizations, the Maryland Agricultural Society and its affiliates emphasized education and improved farming methods in their early years. They also sought to improve the city dweller's understanding of farm life and to promote the achievements of Maryland agriculture.⁵⁰ It was not until the early 1920s that the Agricultural Society or any affiliate other than the Dairymen's and Tobacco Growers' Associations chose to switch some of their attention away from the glorification of agriculture and of new methods for use by the educated farmer to produce better crops or finer show animals and concentrate instead on the economic problems confronting many farmers. The large attendance at the Maryland Week meetings and exhibit indicated, however, that not just a small elite group was interested in learning new production methods. The farmers' institutes and county agents had introduced scientific farming to a wider range of farmers who now flocked to at least some of the Maryland Week activities. Naturally,

⁵⁰ In 1911, Maryland Week was part of a larger "Boost Baltimore" campaign planned by city politicians to persuade the Democratic Party to hold its national convention there in 1912. Woodrow Wilson was the featured speaker at the agricultural meetings which were attended by business and farm leaders. Sun, 4 December 1911: 9.

the farmers of central Maryland were in the best position to take advantage of these activities. The increased involvement of farmers who had previous experience with cooperative purchasing in local organizations and the realization that the best price advantages would be found through statewide cooperation led the society to sponsor the formation of the Agricultural Corporation of Maryland in October 1921. Organized by the society, its affiliates, and the Grange, the corporation issued \$250,000 in stock which could be purchased by individuals for \$10 per share or county cooperatives in blocks of between 500 and 2,500 shares. Although the corporation had planned to market products for its members in addition to purchasing feeds, fertilizers, and seeds, these marketing plans did not materialize until the 1930s.⁵¹

As the purchasing activities of the Agricultural Corporation increased during the twenties and thirties, members of most major farm groups in the state used the corporation to purchase their agricultural supplies. Maryland organizations increased their cooperation during the twenties, while at the same time becoming individually more specialized. By 1930, the Farm Bureau had become the major agricultural organization in the state, supporting the educational programs of county agents and serving as the political voice for the state's farmers. Under the umbrella of the Farm Bureau were the specialized producers' associations such as the Horticultural Society and Poultrymen's Association. While these groups had begun to encourage cooperative marketing and purchasing, their major emphasis continued to be on education about improved production and methods of cooperation. The Grange, central Maryland's former

⁵¹ Sun, 12 January 1922: 5; 28 October 1921: 5; and 13 January 1922: 12; and Maryland Farmer, 1 August 1933: 9.

leading farm organization, had originally enjoyed an increase in membership after the county agents began their work, but, by 1930, its membership was declining in proportion to the increase in Farm Bureau membership. County agents found, however, that many farmers belonged to both the Grange and the Farm Bureau. Farmers retained Grange membership, agents believed, because of the social activities it provided for the rural community.⁵²

The county agricultural societies also experienced a decline in influence in the twentieth century. Revitalized under the county agents as an educational method capable of reaching many local adults and youth, the county fairs were financially successful; however, the societies which conducted them exerted very little influence outside of county fair week. Their function had become very specialized and their members used other farm groups to further their political or economic goals.

The last major group of Maryland farm organizations were the specialized marketing cooperatives. By 1930, the MSDA and the Maryland-Virginia Cooperative Milk Producers' Association, the organization of Washington's milk shippers, were well-established and exerted considerable power both in the cities they served and in other farm groups. The example of the milk cooperatives was followed by Eastern Shore vegetable growers and southern Maryland tobacco planters who organized their own marketing groups. Because of the success of the state's cooperative organizations in the years following the war, Maryland farmers had accepted the principle of cooperative marketing.

⁵² W. C. Rohde, Baltimore County Agent Report, and F. W. Fuller, Carroll County Agent Report, 1924.

CHAPTER IV

THE FIRST EXPERIMENT

Among the plethora of rural organizations formed in the late nineteenth century were the distant forerunners of the specialized cooperatives of the twentieth century. Farmers across the nation, raising a variety of farm products, modeled their first marketing organizations on the cooperative stores of the Grange, the cotton exchanges of the National Farmers' Alliance, and, perhaps, even the trusts of Andrew Carnegie and Henry Frick. Northeastern dairy farmers, finding that their marketing problems increased as nearby urban populations grew, were among the first to organize bargaining associations to negotiate with milk dealers. In the 1880's, farmers shipping milk to Boston, New York, and Philadelphia formed associations, but all failed because they could not enforce prices and regulate the supply of milk entering the cities.¹

Perhaps because of their continued dependence on a variety of farm products for their incomes, Baltimore-area dairy farmers waited longer than their Northern neighbors to form a collective bargaining association. Important only to farmers living close to creameries or railroad lines, dairying remained a sideline for many. Because they had the most experience with the problems of shipping fluid milk to the city, the producers near the railroads organized first. Carroll County

¹Knapp, Rise of Cooperative Enterprise, p. 72. Boston farmers formed the Boston Milk Producers' Union in 1876. The United Milk Producers' Association was formed in Philadelphia in 1889 and the Five States Milk Producers' Union was formed in New York in 1889 and reorganized in 1898.

farmers living along the Baltimore and Ohio Railroad met in January 1884 to form the Patapsco Dairy Association. It was designed to intercede with milk dealers on behalf of its members in any disputes. At the first meeting, members complained that discrepancies existed between the amount of milk they shipped and the amount for which they were paid; one member reported a loss of between three and eight gallons each month.² Farmers shipping milk on the Maryland Central Railroad formed a similar group in Bel Air in 1890 for their "mutual protection and benefit."³ Also authorized to investigate shippers' problems with milk dealers and the railroads, the Maryland Central Dairymen's Association in 1894 began a campaign to obtain lower freight rates for milk.⁴ The purpose of the dairy associations differed from the many educational groups common during the early nineties, yet prominent farmers organized both types of organizations. The Patapsco Association included a member of the state legislature; several members of the Bel Air association belonged to farmers' clubs and agricultural societies. Its founders included William Amoss, the future director of farmers' institutes, and Joseph Hoopes, Harford County's first farmer to install electric milking machines.

In the fall of 1899, a situation began which would be too difficult for these early associations to handle. Under the leadership of ex-State Senator Charles T. Westcott, the Maryland Sanitary Dairy Company and owners of other large dairies began quietly securing options on many city milk routes.⁵ Declaring the the large dairies wanted to "freeze

²Sun, 5 January 1884: 4.

³Sun, 26 February 1890: 4.

⁴Aegis, 3 August 1894: 3.

⁵Sun, 5 September 1900: 10.

out" small dealers by cutting off their supply from the farms, seventy dealers met to form the Retail Milk Dealers' Protective Association. Asa Gardiner, of the Filson Farm Dairy, spoke to the gathering on behalf of the large dairies. He contented that the large dairies only wished to improve milk quality through strict inspection of milk and dairies and to make milk distribution more efficient by eliminating duplicate milk routes and increasing the amount of milk carried on wagons. Gardiner said that he had signed an option with Westcott and that other dealers would be welcome to sell their routes for forty dollars per gallon and continue as wagon drivers. Members of the Protective Association countered that the option form did not guarantee payment for their routes.⁶

Milk shippers also reacted quickly to the news of the combine's plan. Twenty-one out of the thirty-three farmers shipping from the Monkton station of the North Central Railroad met on 21 October and, although they tentatively agreed to work with the combine to improve milk quality and distribution, they proposed to draw the other one hundred Baltimore County shippers along the railroad into a protective association.⁷ During the next week, shippers met at other North Central stations, elected local officers, and appointed representatives to meet with other farmers and with dealers. Farmers decided to ask the combine for an increase in the milk price from thirteen to fifteen cents per gallon. Their new organization would work for the elimination of irresponsible dealers who did not pay for the milk they obtained from farmers and would negotiate with railroads for lower rates.⁸ On 7 November,

⁶Sun, 21 October 1899: 12. ⁷Sun, 23 October 1899: 7.

⁸Sun, 24 October 1899: 7; 26 October 1899: 7; and 7 November 1899: 7.

farmers officially organized the North Central Milk Shippers' Association as the first of what they hoped would be a network of dairymen's organizations throughout the milk shed.⁹ At subsequent meetings, the association appointed representatives to oversee members' interests at the railroad stations and invited all Baltimore-area shippers to a general meeting in the city.¹⁰

The representatives of the North Central Association dominated the first meeting. Organizing the United Milk Producers Association (UMPA), farmers from all surrounding counties rejected Asa Gardiner's proposal that they contract to sell their milk to the combine for a three-to-five-year period at prices set by producers. After discussing several alternatives, they remained divided over exactly what actions to take. Farmers could continue dealing individually with retailers, rely on their new association to set prices in consultation with dealers, or sell milk to the association which would contract with dealers to deliver the milk. The most ambitious plan proposed at the meeting called for the association to bypass the dealers completely and deliver milk to city customers. The members at the meeting decided that their newly-elected officers and directors should follow whatever plan would prevent members of the combine from obtaining milk until the trust was dissolved.¹¹

The structure of the UMPA provided for equal representation among the shippers of all railroad lines even though only the North Central shippers were currently organized. Each railroad association

⁹Sun, 10 November 1899: 7.

¹⁰Sun, 17 November 1899: 7; and 11 November 1899: 7.

¹¹Aegis, 1 December 1899: 3; and Sun, 27 November 1899: 7.

would be represented in the UMPA leadership by a vice president and two directors.¹² Some of the most active farmers in the milk shed, the six officers of the new association included three members of farmers' clubs, two members of roads leagues, and two members of the state legislature. Other officers and directors received their first leadership experience in the UMPA.¹³

Officers of the UMPA rapidly formed organizations for farmers shipping milk on other railroads. A series of meetings held in Carroll and Harford Counties resulted in the formation of the Western Maryland, Baltimore and Ohio, and Baltimore and Lehigh Associations.¹⁴ City and suburban milk producers, many of whom had their own milk routes or regular customers in Baltimore, formed an auxiliary group with 250 members.¹⁵ With this initial work completed, the officers and directors of the UMPA met to plan their next steps. Stressing the need for high quality milk, they urged dealers to tie increased prices to better quality after a fair base price had been determined. They fixed the minimum price for all members' milk sold after 1 January 1900 at sixteen cents per gallon; milk with more than 16 percent cream would be sold for eighteen cents. Appointing a committee to meet with dealers from both the combine

¹² The officers were: President, William Crowther (North Central); Vice Presidents, John Beasman (Baltimore and Ohio), James Kane (Baltimore and Lehigh), James Councilman (Western Maryland), Thomas Lea (City and Suburban representative); Treasurer, Joseph Hoopes (Baltimore and Lehigh). Sun, 9 December 1899: 7.

¹³ Baltimore County representatives at the early meetings had been the most active in other groups, probably because of the county's active Grange and the Gunpowder Farmers' Club. Harford County's Deer Creek Club was not represented in the UMPA leadership. Aside from Beasman, the representatives from Carroll County were appearing in leadership positions for the first time.

¹⁴ Sun, 4 December 1899: 8.

¹⁵ Sun, 8 December 1899: 7.

and the Protective Association, the directors resolved to "provide such safeguards as necessary to protect the prices."¹⁶

It was soon evident that dealers were either reluctant or unable to cooperate with the UMPA. Primarily interested in fighting the combine, the Protective Association used its weekly meetings to plan its campaign to gain consumer support. Members decided that, in order to distinguish themselves from the combine, all their trucks should bear the association's emblem, a dairyman with a club crushing a serpent, and the motto, "Independent of Trusts."¹⁷ The association warned the UMPA that, because the increase would not hold unless all dealers raised prices, it could not adjust its prices unless the combine did the same.¹⁸

The issue remained unresolved as the January 1 deadline drew near. The last meeting between dealers and the UMPA ended with no agreement on the price increase.¹⁹ Recognizing that, as a mere bargaining organization, the UMPA had no power to enforce its demands, the officers decided that the most logical option remaining was to take over distribution of members' milk. Directors met with their associations to solicit subscribers for \$250,000 of capital stock. With the money they raised, the association planned to purchase milk routes, hire drivers, and buy manufacturing facilities. Reminding farmers of their problems with low prices, high freight rates and unscrupulous dealers, UMPA officers promised to force the milk trust to accept the association's prices. Although the association threatened to cut off a dairy's supply if it refused to pay the price set by the UMPA, it offered to

¹⁶ Sun, 9 December 1899: 7; and 21 December 1899: 7.

¹⁷ Sun, 10 November 1899: 7; and 17 November 1899: 7.

¹⁸ Sun, 22 December 1899: 10. ¹⁹ Sun, 29 December 1899: 7.

sell stock to dealers who wished to buy milk.²⁰

Vowing to assume the responsibility of distribution on 15 January, leaders of the UMPA set a difficult task for themselves. They urgently campaigned to secure stockholders and, at the same time, prepared to begin business. Approximately seven hundred members of the local associations promised to purchase stock and agreed to allow their milk to be sold by the UMPA.²¹ Planning to sell milk in sealed jars marked with the percentage of cream and the date of shipment, the association rented a warehouse and began a search for bottling facilities. Rather than storing its surplus milk, the association hoped to build manufacturing facilities. It detailed these plans in its first release to the press and dealers, also promising that it would appoint inspectors to visit farms to check cleanliness so that quality milk would be sent. While dealers would be charged the prices set in December, the UMPA promised consumers that retail prices would not increase.²²

As the fifteenth neared, UMPA officials continued to negotiate with dealers. Senator Westcott of the Maryland Sanitary Dairy offered the hope that dealers and the UMPA could work together without conflict, but, at a meeting between UMPA officials and dealers who had not signed contracts, no price agreement was reached.²³ The UMPA pledged that it would not sell milk to any dealer who did not buy stock; its representatives would be at all depots to distribute milk only to friendly dealers. Dealers countered that they had sufficient supplies to handle all

²⁰ Sun, 12 December 1900: 10.

²¹ Sun, 5 September 1900: 10.

²² Sun, 12 December 1900: 10.

²³ Ibid.; and Sun, 15 January 1900: 10. Since individual UMPA members would no longer be selling milk to dealers, the association also had to obtain members' milk cans from non-cooperating dealers.

manufacturing needs and that they had arranged for ample fluid supplies from independent farmers and from other cities; one carload of milk from Washington and one from Philadelphia would arrive each day.²⁴

On 15 January, the UMPA put its negotiations with independent dealers on the shelf and began the task of distributing and selling milk. Despite the short time for preparation, its representatives were waiting at the three city railroad stations. Although police had been sent to Calvert Station, where most milk arrived, to deal with possible disturbances, UMPA officials divided the milk among their dealers without problems. At Calvert Station, over 150 wagons lined up waiting for the milk they usually received, but 100 drivers left with empty wagons because their employers had not signed contracts. Several dealers signed contracts that morning so that they could obtain milk at the station. Surplus milk was taken from the railroad stations to the association's warehouse and creamery where it was made into butter. Independent dealers were allowed to purchase some of the surplus at the warehouse for four cents more than dealers under contract with the UMPA.²⁵

Several larger dairies avoided doing business with the UMPA by importing about 6,000 gallons of milk each day from other cities.²⁶ They also used the press to stir up public feelings against the UMPA. The formation of the UMPA divided both the combine and the Protective Association as some members from each decided to work with the farmers. Senator Westcott, for example, agreed to cooperate with the UMPA and decided not to pick up the options he had secured.²⁷ Many small dealers,

²⁴Sun, 15 January 1900: 10.

²⁵Sun, 16 January 1900: 12; and Aegis, 19 January 1900: 3.

²⁶Aegis, 19 January 1900: 3. ²⁷Sun, 17 January 1900: 7.

especially those with only one horse and wagon, joined the UMPA because they could not afford to import milk, but the Milk Dealers' Protective Association merely switched its attacks from the combine to the UMPA. Other dealers, primarily members of the old combine, rejected both the Protective Association and the UMPA and chose to fight the farmers on their own. Asa Gardiner led their fight, assuring consumers in his newspaper advertisements that milk deliveries from Filston Farm Dairy would continue. Gardiner accused farmers of pursuing their own goals by driving dealers out of business. He stressed that the quality of the milk he sold was already ensured through city inspection, something which the UMPA was only promising to bring to farms.²⁸

Other dairies also reassured consumers that they would have ample supplies. The owner of the Alpha Dairy, who received 2,500 gallons each day from Philadelphia and Washington, offered to sell some to fellow dealers so that they would not be forced to buy from the association.²⁹ The independent dealers hoped to convince consumers that the UMPA was a trust and should therefore be destroyed. Like the Pikesville Dairy, these dairies eagerly disavowed any connection with the farmers' organization in order to attract support from both farmers and consumers:

In this period of invasion, The Pikesville Dairy Co. offers its service as a clearing house for milk supplies to the farmers of Maryland on one side and all independent dairymen and consumers on the other.

Farmers having first-class milk to sell, Dairymen wishing to purchase the same and customers whose supplies are interrupted, are all invited for their general benefit to communicate with us.³⁰

The UMPA responded with its own advertisements. Emphasizing the

²⁸ Sun, 5 February 1900: 1.

²⁹ Sun, 17 January 1900: 1.

³⁰ Sun, 24 January 1900: 1. Samples of other ads from independent dealers appear in the daily newspapers throughout January.

threat of the proposed milk trust, the ads stated that the UMPA did not plan to replace dealers; it sought only to gain a fair price. The UMPA denied that it was a tool of some city dairies, saying that its stockholders were milk producers. As proof of its desire to improve milk quality, the UMPA stated that it had already arranged for a chemical firm to inspect milk for adulteration and cream content.³¹ It supported a bill introduced in the legislature by one of its directors, Carroll County Senator John Beasman, to appoint a State Dairy Commissioner to guarantee a pure milk supply through increased inspection.³² In a gesture of goodwill to the community, it also donated some of its daily surplus to the Women's Christian Temperance Union for distribution to the poor.³³

The association's rural defenders joined the cause and, like the editor of the Harford County Aegis, argued that farmers needed higher milk prices. Farmers, said the Aegis, also needed to be paid promptly; the unscrupulous dealers who failed to pay or who cut off a farmer during surplus periods were the real villians. Because these middlemen were trying to create the impression that farmers were asking for exorbitant prices, consumers should ignore them and support the farmers. Admitting that the UMPA was attempting to control the market in the same manner as a trust, the editor added: "While we despise trusts of every kind, yet a trust such as the farmers are now trying to form certainly has its good points."³⁴

³¹Sun, 16 January 1900: 1.

³²Sun, 31 January 1900: 8.

³³Sun, 22 January 1900: 14; 23 January 1900: 12; and 24 January 1900: 12. Initially, some city residents were suspicious of this goodwill gesture, believing rumors that the milk was given away because it had been condemned by the Health Department.

³⁴Aegis, 19 January 1900: 2.

The two opposing camps remained in the months that followed even though the debate quieted. Recognizing that the large dairies would continue to secure milk from outside sources, the UMPA sought to improve its own position by buying and equipping a modern milk plant. In February, it purchased the Ice Palace Skating Rink for \$42,500, paying \$5,000 in cash and borrowing the remainder from the American Ice Company.³⁵ After studying bottling plants in other cities, the UMPA installed, at a cost of \$50,000, bottling equipment and apparatus necessary to make butter, ice cream, and cottage cheese.³⁶ It sold milk directly to consumers from its store at the plant and also took over many delivery routes; milk could be purchased by dipped measure or in bottles.³⁷ During the summer, the association erected a large tent near its plant to sell ice cream and even hired an orchestra to play during business hours. In the winter, it sold ice cream from its ice cream parlor inside the plant.³⁸

Although events in the early months seemed to indicate that the UMPA had gained the confidence of consumers, confidence alone could not ensure success. From its inception, the association was chronically short of money. Although the UMPA had been capitalized at \$250,000, farmers only promised to buy stock worth \$150,000. Counting on this

³⁵ Sun, 16 February 1900: 12; and 4 January 1901: 7. The association gave the company three promissory notes for the balance: it owed \$5,000 in six months, \$12,500 in one year, and \$25,000 in two years.

³⁶ Sun, 13 March 1900: 10; and 5 September 1900: 10.

³⁷ Sun, 4 September 1900: 1. Tickets for twenty quarts of dipped milk sold for one dollar; the same amount of bottled milk cost \$1.20.

³⁸ Sun, 5 September 1900: 10; 8 September 1900: 1; and 19 September 1900: 1. Vanilla ice cream cost 25 ¢ per quart.

money, the association renovated its plant and spent \$46,000 to purchase milk routes, but some subscribers never paid for their stock. Even though the association continued to offer prices higher than those of the previous year, dealers lured many of their former shippers back by offering even more money.³⁹ In September the association received only 11,500 gallons of milk each day.

By September it became obvious that only a small miracle could save the UMPA. The association did not have enough cash to pay its first promissory note for \$5,000 due on September 4. On that day, the chemists in charge of the UMPA lab, petitioned the circuit court to place the association in receivership, claiming that the UMPA owed them each back pay of \$316.66.⁴⁰ Believing other creditors would also sue, they told the court that these suits would destroy the business and bring a loss to the stockholders. The court appointed William Crowther, president of the UMPA, and William Wilcox, cashier of the Old Town Bank, as receivers. Giving bonds for \$100,000, the receivers assured creditors that they would reorganize the association within sixty days.⁴¹

The receivers first attempted to reassure the stockholders that their interests would not be neglected. Urging farmers to be patient in their demands for payment, they argued that many had demanded payment from the UMPA faster than they had from dealers.⁴² The largest stockholders, however, were concerned enough to petition the court on

³⁹Sun 5 September 1900: 10. The association had changed its price policy during the summer, basing prices on butterfat content rather than cream. Under the old system farmers were paid between 16 and 18¢ per gallon, based on quality; they were now paid between 13.5 and 19.5 cents.

⁴⁰ Both Penniman and Browne had been promised salaries of \$1,800, with Penniman receiving an extra \$2,000 as superintendent of the plant.

⁴¹Sun, 5 September 1900: 10. ⁴²Ibid.

6 September to appoint a co-receiver to look after their interests.

Even though Crowther was a stockholder and milk shipper, John Beasman was appointed co-receiver.⁴³ Eager to dissolve any other conflicts

between the stockholders and themselves, the receivers met with the UMPA board of directors and representatives of each branch association to discuss the reorganization.⁴⁴ Each local organization appointed seven

dairymen to serve on the reorganization committee with the receivers and board of directors; their plan would be presented later to the stockholders.⁴⁵

At their meetings with the local associations, the receivers presented their plans to begin business again and listened to the farmers express their frustrations. Concerned that they would not receive payment for the milk they had shipped since the association folded, many farmers were nearing bankruptcy. Some shippers were anxious to leave the association, stating that they had been forced to join by their neighbors who threatened that they would no be able to sell their milk except through the UMPA. Others had already stopped shipping to the association, but wanted to sell their stock. Officers of the UMPA replied that no one had been forced to join and urged farmers to resume shipping to the association during its reorganization.⁴⁶

Customers also needed reassurance that the UMPA would continue to deliver milk each morning. Eager to dispel rumors of its complete demise, the UMPA placed advertisements in the newspapers urging customers

⁴³ Sun, 6 September 1900: 10. Beasman was the association's largest stockholder, owning 750 shares. Four of the men who joined him in the petition owned 500 and two owned 500 shares.

⁴⁴ Sun, 11 September 1900: 10. ⁴⁵ Sun, 28 September 1900: 7.

⁴⁶ Sun, 18 October 1900: 7; and 22 October 1900: 8.

to continue their patronage.⁴⁷ The financial problems of the association were evident, however when in one advertisement it informed customers that ice cream must be paid for in advance or delivered C.O.D.⁴⁸

The UMPA presented its reorganization plan to consumers and farmers as a way of convincing them that it was serious about resuming business. Several Baltimore banks agreed to take association bonds worth \$143,000 as collateral for the debt. The UMPA received \$86,000 in notes from its stockholders, most for less than \$100; the notes would be paid from monthly deductions on members' milk checks. Stockholders also agreed to purchase \$50,000 in bonds. With the money from these sources, the association would pay for the daily operation of the business and settle its debts, including the lien on the plant.⁴⁹ Releasing stockholders from liability on any claims against the association or the receivers, the plan also provided that farmers be paid at least eleven cents per gallon for all milk they delivered.⁵⁰

By its reorganization meeting in December, the UMPA had put its new plan into action. Under the plan, the association would be supervised by a committee of five chosen by its new directors.⁵¹ Beginning immediately to work out a schedule of payments to farmers and banks, the committee also promoted the sale of \$60,000 in bonds. In tallying the

⁴⁷ Sun, 8 September 1900: 1; and 21 September 1900: 1.

⁴⁸ Sun, 28 September 1900: 1.

⁴⁹ Sun, 1 November 1900: 13; and 27 December 1900: 10.

⁵⁰ Sun, 22 October 1900: 8.

⁵¹ Sun, 3 December 1900: 7. Several of the former directors had not been re-elected; the most visible absence was that of John Beasman, who was also no longer a receiver. Of the ten directors, only three had served on the original board.

liabilities, the directors found that the UMPA owed \$243,875.⁵²

amount due:	on plant	\$ 42,500
	preferred claims	5,000
	interest on notes	1,275
	banks: Old Town, Commercial and	
	Farmers, Shrewsbury	72,660
	American Ice Company	2,440
general creditors owed over \$500		20,000
small creditors		20,000
farmers		80,000
Total		<u>\$243,875</u>

In one final effort to persuade farmers to resume shipments to the association, the reorganization committee sent a letter, promising to pay fourteen to eighteen cents per gallon, depending on butterfat content. Farmers would be paid at least once each month. The committee urged farmers to continue their support of the association which was the best means they had of ridding the market of irresponsible dealers.⁵³ Many members did not come to the aid of the association and, by the end of December, the hopelessness of the situation was evident. The failure of the UMPA also affected others; on 26 December the Old Town Bank was placed in receivership because of the losses it sustained from the demise of both the UMPA and a local canner.⁵⁴

The officers of the UMPA met on 26 December and, upon hearing the news of the Old Town Bank, began to seek new financial support. When William Crowther proposed that the UMPA pay its debts by giving forty cents on the dollar in cash and sixty cents in association bonds, city banks rejected the offer. Confident that they could raise at least \$50,000 from other banks, the officers told their creditors that the

⁵² Ibid.

⁵³ Sun, 13 December 1900: 7.

⁵⁴ Sun, 27 December 1900: 10; and 9 January 1901: 10. The bank reopened on 9 January.

association would continue.⁵⁵ Not sharing this optimism, the judge supervising the receivership ordered the receivers to stop business by midnight on 31 December.⁵⁶

The final demise of the UMPA resulted in a scramble by dealers to take over its customers and delivery routes. Asa Gardiner announced his plans to expand the herds at Filston Farm and build a new plant to fill the opening in the market.⁵⁷ Some UMPA stockholders attempted to form two new dairies to handle former members' milk. A Carroll County group led by former Governor Frank Brown and John Beasman proposed to start the Olive Dairy, but they abandoned these plans when another group of investors chartered the Farmers' Dairy.⁵⁸ Of the twelve directors of the Farmers' Dairy, three had been directors of the UMPA after its reorganization and most of its first subscribers were former UMPA members. Its temporary president was Evan Haines, former Carroll County Sheriff and UMPA stockholder, while its lawyer, Edward Kines, had also served the UMPA. With the \$15,000 subscribed from its stockholders, the dairy planned to rent the UMPA's milk wagons to begin deliveries. Expecting to receive about 2,400 gallons each day, it decided only to sell milk and do no manufacturing, but it rented the UMPA plant for storage. Because the plant would soon be sold, the dairy rented it on a daily basis.⁵⁹

Despite these plans, the Farmers' Dairy folded in less than two weeks. Lack of capital and problems with the wagon drivers who refused to contract with the dairy unless a majority of its directors were

⁵⁵Sun, 27 December 1900: 10; and 28 December 1900: 10.

⁵⁶Sun, 31 December 1900: 10; and 1 January 1901: 12.

⁵⁷Sun, 29 January 1901: 10. ⁵⁸Sun, 1 January 1901: 12.

⁵⁹Ibid.; and Sun, 2 January 1901: 10.

drivers caused its failure.⁶⁰ Because many drivers intended to return to business as independents, the association's livestock and wagons were sold.⁶¹ After the American Ice Company brought suit against the receivers, plans were made to sell the plant.⁶² Although some farmers had been excited enough by Gardiner's expansion plans to propose that they bid on the plant and form a new company, they could not convince many shippers that they really could make a profit.⁶³

Aside from a flurry of law suits by farmers and creditors attempting to recover some of their losses, the UMPA was rarely heard of again in the Baltimore milk shed. Its plans had been large, but its equally-large failure scared many farmers away from cooperative efforts for several years. The effects of the UMPA on Baltimore dealers are difficult to gauge because no accurate figures exist on the number of dealers before and after the existence of the UMPA. While the struggle with the UMPA probably drove some small dealers out of the market, they were certainly replaced in a short time. Among the large dealers, Asa Gardiner emerged as the leader. After expanding Filsong Farm, Gardiner began his own dairy in 1903.

Despite its failure, the UMPA was important as a bridge between the twentieth century cooperative movements and the organizational experiments of the late nineteenth century. In its goal of total control of the city's milk supply, it resembled marketing cooperatives formed by the National Farmers' Alliance and only dreamed of by Maryland alliances. Although it followed a tradition started by the Maryland Grange in its

⁶⁰Sun, 5 January 1901: 12. ⁶¹Sun, 10 January 1901: 7.

⁶²Sun, 4 January 1901: 7; and 9 January 1901: 10.

⁶³Sun, 30 January 1901: 7.

agency, it went several steps beyond mere distribution of supplies or bulk marketing of farm products in its attempt to ration milk to dealers, organize the majority of area shippers, process the milk in its own plant, and secure delivery routes served by its own milk wagons. Unlike the Grange and Alliance which combined social and educational activities with their economic programs, the purpose of the UMPA was strictly economic. To the UMPA, the best way to protect farmers' interests was to sell milk at a fair price.

The causes of the failure of the United Milk Producers Association were similar to those of early farm cooperatives everywhere: lack of sufficient capital, inexperienced management, and the ability of better-capitalized dealers to break the association's control of the market by importing milk from other states. The officers of the UMPA had assumed a difficult task too quickly; they had just begun to sell stock when they were thrust into the market place. Their distribution plans had been hastily made, and they lacked adequate time to train an office staff or manager. The leaders of the UMPA were not prepared to assume all at once the responsibilities of selling milk, manufacturing milk products, supervising employees, selling stock, dealing with customers and farmers, renovating a milk plant, and mounting a full-scale public relations campaign against hostile dealers.

The farmers' own rhetoric also worked against them. For years, Maryland farmers had cried out against corporate combinations which hurt the innocent farmers and consumers by fixing prices. Now, they themselves were accused of forming a trust and fixing prices. While the farmers' story was reported fairly in the news items, dealers' anti-trust advertisements and the emblem on the milk trucks ("Independent of Trusts") driven all over town by Protective Association members created

ill-feelings among some consumers as well as confusion among dairy farmers. Finally, the association failed because the fear of a dealers' trust was not enough to sustain farmers in the difficult early months of the association. Because no marketing contracts bound the farmer to the association, his only tie was his stock. If a dealer offered him a higher price for his milk than he could obtain through the UMPA, the farmer probably sold to the dealer. Although the UMPA established a precedent for organization on an economic basis, it demonstrated the inadequacies of stock companies for farmers' marketing groups. Leaders of later dairy organizations would profit from the experiences of the UMPA and seek ways to strengthen members' ties to their association. Because only stock ownership held members together, the UMPA was a cooperative in a very loose sense of the word. Farmers in the Baltimore area needed more time to adjust to the concept of cooperation.

CHAPTER V

STARTING OVER

Following the collapse of the UMPA, Baltimore dairy farmers reverted to their old independent habits, negotiating individually with dealers, even though this independence virtually guaranteed low prices, cut-offs during surplus periods, lost milk cans, and high freight rates. Farmers often complained about low milk prices in their farmers' club and Grange meetings, but did not use these groups or create new ones to pressure dealers to raise prices. It took an increase in the price of dairy feeds from twelve to twenty dollars per ton in the summer of 1907 to spur farmers into renewed collective action.¹

In the farmers' institutes and other educational programs, farmers had been encouraged to increase production by feeding high quality feeds. Until county agents taught them how to mix these feeds with home-grown crops, dairy farmers depended on the commercial feeds and, therefore, were sensitive to price increases. When several large Harford County milk shippers threatened to switch from dairying to selling hay and grain, the Fallston Farmers' Club appointed a committee on milk prices.² To draw attention to the need for higher prices to meet the cost of production, the committee called a meeting for all other shippers on the Maryland and Pennsylvania Railroad. Although only 28 of the 155 farmers along the railroad attended the meeting, they decided to organize a protective

¹Sun, 29 September 1907: 20.

²Sun, 27 August 1907: 9.

association. Through the Maryland Dairymen's Protective Association, they planned to further the interests of farmers shipping to Baltimore by protecting them financially, promoting helpful legislation, protecting them from unscrupulous and "financially-unable" dealers, and increasing profits by securing a price increase.³

The president of the new association, Joseph Hoopes, and other members met with dealers to convince them to increase prices. Complaining of the high feed costs and scarce farm labor, Hoopes stated that, although he needed twelve milkers for his large herd, he only had two. When they learned that Hoopes and other farmers with large herds planned to quit or start shipping to Washington where they could obtain higher prices, dealers agreed to a two-to-four-cent increase in prices per gallon.⁴ Dealers who bought milk from Harford County farmers announced that when the scheduled increase went into effect on 1 October retail prices would be raised one cent per quart. Stating that they needed higher prices to ensure an adequate supply, dealers informed the public that the increase had been initiated by the farmers and not by a dealers' combine. The decision to pay higher prices, said Pikesville Dairy president Charles K. Harrison, was an individual one by dealers.⁵

Encouraged by the Harford County farmers' success, shippers along the Baltimore and Ohio and the North Central Railroads also met and appointed committees to negotiate with dealers.⁶ There is no

³ Aegis, 13 September 1907: 3; 27 September 1907: 3; and Sun, 11 September 1907: 11.

⁴ Aegis, 20 September 1907: 3; Sun, 12 September 1907: 14; and 29 September 1907: 20. The new price would range between 18 and 22¢.

⁵ Sun, 14 September 1907: 6; and 20 September 1907: 14.

⁶ Sun, 18 September 1907: 9; and 22 September 1907: 7.

evidence, however, that they joined the Dairymen's Protective Association or that this group followed its negotiations with the dealers with any other activity. Apparently, the dairies agreed to the price increase because some of their major farm suppliers, such as Hoopes, had threatened to leave the dairy business.⁷

Cooperation in marketing continued to be only a secondary concern for Baltimore-area farmers who felt more comfortable in the old educational organizations such as the farmers' clubs and Granges. As the short burst of activity and subsequent quick decline of the Maryland Dairymen's Protective Association suggested, the path to cooperative marketing would be much longer than the one to cooperative purchasing. By 1908, college officials and progressive farmers had decided that they first needed a statewide educational association devoted to dairying. Although the various breed associations had attracted some farmers and dealers interested in stock improvement, they were often too concerned with promoting their own breeds to develop educational programs suitable for the majority of farmers who owned only grade cows.

On 15 December 1908, Dr. R. J. Patterson, head of the state experiment station, sponsored an educational meeting in Baltimore for farmers, dealers, and any other persons interested in dairying. Patterson wanted to create a state dairymen's organization to educate all branches of the dairy industry in proper production techniques.⁸ Officially organized on 17 March 1909 with forty members, the Maryland State Dairymen's

⁷ Hoopes temporarily solved his labor problems when he installed electric milking machines in November 1907.

⁸ Hartman Harrison to Oscar D. Turner, 7 January 1957, in MCMP historical file; and Sun, 16 December 1908: 12. Harrison was a dealer who also served as secretary-treasurer of the early MSDA; Turner was an MCMP fieldman.

Association (MSDA) was open to all dealers and farmers producing milk. Although they intended it to be an educational association, MSDA members appointed committees on the inspection of dairies, the cost of milk production, the cost of transportation, and the laws governing the milk business. Its first meeting featured dairy experts who spoke on sanitary production methods, but farmers also took advantage of the rare opportunity to talk with dealers in an informal setting to complain about low milk prices. The first executive committee, headed by President Samuel M. Shoemaker of Baltimore County, a cattle dealer and owner of a large dairy farm, included both dealers and farmers. Members on the committee represented Frederick, Baltimore, Harford, Cecil, and Montgomery Counties, areas of extensive fluid milk production. Asa Gardiner, also a member of the Baltimore County Agricultural Society, the Gunpowder Senior Agricultural Club, and the Maryland State Fair and Agricultural Society, represented Baltimore dealers on the executive committee.⁹

At the first meeting members approved the constitution and by-laws. A unique aspect of its state charter allowed the association to engage in cooperative bargaining to sell members' milk; however, it made no plans to draw up contracts or initiate bargaining.¹⁰ Because the association included both dealers and producers, it would have been difficult to use the MSDA as a bargaining organization. Its first officers and members intended that the association follow in the tradition of the Maryland Horticultural Society, sponsoring yearly

⁹ Sun, 18 March 1909: 9; 26 April 1909: 9; 10 January 1909: 9; and 10 November 1912, sec. 4: 5. In 1912, another prominent dealer, Oscar Schier, would become secretary-treasurer.

¹⁰ Heaps, Milk Marketing, p. 1.

educational meetings and exhibitions where farmers and dealers could discuss methods of better milk production and distribution.

Beginning in 1909, the MSDA met in conjunction with the horticultural society and the Maryland Cereal and Forage Crops Association in what would become the annual Maryland Week exhibition. At the 1909 meeting, the MSDA awarded cash prizes for the best exhibits of milk.¹¹ At subsequent Maryland Week meetings, the MSDA continued to sponsor exhibits of farmers' milk and butter and also worked with the Health Department to hold competitions grading farm and dairy cleanliness. Beginning the work assumed in the future by the testing associations, the MSDA offered prizes for the member with the cow producing the largest amount of milk in a year or with the best butterfat record. Prizes in these contests included money, purebred bull calves, and new dairy equipment.¹² College and experiment station specialists also helped to prepare exhibits showing proper production and distribution and secured leading health and dairy experts to give lectures.¹³ Observers acclaimed the Maryland Week programs and the association's special emphasis on better production as the best method for improving the quality of milk produced on Maryland farms. Through the MSDA, praised the Sun, "the dairymen have been shown that it is good business policy to properly equip their plants and to care for their stock, and the average quality of milk that is brought to Baltimore from farms within the state is high."¹⁴

¹¹ Aegis, 19 November 1909: 3; and 10 December 1909: 2.

¹² Harrison letter; and Aegis, 23 December 1910: 3.

¹³ Sun, 6 October 1916: 12; and Aegis, 25 November 1910: 3.

¹⁴ Sun, 10 November 1912, sec. 4: 5.

Such praise was not deserved by all farmers and dealers. Neither was it typical of the Sun which usually criticized them and advocated stricter health regulations. Only the most progressive farmers and dealers belonged to the MSDA, although large crowds did attend the Maryland Week meetings and exhibition. While the MSDA did not persuade the majority of farmers to improve their operations, it started a tradition which later benefited these farmers. In their negotiations with dealers, farmers always lacked the accurate data on production costs needed to justify price increases. As early as 1909, MSDA members stated that farmers needed studies of production costs to learn how to reduce farm expenses.¹⁵ The association encouraged farmers to keep good records in order to determine production costs. Experiment station personnel had begun cost surveys in 1908 but, as costs of feeds and other farm products continued to escalate, the demand increased for accurate cost figures to justify higher milk prices.¹⁶ Although the 1910 census recorded an increase of 39 percent in the average value of Maryland farm land, labor expenses rose 53 percent and fertilizer costs rose 29 percent.¹⁷ All costs rose even higher in the following years. In 1911, Frederick County farmers paid twenty-five dollars per ton for dairy feed.¹⁸ A survey taken one year later by the Baltimore County Chamber of Commerce documented that farmers in the milk shed

¹⁵ Aegis, 19 March 1909: 3.

¹⁶ Sun, 16 December 1908: 12. In 1908, the yearly cost of keeping a cow was thirty-one dollars, according to S. S. Buckley of the experiment station.

¹⁷ Sun, 12 March 1911, sec. 4: 5.

¹⁸ Sun, 7 May 1911, sec. 4: 5.

spent an average of thirty dollars per ton.¹⁹

Surplus periods, when dealers cut milk prices, left farmers in even worse straits because costs remained essentially the same. Although dealers tried to discourage surplus production by paying farmers as much as 50 percent less for any milk produced in the summer months over the amount they averaged in the winter, farmers could not easily cut production.²⁰ A survey done by the U. S. Department of Agriculture in 1913 showed that the yearly costs of keeping cows in Maryland averaged \$58.67, excluding feed; however, yearly feed costs were \$51.53 per cow. The cost of milk production per gallon was 17.8¢, greater than the average price of 14¢ received by farmers.²¹

As farming costs continued to escalate, experiment station specialists met with farmers in many sections of the milk shed to encourage them to join testing associations and cull poor producers as a means of reducing costs. At a meeting of Harford County farmers, dairy specialist Guy Wolcott taught them how to make a balanced feed ration from home-grown crops.²² Encouraged by their testing associations to keep accurate records, progressive farmers documented how increased costs had affected them. Because they involved the same group of farmers, testing association records were the first cost surveys capable of measuring changes in costs over time. In 1917, T. E. McLaughlin,

¹⁹ Aegis, 11 October 1912: 3.

²⁰ Sun, 2 July 1913: 6.

²¹ Aegis, 18 July 1913: 3; and Sun, 20 July 1913, sec. 4: 8. The survey was of 10 dairy herds (250 cows) in Baltimore County. The cost of keeping a cow included capital invested in property and livestock, labor, bedding, taxes, insurance, sanitary expenses, and depreciation of livestock at 12 percent. The average purchase price of the cows was \$54; the labor cost per cow averaged \$37.05. The average pounds of milk given yearly per cow was 5,222 pounds.

²² Aegis, 23 January 1914: 3.

the Harford County Extension Agent, compiled a detailed cost survey from the records of seven farmers (Table 2) showing that, although feed expenses varied among different herds, total dairying costs continued to increase steadily. In 1916, the average cost of producing one gallon of milk, according to McLaughlin, was 19.8¢.

TABLE 2

DAIRYING COSTS FOR HARFORD COUNTY FARMERS, 1916

I. Cost per Cow Fed for Year 1916

E. A. Wilson	\$68.38
D. G. Harry	60.00
A. B. Twining	86.49
Osborne & Graybille	60.21
S. A. Williams	60.21
J. T. Hoopes	83.86
Dr. H. Hoopes	<u>95.10</u>
Average	\$73.50

II. Cost of Feed for One Cow--Ethel, belonging to D. G. Harry, from 1911 to 1916

1911, total	\$34.90
1913, total	54.41
1915-1916, average	60.00

III. Average Feeding System and Price in County

<u>Kind of Feed</u>	<u>Lbs. per day</u>	<u>price per ton</u>	<u>total for 7 mos.</u>
Ensilage	30	\$ 4.00	\$13.20
Alfalfa or clover hay	10	15.00	15.75
Grain, corn, bran, etc.	9	30.00	28.35
			<u>total for 3 mos.</u>
Grain	4	30.00	5.40
Pasture, \$2 per month per cow			<u>6.00</u>
Total cost per year, allowing two months dry			\$68.70

TABLE 2--Continued

IV. Cost of Producing Milk from One Cow
(The producers are taking the lowest feed cost found in dairies where careful records were kept, \$60.00.)

Labor, @ 15¢ per hour	\$36.68
Shelter, equipment, repairs, etc.	10.08
Depreciation of cow	9.36
Cost of keeping bull	3.58
Taxes and interest on cow	5.40
Veterinary services	1.00
Bedding	5.00
Ice, coal and wood	3.00
Tools, buckets, cans, salt	.50
Strainer cloth	<u>.37</u>
Total	\$74.97
Delivery to station	<u>6.00</u>
Total cost per cow	\$80.97
Cost of feed per cow	<u>60.00</u>
Gross cost of keeping cow	\$140.97
Value of calf and manure	<u>22.00</u>
Net cost of keeping cow	\$118.97

V. Labor

(Labor is hard to get, prices are high, 15¢ per hour being reasonable as you can procure men, some higher. One man milks about seven cows per hour on an average.)

Wages, per hour	\$.15	
Cost to milk one cow	.021	
Cost per day	.042	
300 days @ \$.042 per day		\$12.60
Cooling the milk, getting ice, cleaning cans, etc.		
2 hours per day, 365 days @ 30¢ per day for 20 cows,		
\$109.50; per cow		5.47
Washing cans at Baltimore, 1¢ per can of 5 gallons;		
600 gallons @ 1¢ per 5 gallons		1.40
Caring for cow, cleaning, feeding, preparing feed,		
etc., @ 15¢ per hour		<u>17.00</u>
Total labor cost		\$36.68

VI. Delivery

Delivery to station or truck, 1¢ per gallon per cow,	
600 gallons	\$6.00

TABLE 2--Continued

VII. Shelter and Equipment (Buildings and equipment are valued at \$100.00 per cow on the average.)		
Repairs and depreciation @ 3%		\$ 3.00
Interest on investment @ 6%		6.00
Taxes, 1.50 on 50%		.75
Insurance, 1 percent for three years		<u>.33</u>
Total cost per cow		\$10.08
VIII. Depreciation per Cow (Depreciation per cow averages close to 11.7%. The average price per cow is about \$80.00. Failure to breed, abortion, udder troubles, death, old age, failure to make a profit, sale at a loss, etc. figure here.)		
Depreciation per cow		\$9.36
IX. Cost of Bull (The average bull is valued at \$100.00. It is kept for only four or five years on account of inbreeding and is then sold at a loss.)		
Interest on bull @ 6%	\$ 6.00	
Taxes @ 1.50 per year	.75	
Depreciation per year	10.00	
Feed	<u>55.00</u>	
Total for 20 cows	\$71.75	
Cost per cow		\$3.58
X. Taxes and Interest per Cow (The cows are valued at \$80.00 each. There are some registered cows in the county.)		
Taxes on appraised valuation of \$40.00 @ 1.50		\$.60
Interest on \$80.00 @ 6%		<u>4.80</u>
Total per cow		\$5.40
XI. Veterinary Services		
Medicine, attention, disinfectant, etc., per cow		\$1.00
XII. Bedding		
One ton straw per cow per year		\$5.00
XIII. Ice for Cooling		
Ice, coal and wood for cooling milk and sterilizing		\$3.00

TABLE 2--Continued

XIV. Tools, etc.

Tools, buckets, can, salt, etc.	\$.50
Strainer cloth, 2¢ per day for 20 cows, per cow	\$.37

XV. Manure

(The manure is valued at \$2.00 per ton.)

13 tons @ \$2.00	\$26.00
Handling	9.00
Net value of manure	\$17.00

XVI. Calf

Value of calf a few days old, at present prices	\$5.00
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SOURCE: McLaughlin, "Figures vs. Guesswork," Kimball's Dairy Farmer, 1 January 1917: 9.

Farmers used the records compiled by McLaughlin and other county agents in their newest campaign to obtain higher prices. In 1915 and 1916, prices of all other farm products had increased more than milk prices. Potatoes had doubled in price and eggs, sugar, and meats had also risen, but milk prices rose only 4 percent.²³ Farmers across the nation reacted to the need for a price increase by renewing their organization efforts. Although New York's Dairymen's League had been formed in 1907, it did not become an active bargaining organization until it led a farmers' boycott in 1916. In 1913, Boston-area farmers organized the New England Milk Producers' Association; bargaining groups were also organized before 1917 in Michigan, St. Louis, Minnesota, and Wisconsin.²⁴

²³ Sun, 13 February 1917: 2. A USDA survey recorded price increases in farm products in 1916: sirloin, 11 percent; ham, 21 percent; lard, 29 percent; flour, 11 percent; eggs, 11 percent; butter, 14 percent; potatoes, 100 percent; sugar 25 percent; and milk, 4 percent.

²⁴ Charles W. Holman, "The Progress and Status of Dairy Cooperation in the United States," AIC 1927, pp. 17-18.

Because the fledgling dairymen's associations in the Northeast and Midwest recognized that dairy farmers shared many common problems which needed national solutions, they formed the National Milk Producers' Federation in 1916. Headquartered in Washington, D. C., this organization served as a lobbying organization for dairy farmers and offered assistance to new cooperative associations.²⁵

State and federal government policies also encouraged farmers to attempt new organizations. California passed the first state cooperative act providing for non-stock, non-profit membership corporations in 1909 and other states soon followed with cooperative laws of their own.²⁶ The U. S. Congress passed the Clayton Amendment to the Sherman Act in 1914, legalizing farmers' associations established on a non-stock basis.²⁷ In 1913, the Department of Agriculture increased its support of farmers' cooperatives by creating the Office of Markets to promote cooperative marketing and to study the distribution of farm products.²⁸ Although he ordered county agents not to transact business for farmers, the Secretary of Agriculture told them that it was the "duty" of the USDA

to furnish farmers with information which will enable them to develop greater efficiency in all respects including the securing of their supplies and marketing their products. . . . Whenever and wherever farmers through machinery of their own are developing greater agricultural or business efficiency, we shall use the means of education at our disposal with perfect freedom in bringing the methods²⁹ of such organizations or communities to the attention of others.

²⁵ Knapp, Rise of Cooperative Enterprise, pp. 219-221, 223.

²⁶ Charles W. Holman, "The Rise of The Dairy Cooperative," American Cooperation: A Collection of Papers and Discussions comprising the First Summer Session of the American Institute of Cooperation at the University of Pennsylvania, July 20 to August 14, 1925, vo. 2 (Washington, D. C.: The American Institute of Cooperation, 1925), p. 5.

²⁷ Knapp, Rise of Cooperative Enterprise, p. 461.

²⁸ Ibid.

²⁹ Secretary of Agriculture David F. Houston to county agents, March 24, 1914, quoted in Ibid., p. 205.

Harford County farmers turned to their county agent for assistance when the price situation worsened in the summer of 1916. The county's Pomona Grange appointed a committee of fifteen dairy farmers to work with T. E. McLaughlin to plan for a meeting between shippers and dealers. Keeping the seasonal milk supply fluctuations in mind, the committee resolved to ask for twenty-two cents per gallon for milk produced from September to December, twenty cents from January to April, and eighteen cents in the peak production period of May to August. Dealers and farmers would each receive half of a proposed retail price increase of four cents per gallon. One hundred shippers invited by the Grange and testing associations of Carroll and Harford Counties met with dealers' representatives, Asa Gardiner of the City Dairy and Irving Baxter of the Western Maryland Dairy on 22 August. Although these dealers sympathized with farmers' need for higher prices, they feared consumer protests if they increased retail prices. Farmers bitterly complained that, at the current prices of between 14 and 18.5¢ per gallon, they could make more money feeding their milk to their hogs.³⁰ Gardiner and Baxter countered that they could not raise their prices too high because other dealers would undercut them. Consumer prices for milk in Baltimore averaged thirty-three cents per gallon, but they ranged from twenty-five to forty cents.³¹

Although they reached no decision at this first meeting with dealers, the shippers continued to agitate for a price increase. Appointing a temporary chairman, secretary, and a committee to enlist the support of

³⁰ Sun, 2 September 1916: 6. Unless otherwise indicated, all prices given refer to milk with 4 percent butterfat.

³¹ Aegis, 25 August 1916: 3; Sun, 23 August 1916: 12; and 2 September 1916: 6.

other shippers, the farmers planned to meet again in one week. The new chairman was David G. Harry, a northern Harford County farmer who had championed the cause of scientific milk production ever since the state's second cow testing association was organized in his home in November 1911. In 1916, he served as Master of the Harford Pomona Grange when it instigated the farmers' actions. Another northern Harford County farmer, W. A. Wheeler, became secretary-treasurer, while others served on the committee assigned to encourage all shippers in the milk shed to attend the next meeting. A member of the Highland Grange with Harry and Wheeler, I. W. Heaps was also a prominent Democrat currently serving in his second term as a county commissioner. Joseph Hoopes also served on the committee along with two Carroll County farmers, Robert Gist and Republican State Senator R. Smith Snader. Both of these men had experience in dairy organizations beginning in 1899 with the United Milk Producers' Association. Of the Harford County leaders, only Hoopes had belonged to the UMPA. Newcomers to leadership positions in dairy organizations, Heaps, Harry, and Wheeler had not been active in the MSDA, although they were members. All the men owned substantial dairy herds.³²

Agreeing to meet again with dealers, the temporary officers began to recruit members. Rural newspapers urged all farmers to attend the next meeting and the Maryland and Pennsylvania Railroad agreed to sell special excursion tickets on its morning and afternoon milk trains for the farmers traveling to the meeting.³³ Harry sent letters to all Baltimore shippers describing the resolutions to be discussed; these

³² Sun, 23 August 1916: 12. According to MSDA membership records, in 1918 the size of their herds were: Harry, 42 cows; Heaps, 25 cows; Gist, 60 cows; and Snader, 50 cows.

³³ Aegis, 25 August 1916: 3.

resolutions included the price plan devised at the initial committee meeting in Harford County as well as a proposal to increase the price of cream in the same proportion as the increase in milk prices. Farmers also wanted to persuade dealers to use more care in weighing and testing milk and proposed that testing associations and dealer-appointed testers make check-test in case of a dispute between a farmer and his dealer.³⁴

Over 1,000 farmers attended the next meeting where Harry, Wheeler, Heaps, and county agent McLaughlin told them of the proposed price plan. Asa Gardiner spoke on the dealers problems, created by increased labor and equipment costs since the beginning of the war. Some farmers, including State Treasurer and MSDA President John Dennis, believed that all dairy farmers should join the MSDA, but the consensus at the meeting was that they needed a separate organization to negotiate with dealers. D. G. Harry was elected president of the new Maryland and Pennsylvania Milk Producers' Association, Snader was named vice-president, and Wheeler remained secretary-treasurer. The officers appointed a committee on milk prices with Heaps as chairmen. Members from each county in the milk shed elected two representatives to serve on the executive committee. These representatives included State Treasurer Dennis from Baltimore County and Robert Gist from Carroll County. Recognizing that the price negotiations would best be handled in a smaller conference, the committee agreed to meet with dealers in two days.³⁵

The farmers' demands did not go unnoticed by the press and consumers. The Sun stated that, although shippers had some justification for a price increase, the raise should not be given until an investigation

³⁴ Sun, 28 August 1916: 12.

³⁵ Sun, 30 August 1916: 14; and Aegis, 1 September 1916: 3.

on milk prices was made.³⁶ Calling on the mayor to start an investigation immediately, the newspaper estimated that, if each family used one quart per day, the two-cent increase in average retail prices would cost consumers five hundred dollars per day. After listening to the farmers at the mass meeting on 29 August, however, officials of the city Consumers' League said that they would not fight either a two or a four-cent raise. Although they believed that the failure to increase prices would result in a milk strike or in the inability of farmers and dealers to provide city consumers with pure milk, they also called for an investigation to determine the exact size of the raise needed by farmers.³⁷

Consumers' reluctance to accept a price increase without a prior investigation of market conditions aided dealers' efforts to halt the increase. At a heated conference on 31 August, some shippers talked of striking unless dealers raised prices, but dealers wanted to wait until a threatened railroad strike was settled before considering a price increase. Arguing that a milk strike would turn consumers against the farmers, cooler heads among the shippers persuaded the others to agree to the postponement. Because they believed that the public would not object to a price increase if an investigation documented the farmers' needs, the milk producers' association asked the State Board of Agriculture to start a study of the market conditions.³⁸

Despite some farmers' protests that prices be raised immediately, most observers praised the decision to postpone the price increase until after an investigation. The Sun called on both farmers and distributors

³⁶ Sun, 29 August 1916: 6.

³⁷ Sun, 30 August 1916: 14; and Aegis, 1 September 1916: 3.

³⁸ Sun, 1 September 1916: 14.

to prepare statistics showing their increased costs; however, it recognized that milk was the only farm product not to increase in price since the start of the war.³⁹ Some dealers also recognized that farmers needed the price increase, but refused to negotiate even after the railroad situation was settled. Eight members of the Milk Bottlers' Exchange met with the milk producers' representatives and informed them that they rejected the proposed increase. Asa Gardiner stated that these eight dealers controlled only 50 percent of the market. While they could agree to the increase, they believed that the 187 smaller dairies in the city would undersell them. The large dairies also feared an influx of milk from other milk sheds if only the Baltimore price increased. Stressing their good relations with the shippers, the large dairies sent a letter to farmers:

We, who pay the best prices and who pay our bills promptly and who handle our business in the interest of the public health and welfare, are to suffer business losses not for your benefit but for the benefit of these other 187 dealers, because it is a fact that the granting of your demand would disorganize and disrupt our business without⁴⁰ any benefit whatsoever to you except for the first few weeks.

The milk producers achieved a minor victory when the eight leading dairies agreed to work with farmers to obtain accurate butter-fat tests.⁴¹ Negotiations continued and, on 10 October, the five largest dairies announced that they would increase their payments to farmers by two cents per gallon on 1 November. The prices paid would be those originally proposed by the milk producers, but the dealers agreed to

³⁹ Sun, 2 September 1916: 6.

⁴⁰ Sun, 9 September 1916: 14; and Aegis, 15 September 1916: 3.

⁴¹ Sun, 9 September 1916: 14. These dairies were Gardiner's City Dairy, Western Maryland, Farmlands, Spring Lake, Fairfield Farm, Deildora, Walnut Grove, and Highland Farm.

guarantee the prices for only ten months. Because they felt that they could not absorb the increase, they announced that retail prices would have to rise.⁴² After 13 October when City Dairy published its new milk prices for November, stating that farmers would receive twenty-two cents per gallon, the other dairies soon followed.⁴³ At a shippers' meeting the next day, the producers voted to accept the dairies' terms for the next ten months. Farmers shipping to smaller dairies threatened to shut off their supplies unless they also agreed to the price increase.⁴⁴ Several of these dairies agreed to increase farmers' prices but, in order to gain an advantage over the large dairies, they promised not to raise retail prices.⁴⁵

The mood of the farmers at the Maryland and Pennsylvania Milk Producers' meeting mirrored that of many Maryland dairy farmers. Although some Washington shippers already received twenty-two cents per gallon, Rockville-area farmers wanted to strike; in Allegany County, farmers and Cumberland city officials became locked in a dispute over milk prices and licensing requirements.⁴⁶ Dealers warned Baltimore shippers that, in order to discourage increased production after the price increase went into effect, they planned to purchase less surplus milk.⁴⁷ The Baltimore County agent reported that several prominent dairy farmers there wanted to sell out because the price was still too low.⁴⁸

⁴² Sun, 10 October 1916: 14; and Aegis, 13 October 1916: 3. The cooperating dairies were City, Farmlands, Western Maryland, Fairfield Farm, and Spring Lake.

⁴³ Aegis, 13 October 1916: 2. ⁴⁴ Aegis, 20 October 1916: 3.

⁴⁵ Sun, 1 November 1916: 16.

⁴⁶ Sun, 25 October 1916: 3; and John McGill, Allegany County Agent Report, 1916.

⁴⁷ McLaughlin, "Figures vs. Guesswork," p. 4.

⁴⁸ J. F. Hudson, Baltimore County Agent Report, 1916.

Because dairy farmers in his state also demanded higher milk prices, Pennsylvania Governor Brumbaugh met with Governor Harrington from Maryland to discuss the regional milk situation. Responding to the demands of all parties for an investigation, the governors decided to form a commission to investigate all phases of milk production, transportation, and distribution in Maryland, Pennsylvania, and Delaware. The commission included representatives of farmers, dealers, health officials, and university personnel and was chaired by Dr. Clyde King, professor of economics and political science at the University of Pennsylvania. Maryland's members on the commission included D. G. Harry, USDA dairy specialist G. H. Alvord, and Baltimore dealer H. K. Harrison.⁴⁹

The commission began work immediately, gathering evidence from a variety of sources. It sent questionnaires on farm production and costs to county agents who distributed them to farmers and it requested that several dealers in each city answer questionnaires on distribution costs.⁵⁰ The commission also held public hearings during November 1916 in the major cities where they heard from health officials, consumers, dealers, and farmers.⁵¹

The data collected by the commission confirmed the dark pronouncements made by farmers. From 1910 to 1916, the cost of farm labor increased 70 percent, grain and roughage increased 36 percent, and the cost of cows rose 21 percent.⁵² Average milk prices had not kept pace

⁴⁹ Sun, 16 October 1916: 12; and 21 October 1916: 12.

⁵⁰ Report of the Governors' Tri-State Milk Commission by the Milk Commissions of Pennsylvania, Maryland, and Delaware, Pennsylvania Department of Agriculture Bulletin No. 287 (1917), p. 9.

⁵¹ Ibid., p. 5; and Sun, 16 November 1916.

⁵² Tri-State Commission, p. 14.

with the increase in costs. Baltimore consumers paid an average price of fourteen cents per gallon from 1908 to 1913 and sixteen cents from 1914 to 1916.⁵³ Of the 226 responses to the questionnaires, no farmer reported a profit from his dairy operation, although tenant farmers generally considered their costs to be lower than those reported by farm-owners. D. G. Harry had the most efficient dairy operation, with a loss of .4¢ on every gallon of milk produced. The largest loss reported was 7.5¢ per gallon.⁵⁴

The Tri-State Commission announced its recommendations in January 1917 and published its complete report a few months later. Emphasizing the importance of milk for the health of the population, the commission joined many urban reformers in urging that milk distribution be regarded as a public utility and, therefore, subject to public regulation. To insure high quality, it proposed that all producers secure a permit before selling milk and that all milk brought in from out-of-state be inspected as it entered the city and graded according to established government standards. The commission urged the USDA to appoint dairy and farm inspectors to inspect farms at least three times each year. All milk testers who determined butterfat counts for dairies should be licensed in order to decrease the conflict between farmers and dealers over butterfat tests.⁵⁵

⁵³ Ibid., p.20.

⁵⁴ Ibid., pp. 16, 21. Harry reported that the average cost to produce milk from each cow in his Jersey herd was \$117.15 and that his average yearly income was \$137.00. He received an average yearly output of 700 gallons per cow at an average cost of 16.4¢ per gallon. He was paid 16¢ per gallon.

⁵⁵ Ibid., p. 45; and Sun, 22 January 1917: 3.

Wary of the new farmers' associations currently waging milk wars with dealers in New York, Boston, Chicago, and other cities, the commission urged restraint among farmers. It warned that strikes in the tri-state area would fail because the milk sheds of the large cities overlapped. Because of the area's extensive rail network, dealers could easily import milk from other sections if the price rose too high in their own milk shed. Echoing the advice of a long-gone generation of farm leaders and organizations, the commission asserted that better management and education remained the best insurance for farmers interested in making money in the milk business. It encouraged them to keep accurate farm accounts, to join testing associations, to practice scientific feeding, and to participate in educational programs sponsored by county agents. Farmers should cut their individual expenses by sharing the purchase costs of good bulls and by forming cooperative hauling associations. The commission also told farmers to work closely with the government agencies responsible for maintaining sanitation standards.⁵⁶

Addressing the problem of uneven seasonal production which resulted in low prices and cut-offs during peak periods and higher costs for dealers during shortages, the commission urged dealers to encourage more uniform production by paying farmers a fixed price throughout the year for the amount of milk delivered in scarce seasons.⁵⁷

Although it collected extensive data on milk transportation and distribution as well as production costs, the Tri-State Commission ultimately failed to provide concrete guidelines for the new dairy farmers' organizations. It did not address the farmers' desire to persuade dealers to increase prices and, by concentrating instead on ways to reduce

⁵⁶ Tri-State Commission, pp. 25-26.

⁵⁷ Ibid., p. 51.

production costs, the commission ignored the fact that some of these costs remained out of the farmers' control. The commission found no examples of farmers' bargaining associations to serve as models but, by the time it published its report, area milk producers had started to reject the traditional education and management prescriptions in favor of new cures.

In 1917, Philadelphia's milk shippers formed the Inter-State Milk Producers' Association to engage in collective bargaining with the city's dealers. Aided by local county agents, they organized local affiliates along the railroad lines in Pennsylvania and on Maryland's Eastern Shore.⁵⁸ Throughout early 1917, Baltimore's shippers busily strengthened their own organizations. While they maintained the Maryland and Pennsylvania Milk Producers' Association as a bargaining group, they sought to unite all Maryland farmers in the MSDA. They planned to combine the old educational function of the MSDA with an activist policy emphasizing farmers' need for higher prices. Signalling this change, members at the annual election of the MSDA in November 1916 elected the slate of officers proposed by the Maryland and Pennsylvania Producers' Association rather than the current MSDA officers. They named Harry, Snader, and Wheeler to the same offices in the MSDA they held in the bargaining group.⁵⁹

Under the leadership of its new executive committee, the MSDA began an educational campaign to convince dealers and consumers that they needed higher prices.⁶⁰ They also initiated a membership drive, encouraging the formation of local dairymen's associations in each county. The

⁵⁸ County agent reports, 1917; and Holman, "Progress and Status of Dairy Cooperation," AIC, 1927, p. 17.

⁵⁹ Aegis, 24 November 1916: 3.

⁶⁰ Aegis, 12 January 1917: 3.

major emphasis of these local groups would be education, but not just for farmers; the dairymen also sponsored programs designed to educate the public about the food value of milk. Local associations also mediated in conflicts between farmers, dealers, or health officials. In Cumberland, for example, the local unit of the MSDA supported farmers in a dispute over new health regulations, working with city officials to gain a milk price increase.⁶¹

Some Baltimore-area county agents had already assisted their local farmers in organizing county groups affiliated with the Maryland and Pennsylvania Association. These groups were brought into the network of the MSDA.⁶² Thanks to the work of county agents and the price increase obtained by the Maryland and Pennsylvania Association, the locals in central Maryland became the largest and most active. Although the Carroll County group alone had five hundred members, Harford County's remained the most prominent, as seen in the selection of its leaders as officers of the state associations. The Harford County group was also fortunate to be guided by the county agent most committed to their cause; while most agents supported the dairymen's groups to some extent, McLaughlin gathered statistics, called special meetings, and advised producers during their negotiations with dealers. After the price increase had been secured, the county's Pomona Grange praised McLaughlin for his assistance. Gratified by the success of their new association in rallying so many farmers to their cause, milk producers believed that they had, at last, found a way to secure high prices.⁶³

⁶¹ John McGill, Allegany County Agent Report, 1917; and Thomas L. Smith, Washington County Agent Report, 1917.

⁶² Aegis, 9 February 1917: 3.

⁶³ Aegis, 3 November 1916: 3.

CHAPTER VI

THE WAR AT HOME

Although pleased with their success in assuming control of the MSDA and in forming local dairymen's groups, farmers soon realized that their difficulties would continue. The large dairies had kept their promise and paid the agreed-upon prices through the ten-month contract period. When the contracts expired in May 1916, however, farmers demanded another raise. Because production costs continued to increase, dairies agreed to pay twenty-three cents per gallon in May and June and twenty-five cents in July and August. The total five-cent increase would be passed on to consumers.¹ Farmers were not completely content with the new increases even though some received almost eight cents more for milk than they had only one year before. Citing government reports which fixed production costs at 28.5¢ per gallon, farmers met during August in both their local associations and in a mass meeting of all Baltimore shippers to demand that September prices be fixed at twenty-eight cents. I. W. Heaps, chairman of the price committee, urged dealers to base prices on feed costs and warned that farmers would have to sell their cows unless prices rose.²

Dealers balked at this latest demand. Already under pressure from health officials to comply with the pasteurization ordinance by the

¹Aegis, 4 May 1917: 3.

²Aegis, 10 August 1917: 3; and 24 August 1917: 3.

November 1 deadline, owners of both large and small dairies feared consumer protests if they raised prices again. Price increases given to farmers, said the dealers, would be passed on to consumers because higher expenses had made it impossible for dealers to absorb another increase. In a full page advertisement in the Aegis, Asa Gardiner of the City Dairy reminded farmers that prices had risen three times in the last year, totaling nine cents per gallon, and that consumer prices had risen eight cents. He demanded an investigation of milk dealers to prove that they did not earn the huge profits farmers and consumers accused them of making. In the dairy's most profitable months, said Gardiner, it earned a profit of only one-half cent per quart.³

By November, farmers no longer remained satisfied with dealers' reasons for refusing to raise prices. While some Baltimore County farmers threatened to call a milk strike, others in the milk shed began selling their cows or shipping to Washington. The wartime demand for beef had increased cow prices, providing an incentive for farmers to sell their cows.⁴ After farmers stopped buying high priced feeds and fed home-grown feeds not balanced to promote high milk production, many sent less milk to the city. In early November, some dealers reported that they received 10 percent less milk than in the previous year.⁵

Fearing that the shortage would grow worse or that another round of retail price increases would spur consumer protests, the Maryland Council of Defense instructed Dr. A. F. Woods, president of the Maryland

³Aegis, 31 August 1917: 1.

⁴Maryland Farmer, 12 December 1919: 6.

⁵Sun, 7 November 1917: 4; 11 November 1917: 14; and J. F. Hudson, Baltimore County Agent Report, 1918.

College of Agriculture, to investigate milk prices and production and distribution costs.⁶ Both the MSDA and the Milk Bottlers' Exchange agreed to support the investigation after the Council of Defense and the U. S. Food Administrator promised to act on Woods's recommendations. Consumers and the press agreed that the investigation was vital, not only to ensure fair prices but also to guarantee an adequate milk supply for the city.⁷ The Sun also hoped for the investigation to defuse the criticism against the new health department ordinances. Many small dealers and some consumers blamed the high prices on the ordinances, urging for their repeal.⁸ Supporters of the ordinances wanted the price problem resolved before the city council changed or repealed the regulations.

As a temporary measure to keep the shortage from growing worse, City Dairy proposed to increase consumer prices by four cents per gallon and split the raise between it and the farmers. The dairy stated that it needed the increase because of its high expenses for horse feed, labor, fuel, and the new bottles required by the pasteurization ordinance. Approved by the Food Administrator and the Council of Defense and adopted by other large dairies, the raise gave farmers thirty cents per gallon for the winter months.⁹

Because of the urgency expressed by all parties, Dr. Woods began immediately to collect data. Although the Baltimore market was the

⁶Sun, 18 November 1917: 14.

⁷Sun, 20 November 1917: 14. Beginning on 1 November, a U. S. Food Administrator in each region determined prices for beef, pork, mutton, fish, poultry, eggs, milk, butter, cheese, flour, sugar, cereals, lard, beans, peas, fruits, vegetables, and some canned goods.

⁸Sun, 19 November 1917: 4; and 21 November 1917: 6.

⁹Sun, 18 November 1917: 14. Retail prices for milk from City Dairy would now be 13¢ per quart.

major area of concern, Woods collected information from several counties and large towns. He used ten county agents to gather the information on farm costs from ten farmers in each county. Rather than rely on testing association or other existing records, he asked that the farmers record costs for the week of 26 November to 2 December. Dealers' records for the same period were also examined.¹⁰

The Council of Defense released Woods's report on 3 January 1918 and immediately loosed a controversy over both its statistics and its recommendations. Although consumer prices in Baltimore had increased from an average of nine cents to thirteen cents per quart since July 1916, Woods reported that these prices remained too low for farmers and dealers to make a profit. The cost of production for milk entering Baltimore averaged 63.38¢ per gallon. Farmers' costs were 42.26¢, distributors' 21.12¢, and transportation costs 2.15¢. Of the 52¢ currently paid by consumers for milk, dealers received 22¢ and farmers 30¢.¹¹ Woods blamed the high costs of grain, replacement cattle, and labor for the farmers' losses and warned consumers that, because the high wartime prices for grains, cattle, and hogs could easily induce dairymen to go into another type of farming, milk producers must be paid competitive prices. Recognizing that high prices would decrease consumer demand and endanger the health of city residents, he urged farmers to become more

¹⁰ Sun, 4 January 1918: 12. The counties surveyed were Allegany, Washington, Frederick, Baltimore, Carroll, Harford, Montgomery, Cecil, Kent, Queen Anne's. The counties studied included the major suppliers of Baltimore and Washington, D. C., as well as the Eastern Shore suppliers of Philadelphia, and the western Maryland counties which supplied the large towns in that region.

¹¹ Sun, 4 January 1918: 12. The average cost for the state was 64.03¢, ranging from a low of 44.42¢ in the Eastern Shore town of Chestertown to a high of 68.67¢ in Cumberland. Other costs were: Frederick, 60.19¢; Hagerstown, 68¢; and Frostburg, 68.18¢.

cost-conscious through the use of testing and breeding associations, and to increase production per cow by using balanced rations of home-grown and purchased feeds.¹²

Dairies' high costs were primarily caused by replacement costs for bottles and the duplication of milk routes. Economies of scale did not currently exist among Baltimore dairies; large dairies recorded higher costs than small dairies because they received closer scrutiny from the Health Department.¹³ Woods recommended that health inspection be increased for all dairies and that public control over the market also be increased. The best way, said Woods, for both dealers and farmers to gain a fair price was for the distribution of milk to become a public utility. Regulation of prices would rid the market of the price wars which caused low farm prices and prevent the formation of trusts which resulted in high retail prices.¹⁴

Immediately after Dr. Woods released his report, D. G. Harry requested dealers to meet with the Food Administrator and the officers of the milk producers' association to discuss raising milk prices to the levels of the production costs documented in the report. The farmers planned to ask for an immediate raise to thirty-five cents per gallon. Because consumer prices would have to be increased four cents per gallon to meet the farmers' demand, dealers prepared to fight.¹⁵ They stated that the farmers in the study had over-estimated their costs by using munition factory wages to determine labor costs.¹⁶ Farmers

¹²The Daily News (Frederick, Maryland), 5 January 1918: 7.

¹³Sun, 26 February 1919: 14.

¹⁴News, 5 January 1918: 7; and Sun, 4 January 1918: 12.

¹⁵Sun, 6 January 1918: 12.

¹⁶Sun, 5 January 1918: 12.

argued that because they competed with factories and the government for labor, they had to pay comparable wages to attract or keep farmhands.

Supporting dealers in their resistance to the price increase, angry consumers and the press urged the Food Administrator not to raise the price of milk. Many consumers believed that Woods had slanted his report in favor of the farmers. Declaring that "all the baby-killers are not in the German army," one Baltimore resident expressed disbelief at farmers' threats to leave the market:

I hope the Food Administrator will refuse this last nefarious raise in the price of milk and call their oft-repeated bluff about selling off their herds by telling them to sell and be-----, and see how many do! They will turn to wheat raising and other branches of farming,¹⁷ eh? About as quick as a carpenter will turn into a stone mason.

The Sun urged the dairymen to be patient and remember their patriotic duty to cooperate with dealers and consumers during the war:

In fact, we have a right to expect greater sympathy from them [the farmers] since the lives of many virtually helpless classes are practically in their hands. What they produce is to these classes essential to health, and the country in general must suffer if the burdens of life are unnecessarily¹⁸ increased in a period of stress and strain like the present.

Refusing to believe that farming costs had risen as high as farmers or Dr. Woods reported, the Sun sent its reporters into the country to look for farmers who currently made a profit. One reporter found that many of the farmers shipping to Baltimore from one area of Frederick County rented their farms, producing milk as a sideline to their crop operations. Because the milk check provided extra income with little expense for high-priced feeds and equipment, these farmers were content with the prices. One farmer reminded the reporter, however, that others had different operations which might require higher costs.

¹⁷Sun, 8 January 1918: 6.

¹⁸Sun, 10 January 1918: 6.

Stressing the simple life he led, he also told the reporter that, "if you quit the newspaper business and went into dairying you would want 50 cents a gallon."¹⁹ Farmers informed the Sun that while they might be currently satisfied with prices they regarded dairying as a business and believed that the public must realize they would sell their herds if they did not make a profit. Although farmers wanted to eliminate unprofitable farm practices, they warned that this process would not happen all at once. Price increases would be necessary if costs rose beyond farmers' control.²⁰ Other farmers' confirmed Woods's observations that some milk producers quit because they believed costs had become too high. One York County farmer told a reporter that his community supported four creameries twenty years before, but all had closed because farmers no longer produced enough milk to supply them.²¹

Arbitrating between all opposing groups, state Food Administrator Edwin G. Baetjer rejected the farmers' petition for a price increase. Baetjer disputed the accuracy of the Woods report and stated that he preferred to base milk prices on the lower summer costs when farmers fed cows pasture instead of all purchased feeds. He planned to postpone his decision until after the release of a Federal Milk Commission study. Angry at Baetjer's refusal, D. G. Harry called a meeting of all MSDA members to present their case again.²² County dairymen's associations met to stir up support for the mass meeting, passing resolutions calling for a 10 percent cut-back in production from all herds. To answer the accusations by dealers and consumers of farmers' unpatriotism,

¹⁹Sun, 8 January 1918: 12.

²⁰Sun, 10 January 1918: 6.

²¹Sun, 12 January 1918: 6.

²²Sun, 9 January 1918: 12; and 16 January 1918: 12.

the resolutions urged farmers to purchase Liberty Bonds with money they received from the sale of their cows.²³ Upset at the press and the dealers, farmers warned against the real possibility of a milk famine. Said one Baltimore County farmer's wife:

The farmer angry at the injustice shown him by his city competitors is about to quit the business and try to raise grain, which will not tax his strength and vitality so heavily as milk production, and the city bids fair to enjoy a milk famine which has been brought about by foolish twaddle both from the press and the consumer. The farmers are not serfs and are tired of being the goats of the consuming public and the politicians.²⁴

Baetjer heard more threats of a milk shortage at the MSDA meeting on 25 January. When president D. G. Harry urged the several hundred members at the meeting to sell some of their cows, Baetjer told them to disregard this advice which would make farmers appear like war profiteers. He admitted that some dealers made more money than they should and also stated that farmers should receive premiums for milk with high butterfat content. Because consumption remained below normal, he rejected the petition for an increase in retail prices and ordered farmers and dealers to work out a satisfactory agreement within the present retail price structure. Although disappointed at Baetjer's refusal to grant an increase, farmers agreed to work with dealers and to maintain production so that a shortage could be avoided.²⁵

Although peace temporarily returned to the market, the tensions still remained. The shortage lasted throughout the spring; several dairies advertised in the rural newspapers for new shippers until late March. Prices stayed at thirty cents per gallon until the late spring

²³ Sun, 20 January 1918: 12.

²⁴ Sun, 15 January 1918: 6.

²⁵ Sun, 26 January 1918: 12.

when the pasture reached its peak and milk became plentiful. When the supply increased so much that dealers faced a surplus, they asked farmers to accept a lower price. Arguing that summer milk was an inexpensive by-product on many farms, dealers believed farmers could accept less. Many progressive farmers countered that dairying had become their major business and that they had invested too much money to increase the production of their herds to accept lower prices. No longer dependent only on pasture as feed in the summer, they fed a balanced ration of purchased and home-grown feeds all year. All farmers continued to be reluctant to accept lower prices, especially when they found that dealers did not plan to lower consumer prices.²⁶

In July, many farmers once again threatened to leave the milk business. The leaders of the producers' associations recognized their need for a more effective means of persuading both dealers and the Food Administrator that they needed higher prices. Under the system they had relied on since the founding of the Maryland and Pennsylvania Association, two large associations represented the state's farmers even though the officers were the same for both groups. The MSDA remained primarily an educational group, with the Maryland and Pennsylvania Association responsible for collective bargaining in the Baltimore milk shed. Outside the Baltimore area, county associations considered themselves subsidiaries of the MSDA but associations within the milk shed identified with both groups.

Under this system, farmers had failed in January to convince dealers and the Food Administrator of the need for a price increase.

²⁶Sun, 31 August 1918: 14; and J. F. Hudson, Baltimore County Agent Report, 1918.

Like the United Milk Producers' Association, neither of the modern associations had the authority to represent the majority of Baltimore shippers and enforce prices. The leaders of the groups recognized that they could no longer depend on the loosely-organized network of county and state associations which reacted well to crises, but did not provide the continuity needed to make the farmers a strong force in the market. To establish this continuity, the leaders proposed to rent offices in the city and begin regular monthly consultations with dealers. Because expenses for permanent offices could not be met with the one-dollar membership dues from the current bargaining association, leaders searched for new ways to finance their plans to achieve price increases for farmers.

Remembering the lessons learned in the UMPA, leaders rejected the use of stock sales as a basis for membership in their new group and turned instead to the methods used by the new cooperative associations being formed in cities throughout the country. On 20 July 1918, a committee appointed by the Maryland and Pennsylvania Milk Producers' Association met to discuss reorganization procedures with Dr. Woods, chairman of the Maryland State Board of Agriculture Samuel Shoemaker, and USDA Bureau of Markets representative O. B. Jesness. Chaired by Roland S. Baile, a Carroll County farmer, the committee included I. W. Heaps, D. G. Harry, Maryland State College professor F. B. Bomberger, and farmers from Baltimore and Washington Counties. The committee asked Bomberger, also the marketing specialist for the Maryland Cooperative Extension Service, and Jesness to draw up a reorganization plan including new by-laws and a membership contract.²⁸ Remembering that the original charter of the Maryland State Dairyemen's Association permitted the

²⁷Heaps, Milk Marketing, pp. 2-3; and MSDA Minutes, 20 July 1918.

organization to engage in collective bargaining in order to sell members' milk, the committee recommended that the Maryland and Pennsylvania Association, which had no charter from the state, take over the operation of the MSDA. At a general meeting of the MSDA, five hundred farmers discussed the plans for the proposed reorganization. The association planned to begin collective bargaining to sell its members' milk to individual dairies and to establish its business offices in the city where it expected to meet monthly with the dealers to set milk prices. Proposing that operating expenses be paid from membership dues of one dollar and a brokerage fee of one-tenth cent for every gallon of milk marketed by the association, the committee asked dealers to deduct this fee from farmers' milk checks and pay it to the association.

To oversee the business of the association, members elected a nine-member board of directors, nominated by a committee representing all counties in the milk shed. Reflecting the dominance of Harford and Carroll County farmers in the milk shed, this first board of directors included three men from each of these counties. Satisfied with the steps the leadership of the old groups had taken, the members retained Harry, Heaps, and Wheeler from Harford County as well as the Carroll Countians, Snader and Gist. They also elected one other Carroll County farmer, John Cauthorn as well as Daniel Pearce from Baltimore County, Howard Kuhn from Howard County, and David Zentz of Frederick County.²⁸ These first directors had been active in the earlier associations and often in state and local politics. All but Cauthorn had substantial herds,

²⁸Heaps, Milk Marketing, p. 22. The remaining county whose farmers supplied milk to Baltimore, York County, Pennsylvania, would not be represented until the following year when the by-laws were amended to increase the size of the board to twelve members.

indicating a commitment to dairying as a full-time occupation.²⁹ Members also re-elected Harry and Snader as president and vice-president and named Heaps, chairman of the old association's price committee, as the new secretary-treasurer. Heaps had been active in all the early price negotiations with dealers and was appointed business manager at the first meeting of the board of directors. Responsible for the daily operation of the MSDA, he received five dollars per day plus traveling expenses to work in the association offices at least three days each week.³⁰

During the reorganization period, Heaps and his committee had been aided by Harford County agent T. E. McLaughlin who presented the association's new price plan at the general meeting. The committee had based their price demands on the modified cost of production formula used by Dr. Woods in his survey and included figures for grain, hay, silage, labor, and transportation.³¹ The members voted to accept the proposal that the average milk price be raised to forty cents. Prices would fluctuate according to seasonal supplies and changes in feed costs. Proposing that the September price be raised to thirty-eight cents, Heaps urged farmers to remain firm and demand the increase from the Food Administrator.³²

²⁹The average herd size of the members of the first board of directors was thirty-nine cows. Cauthorn's herd of twelve cows was the smallest and Gist's sixty-cow herd was the largest. With the exception of Cauthorn, all directors owned herds larger than the average of 14.3 cows for MSDA members in 1920.

³⁰MSDA Minutes, 29 August 1918.

³¹Maryland Farmer, 25 October 1918: 4.

³²Details of the reorganization and first general meeting are found in: Heaps, Milk Marketing, pp. 2-3; MSDA Minutes, 23 August 1918; Sun, 24 August 1918: 14; and D. G. Harry, "Marketing Milk in Maryland," Maryland Farmer, 12 November 1920: 12. A copy of the MSDA by-laws is located in appendix 2.

Even before the farmers' plans for their new organization had been announced, some dealers had decided to seek a price increase for milk producers.³³ On 29 August, members of the Milk Bottlers' Exchange met with the directors of the MSDA and agreed to ask for an increase of three cents per quart at the retail level. Farmers would receive two-thirds of this increase with dealers keeping the remaining amount.³⁴ The increase, however, forced Baltimore consumers to pay two cents more per quart than Washington buyers and four cents more than in Philadelphia.³⁵ When dealers argued that the increase was vital if the city wanted to avoid a milk shortage, health officials criticized them for giving in to the farmers' demands. Claiming that more farmers were entering the business than were leaving, Health Commissioner Blake argued that feed costs had decreased since the previous year. Although Blake feared that the health of city children would be impaired because higher prices would decrease consumption of milk, he admitted that the city was powerless to prevent the raise.³⁶

The Sun also recognized that the Food Administrator could not refuse the raise. Although it criticized the new organization and the farmers' assertive stand, the newspaper's editors believed that "a good many farmers have become convinced that they must have higher prices or lose money, and are selling their cows, and that raises the question whether it is not necessary to grant an increase, even if it is not justified." If the farmers and the dealers took advantage of the war to ask for higher prices, the Sun warned, "the city will have to pay the

³³Sun, 23 July 1918: 14.

³⁴Sun, 30 August 1918: 14.

³⁵Sun, 23 July 1918: 14.

³⁶Sun, 25 August 1918: 14; and 31 August 1918: 14.

price."³⁷ On 30 August, the Food Administrator confirmed that the city would pay the price. Although not convinced that farmers needed the raise, Acting Food Administrator Maltbie agreed with the Sun that many believed they would go out of business without the higher prices.³⁸

After this initial success, the MSDA turned to the gigantic task of securing members. For the first time in the Baltimore milk shed, farmers were asked to sign contracts allowing a third party to sell their milk. Members agreed to deliver their milk in good condition to the creamery, plant, or station designated by the MSDA which would charge a penalty if producers failed to deliver the amount required. The MSDA required farmers to give a promissory note for the sum of one dollar per cow, or at least fifteen dollars, to be used in emergencies. In return, the MSDA promised to market all milk, to establish prices through negotiations with dealers, and to furnish dealers with an adequate supply of milk.³⁹

Although the newly-reorganized MSDA gained 450 members at its first general meeting, persuading Baltimore's remaining 1,150 shippers proved to be a large task for the officers and board of directors.⁴⁰ MSDA representatives visited the elite farmers' clubs and local Granges seeking both members and moral support. They also held mass meetings in each county to recruit members.⁴¹ Rural organizations and the local press reacted favorably to the reorganization of the MSDA and congratulated

³⁷ Sun, 30 August 1918: 14.

³⁸ Sun, 31 August 1918: 14; and Aegis, 6 September 1918: 3.

³⁹ See appendix 3 for a copy of the membership contract.

⁴⁰ Harry, "Marketing Milk in Maryland:" 12.

⁴¹ Heaps interview; and Heaps, Milk Marketing, p. 24.

the association on obtaining the price increase. Like many rural residents, the editor of the Aegis had grown tired of the demands placed on the farmer in the name of patriotism and charity toward children:

To bemoan the high cost of milk and the little children it will affect, is practically to call on the farmer to dispense his charity among the young of the city, instead of paying his honest debts at home. If city parents are unable to rear their young it may become a laudable scheme to have a city municipality do so; but to require such involuntary help from country producers of food would come perilously close to securing another's goods under a method characterized by a very ugly name.⁴²

Members of the MSDA criticized farmers who waited for high prices before joining the association, saying that these uncooperating farmers prevented the association from obtaining the high prices. Only through cooperation could they avoid the hardships of the last few years.

Extension Service specialists and county agents became the most influential supporters of the MSDA. Although forbidden to engage directly in farmers' business transactions, Extension Service personnel followed their state director's instructions to do anything they could to help "improve the economic conditions of farm life."⁴³ Unable to form or conduct business for groups, county agents could advise cooperatives, publicize their meetings, and recruit new members. County agents kept MSDA membership contracts in their offices and also made visits to individual farmers, urging them to join. They encouraged the MSDA county associations to make cooperative purchases of feed and fertilizer and in 1921 agents supported the participation of the MSDA in the Agricultural Corporation of Maryland. The state Extension Service director released Harford County agent T. E. McLaughlin from his local responsibilities

⁴² Aegis, 6 September 1918: 2.

⁴³ Maryland Extension Service Annual Report, 1919, pp. 7-8.

and assigned him to recruit members from all counties in the milk shed.⁴⁴ In one of his first actions as McLaughlin's successor, B. B. Derrick published lists of Harford County shippers who had or who had not joined the association. Announcing a county-wide meeting to discuss the MSDA program, Derrick encouraged members to visit their neighbors who had not joined and persuade them to attend the meeting and sign contracts.⁴⁵

The state extension staff also assisted the recruitment effort by providing special educational programs at the county meetings. While the major emphasis of these meetings continued to be on recruitment and informing members of market conditions, MSDA officials also wanted to demonstrate their interest in promoting improved milk production.⁴⁶ State specialists worked closely with the MSDA directors in figuring the cost-of-production formulas used to establish prices. In 1919, the extension dairy specialist attended fourteen meetings of the MSDA board of directors to assist in their negotiations with dealers.⁴⁷

MSDA officers and the county agents urgently pursued their membership drive because dealers hesitated to deal with the association until it could speak for the majority of shippers.⁴⁸ The Milk Bottlers' Exchange, representing the most established dealers, did consent to meet monthly with a committee from the MSDA to discuss prices after federal control of prices ended in December 1918. While farmers originally

⁴⁴Maryland Farmer, 4 June 1920: 19.

⁴⁵B. B. Derrick, Harford County Agent Report, 1919; and Aegis, 21 February 1919: 3; 7 March 1919: 1.

⁴⁶Maryland Farmer, 13 December 1918: 17.

⁴⁷Maryland Extension Service Annual Report, 1919, p. 48.

⁴⁸D. G. Harry, "The Truth About the Milk Situation," Maryland Farmer, 25 October 1918: 3.

tried to obtain flat rates based on production costs, a surplus during the winter of 1918 and 1919 forced them to abandon this price plan.⁴⁹ In order to curb surplus production, to increase production during the fall, and to persuade the dealers to handle more surplus milk, the association put its base-surplus plan into effect. Under the plan, farmers received one price for the average amount of milk they sold during the low production months of October, November, and December of each year. For any milk produced over this base amount during other months, farmers would receive a lower surplus price.

Dealers and MSDA officials gradually perfected the base-surplus plan through their price conferences and their joint experiences in the marketplace. Conflicts frequently occurred in these early monthly meetings, but eased after Dr. Clyde King agreed to serve as price arbitrator for the market. King had served as chairman of the Tri-State Commission in 1916 and as Eastern Milk Commissioner for the U. S. Food Administration during the war. Already working as arbitrator in Philadelphia, King eventually served in the same capacity in Washington, Pittsburgh, and Chicago even during his tenure as Secretary of State and Budget Director for Pennsylvania.⁵⁰

King's mediation was needed to solve a dispute in early 1919 when the Health Department began pressuring dealers and the MSDA to lower milk prices. While producers and dealers agreed that retail prices be decreased one cent per quart, Dr. Marion Hopkins, head of the department's food and milk division, argued that winter prices be lowered at least one more cent and that summer prices be decreased a

⁴⁹ FTC, 1936, p. 48; and Maryland Farmer, 7 February 1919: 8.

⁵⁰ Maryland Farmer, 1 August 1933: 6.

total of four cents.⁵¹ Hopkins attacked the attempts of both the MSDA and the Bottlers' Exchange to strengthen their control over the market:

Baltimore, probably more than any other city, is suffering from a movement which is spreading over the country which results in the forming of strong organizations of milk-producing farmers, the main object of which is to get more money for their milk. At the same time the city distributors are forming organizations for the purpose of seeing they get a satisfactory slice of the money the consumer pays. As the result of the work of these organizations competition and the laws of supply and demand are almost entirely eliminated in determining the price of milk.⁵²

Consumers and the city government joined Hopkins in demanding that milk prices be lowered. They cited lower prices in Washington, Philadelphia, and New York as further proof that Baltimore prices remained too high and attacked Heaps and the MSDA officials for telling farmers to decrease production in order to keep prices high. Some city officials also suspected the MSDA of being in league with the dealers to create a monopoly and fix prices.⁵³ The city Board of Estimates requested owners of the large dairies to explain why the price of milk should not be lowered. Although Mayor Preston threatened to begin an investigation, he agreed to allow dealers a reasonable period to lower prices on their own before appointing an investigative committee.⁵⁴ Hoping to avoid the controversy surrounding another investigation, dealers agreed to decrease prices, but chose to cooperate with the producers' association to decrease

⁵¹Maryland Farmer, 7 February 1919: 8; and Sun, 1 February 1919: 14.

⁵²Sun, 26 February 1919: 14. As an indication that milk could be sold for less at a profit, Hopkins cited the current price war in East Baltimore where two dealers were selling milk for as low as twelve cents per quart. The war was settled through the mediation of a committee from the Bottlers' Exchange and MSDA. Sun, 23 February 1919: 16.

⁵³Sun, 7 February 1919: 6; 10 February 1919: 6; and Heaps, Milk Marketing, pp. 24-25.

⁵⁴Sun, 26 February 1919: 14; and 1 Marcy 1919: 14.

them gradually. Convinced that the farmers meant to work together in their new organization, Asa Gardiner sided with T. E. McLaughlin and Dr. Woods when they disagreed with Dr. Hopkins over farm feed costs at the meeting of the Board of Estimates. Gardiner also warned city officials that dealers, too, could be forced out of business if prices fell too low; since 1917, costs for bottles, caps, fuel, and labor had all risen, forcing over two hundred dealers from the market.⁵⁵

Led by Gardiner, the Milk Bottlers' Exchange continued to meet with the MSDA to resolve the surplus situation. While the Exchange did not speak for all dealers, it represented the dairies selling most of the milk in the market. Although a surplus currently existed, dealers remembered the recent shortages and supported the cooperative because it offered the best guarantee of an adequate supply throughout the year. Many of the unscrupulous dealers had been weeded out of the market, casualties of the pasteurization ordinance. The remaining dealers had become more sensitive to the needs of the farmers and more dependent on them to supply milk regularly. Anxious to maintain stability in the market, these dealers decided to cooperate with the MSDA in its new base-surplus plan.

The struggle to find markets for the surplus provided the first opportunity for cooperation. In a victory for the MSDA, dealers tentatively agreed to take all the milk produced by MSDA members. Several dealers in the Exchange handled the surplus milk and milk from farmers whose distributors had gone out of business in return for an agreement by the MSDA that prices be lowered and a surplus price established.⁵⁶

⁵⁵Sun, 1 March 1919: 14.

⁵⁶MSDA Minutes, 4 February 1919: and 24 February 1919.

Dealers urged farmers to cut production and warned that, even though they had tentatively agreed to take all surplus milk, they would stop shipments one or two days a week if the surplus continued.⁵⁷

Although the MSDA joined the dealers in encouraging members to reduce the surplus by selling low-producing cows and not buying more cows, it recognized the problems inherent in relying on exhortation alone. The officers of the association resolved from the beginning that the MSDA would market all of its members' milk, a promise that prompted many farmers to join. During March, it arranged for some of its Frederick County producers to send their milk to a dry milk plant at Hagerstown.⁵⁸ Members in Harford County proposed that the association take further steps to handle the surplus by building its own condensing plant to manufacture and store extra milk. While these members favored building a plant even if the association had to borrow money, the board of directors cautiously tabled the suggestion until the MSDA had recruited more members and achieved a secure financial position.⁵⁹

After the establishment of a surplus plan, consumer prices fell to fourteen cents. Some consumers believed that prices remained too high, but both dealers and farmers hoped for these lower prices to increase consumption enough to cover their losses. Recognizing that milk consumption in Baltimore remained lower than in other large cities, the MSDA, dealers, and the city began a joint campaign to increase the use of milk. Urging city officials to focus on improving public health through

⁵⁷Sun, 23 February 1919: 16; and 26 February 1919: 14.

⁵⁸Maryland Farmer, 7 March 1919: 6.

⁵⁹Sun, 23 February 1919: 16; Aegis, 28 February 1919: 3; and MSDA Minutes, 27 May 1919.

increased milk consumption instead of investigating prices, the dealers and producers sponsored a nutrition program for city schools. Financed mostly by the city, but also supported by the Bottlers' Exchange and MSDA, this nutrition campaign foreshadowed the organized nutrition work later done by the Baltimore Dairy Council. It received additional sponsorship and assistance in planning from the Women's Civic League.⁶⁰

The MSDA quickly recognized that an essential part of any nutrition campaign was the improvement in milk quality. Higher quality milk would also bring more money to producers. Both the MSDA and the dealers achieved a major victory in August 1919 when they agreed that milk prices would be based on butterfat content. They set base and surplus prices for milk containing 4 percent fat which increased or decreased one-half cent for each one-tenth percent of butterfat. To ensure fair tests, they established an independent laboratory. Originally financed by the dealers, after 1922, the laboratory's expenses were shared evenly by the MSDA and the Bottlers' Exchange. The laboratory tested at least two samples of members' milk each month and reported the results to dealers who paid farmers according to the average butterfat content. A laboratory board consisting of one representative from the dealers' and farmers' associations and a third member selected by both groups settled disputes.⁶¹ MSDA officers visited non-members of the Bottlers' Exchange, urging them to cooperate with the butterfat testing and asked farmers shipping to dealers who did not cooperate to notify the manager so that

⁶⁰ Maryland Farmer, 30 May 1919: 6; and 20 May 1921: 1. The city contributed \$5,000 to the campaign while the dealers gave \$3,000 and the farmers \$1,000.

⁶¹ Heaps, Milk Marketing, pp. 60-61; MSDA Minutes, 15 July 1919; 1 August 1919; and Maryland Farmer, 19 December 1919: 7.

a new dairy could be found to handle their milk.⁶²

The butterfat testing plan won the approval of the Health Department, whose representatives began attending the monthly price meetings. Gratified by the support of the MSDA and the Bottlers' Exchange for the nutrition campaign, the department softened its original hard line against the farmers. As the city passed more ordinances governing the care of milk on farms, the Health Department saw the MSDA as a means of publicizing the new regulations and enforcing them. The cooperative's fieldman became a key ingredient in the plans of the department and the MSDA. Hired in August 1919, the fieldman traveled throughout the milk shed, working with farmers who had problems with the health regulations or who needed advice on improving their herds.⁶³

The fieldman was an important link between the association and its members. The MSDA used many such links to keep members informed and enthusiasm high. It held frequent county meetings, continuing the blend of educational talks, market reports, and recruitment campaigns. The association's annual meeting, held at a local amusement park, combined an old-fashioned farmers' picnic with a business meeting and dairy forum. In 1918, the Maryland Farmer, a general farm magazine begun in the early nineteenth century, resumed publication. An enthusiastic supporter of cooperative movements around the nation and in Maryland, the magazine was sent to all MSDA members by the association beginning in May 1919. On the association's special page, MSDA officers printed the monthly price lists, educational articles, and special announcements.

⁶² Maryland Farmer, 14 November 1919: 6; and 31 November 1919: 6.

⁶³ MSDA Minutes, 26 August 1919; and 2 December 1919. Because his work was partly educational, the State Board of Agriculture contributed \$900 to the fieldman's salary of \$2000.

By the end of its first year, the MSDA had established many of the patterns which characterized its future actions. At the first annual meeting, it boasted of a total of 1,451 members, over three-quarters of the city's milk shippers.⁶⁴ From this point, most of the farmers joining the MSDA would be shipping to Baltimore for the first time. Recognizing that a higher number of shippers resulted in periodic surpluses, the association voted to increase the brokerage fee to one-fifth cent per gallon. It planned to use this money to cover losses it incurred placing surplus milk.⁶⁵

The surplus periods occasionally triggered tensions between farmers and dealers, but the structure of the base-surplus plan and the presence of the arbitrator helped to resolve most conflicts. Although some farmers criticized the arbitrator for making the MSDA accept lower prices than they wanted, most supported the system. Dr. King successfully obtained seasonal prices for milk reflecting both supply and demand. The MSDA mediated during conflicts between individual members, dealers, the railroads, or the Health Department, reducing the abuses which had harmed many farmers. After the beginning of butterfat testing, it criticized dealers who, in an effort to pay farmers less, withheld their addresses to keep the testing laboratory from sending a copy of the test results to the farmers. By persuading dairies to handle surplus milk, the association cut the losses farmers formerly incurred when dealers left extra milk at the railroad stations to spoil.⁶⁶ It also assured dealers of an adequate supply by requiring farmers who switched dairies to inform the association and it appointed a committee to

⁶⁴ MSDA Minutes, 23 August 1919.

⁶⁵ Ibid.

⁶⁶ Maryland Farmer, 12 December 1919: 5, 6.

work with dealers and railroads to reduce theft and spillage of milk during transit.⁶⁷ Promising to investigate all reports of lost milk or cans, the committee also encouraged farmers to prevent some of these losses by investing in cans with tightly-fitting, plainly-marked lids.⁶⁸

As the association became more involved in the daily problems and conflicts of the market, its leaders realized the need for full-time management. In December 1919, the board of directors decided to retain Heaps as manager for a salary of \$2,000 per year plus expenses. Although Heaps continued to farm, he spent a larger portion of his time in the offices of the association.⁶⁹ The hiring of Heaps as manager served as just one example of the cooperative's growth as a legitimate business enterprise in Baltimore. The MSDA also entered into the national cooperative movement by joining the National Milk Producers' Federation which elected president D. G. Harry to its executive committee. Closer to home, the MSDA worked with the fledgling producers' cooperative in the Washington milk shed, predicting an eventual merger of the two groups.⁷⁰

⁶⁷ Maryland Farmer, 24 October 1919: 10.

⁶⁸ MSDA Minutes, 18 March 1919; Maryland Farmer, 17 October 1919: 7; and 28 November 1919: 6.

⁶⁹ MSDA Minutes, 2 December 1919.

⁷⁰ P. A. Hauver, Frederick County Agent Report, 1919.

CHAPTER VII

LEARNING TO COOPERATE

Unlike the areas serving several other cities, the Baltimore milk shed was small and well-defined. Before 1920, it had been defined by custom, later by Health Department fiat. The natural boundaries of the Susquehanna River, the Chesapeake Bay, and the Appalachian Mountains, as well as the milk sheds of Washington and Philadelphia, effectively surrounded the city. Although Baltimore's extensive railroad network offered many farmers a choice of markets for their milk, city health regulations and the rise of cooperatives helped to stop farmers from switching markets when prices in one city rose higher than in the neighboring milk sheds. Some farmers in the counties surrounding Baltimore joined the Philadelphia and Washington associations, but in its early years the MSDA never sought members in other milk sheds. Instead of serving several small cities and towns or recruiting many members in a wide geographical area, the leaders of the MSDA chose to organize only those farmers shipping to Baltimore. By 1925, 98 percent of the city's farm suppliers belonged to the association and in 1933 Baltimore led all other eastern cities in the proportion of shippers organized in a cooperative. Only in Washington, which had similar health regulations, did the cooperative also represent over three-fourths of the producers shipping to the city. Less than 50 percent of the farmers supplying milk to Boston and New York belonged to a cooperative.¹ Despite its control of a larger

¹Heaps, statement in the "Conference on the Financing of Dairy

proportion of the market, Baltimore's association never achieved the size of the large cooperatives serving New York, Philadelphia, and Boston. In 1927, it ranked fourteenth in size among all milk marketing associations with 3,800 members as compared to New York's Dairymen's League with 66,445 members. The largest dairy cooperative was the Land O' Lakes Association with 73,000 members in the Mid-West.²

Most of the original MSDA members farmed in Harford and Carroll Counties, reflecting the dominance of these counties in milk production. While Baltimore County had been the city's leading milk supplier in 1910, both Carroll and Harford Counties surpassed it in the number of dairy cows by 1920.³ Because the lack of good roads and railroad connections had slowed the development of commercial dairying in Howard County, fewer farmers there joined the MSDA. The few shippers from Montgomery County and Adams County, Pennsylvania lived near railroad lines leading to Baltimore. Farmers from southern York County, Pennsylvania also shipped to Baltimore by railroad. Although Frederick County remained the state's leading dairy area, it was under-represented in the MSDA because most farmers there, as in Montgomery County, shipped to Washington. Only the producers living along the railroads in the eastern sections of the county shipped to Baltimore.

By 1920, the areas producing most milk for the city had shifted

Cooperatives," AIC, 1925, p. 164; Maryland Farmer, December 1933: 8. According to a survey by the U. S. Farm Credit Administration, 96.7 percent of Baltimore's shippers were organized, 92.4 percent in Washington, 71 percent in Richmond, 69.9 percent in Philadelphia, 45.1 percent in Boston, and 40.6 percent in New York.

²Holman, "Dairy Cooperation," AIC, 1927, pp. 17-18.

³U. S. Census, 1910, vol. 6, Agriculture: Reports by States: Alabama to Montana: 734-5; and 1920, vol. 6, part 2, Agriculture: Reports by States, the Southern States: 125-6.

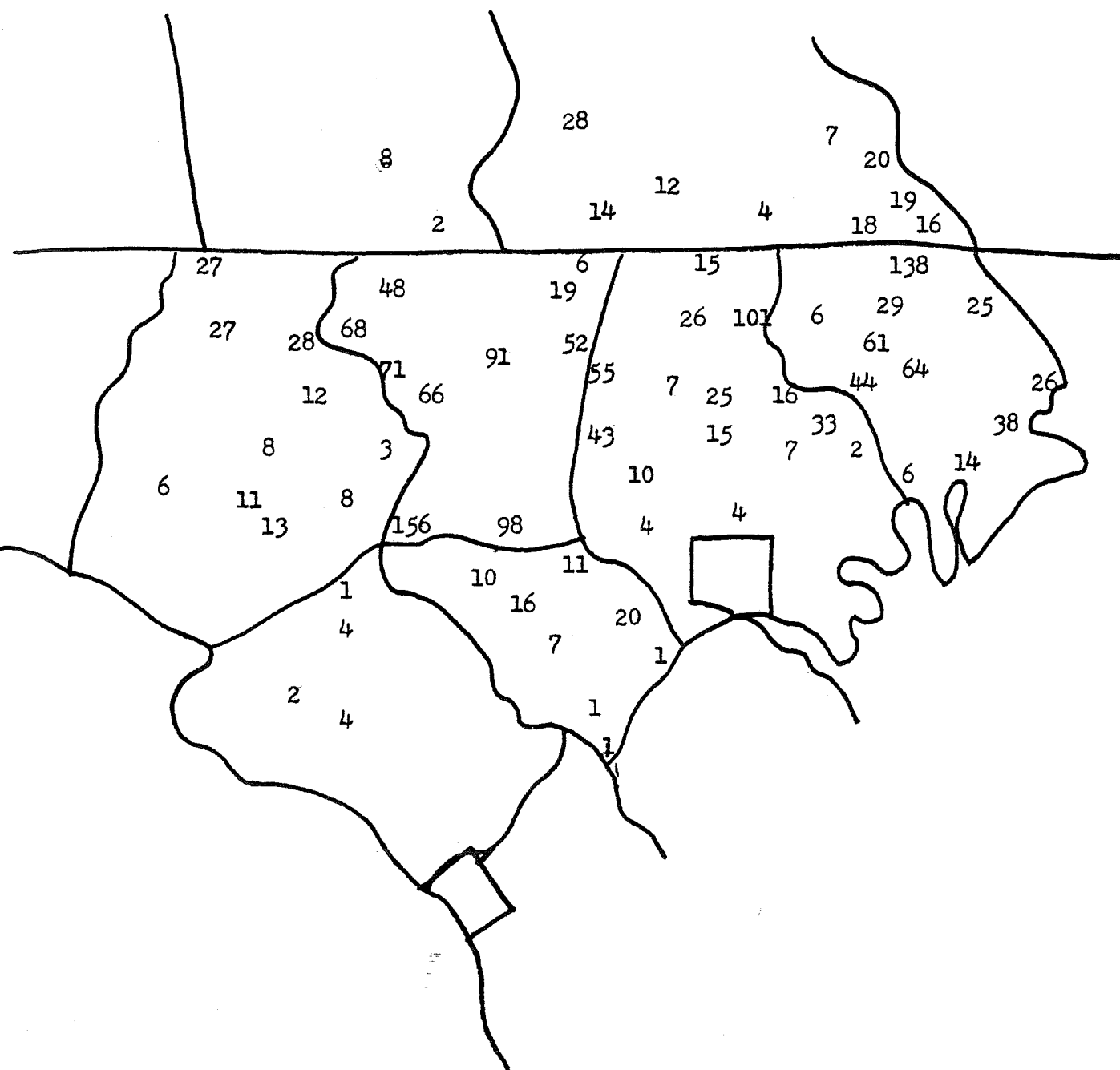
from the suburban sections into the countryside. The inner limits of the milk-producing areas became the suburban areas of high population and the distance from which milk could be transported to the city without damage set the outer limits. Farmers in the outlying regions of the milk shed could only ship milk without subjecting it to unsafe temperatures if roads or railroads provided quick transit or if they could take their milk to a nearby country receiving station. Baltimore dairies owned six of the eleven stations operating in 1920 and local merchants owned the remaining seven. Of 1,442 MSDA members shipping in 1920, only 21.7 percent sent their milk to receiving stations. Most of these shippers lived farther than thirty miles from the city. York County, with 31.8 percent, had the highest proportion of shippers using the receiving stations. Even though the Maryland and Pennsylvania served this area, the trip from many farms remained too long to be made safely. Milk taken to the receiving stations could be cooled before shipping and, if not needed in the city, could be separated and the cream stored.⁴ As production expanded in the outlying areas, the use of country receiving stations increased to 52 percent of the total MSDA membership by 1934. In areas more than thirty miles from the city, over 85 percent of the members delivered their milk to twenty country stations. York County farmers continued to send the highest proportion of their milk to the stations. Because its farmers delivered most of their milk to dairies by truck, Howard County had the smallest amount shipped to stations.

Generally, farmers who shipped to receiving stations owned

⁴The maps on the following pages show the location of MSDA members in 1920, 1924, 1929, and 1934, according to the towns found on Map 3. A description of the membership records used to compute the data in this chapter as well as detailed tables are found in appendix 4.

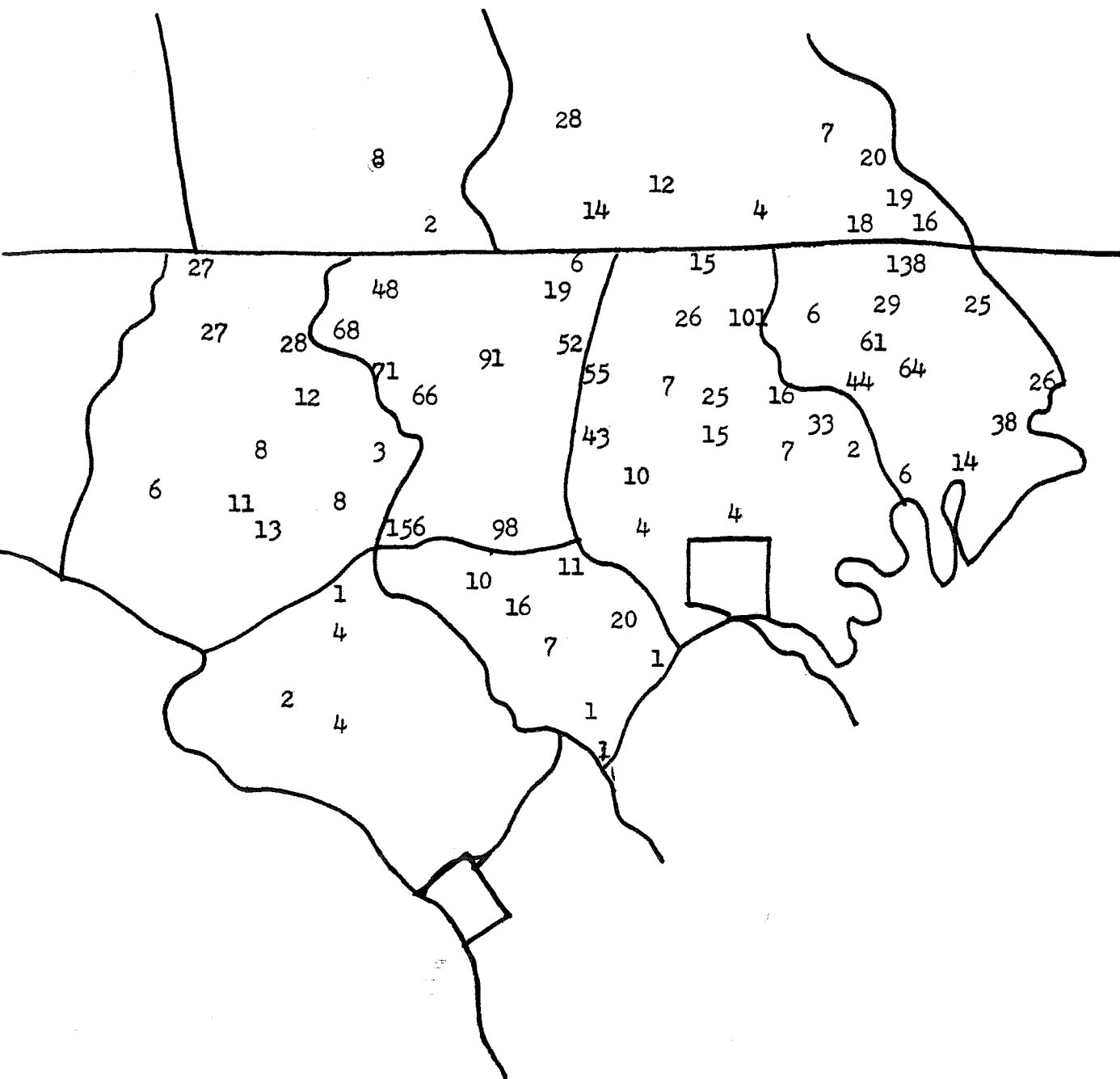
MAP 5

MSDA MEMBERS, 1924



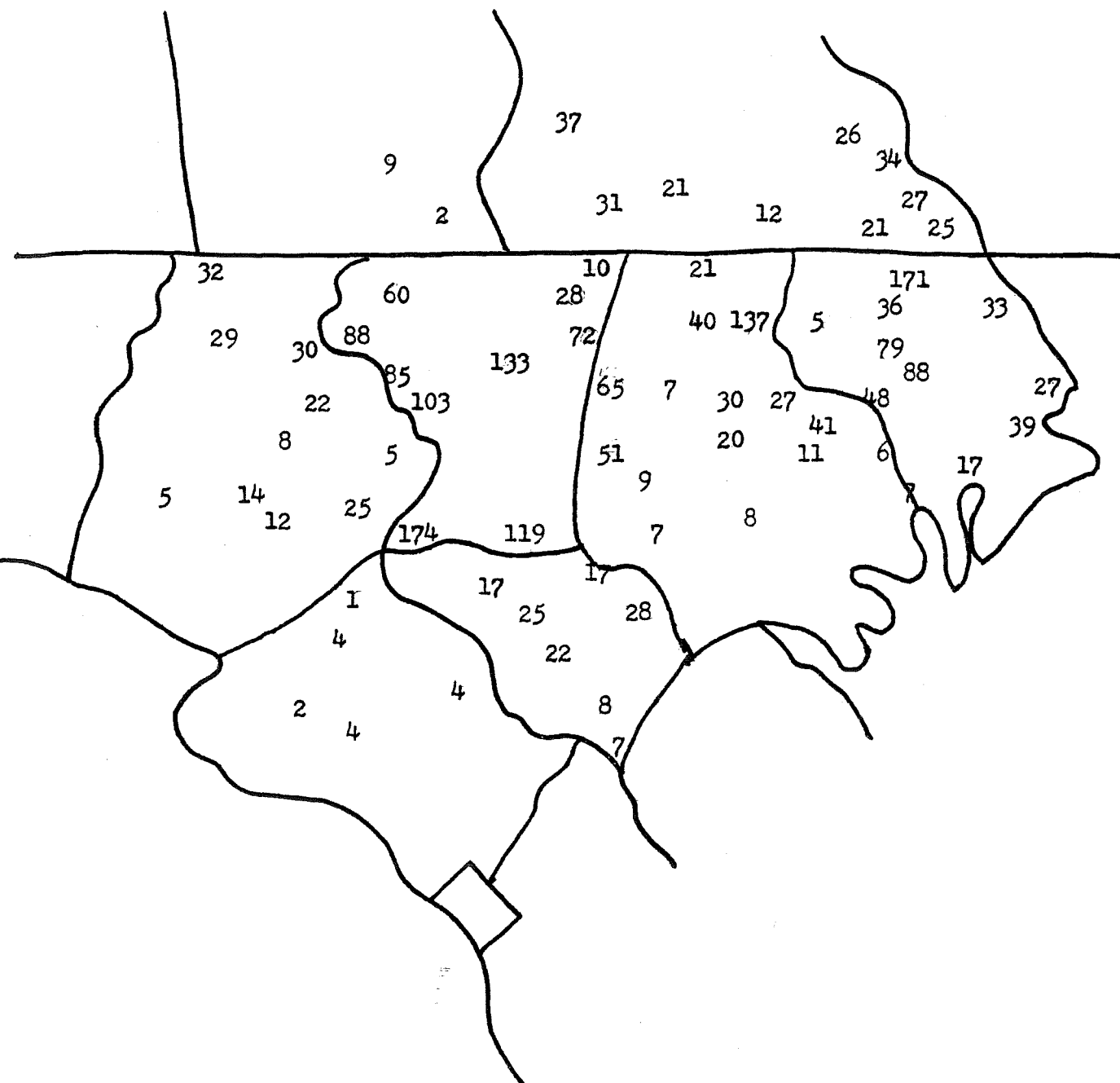
MAP 5

MSDA MEMBERS, 1924



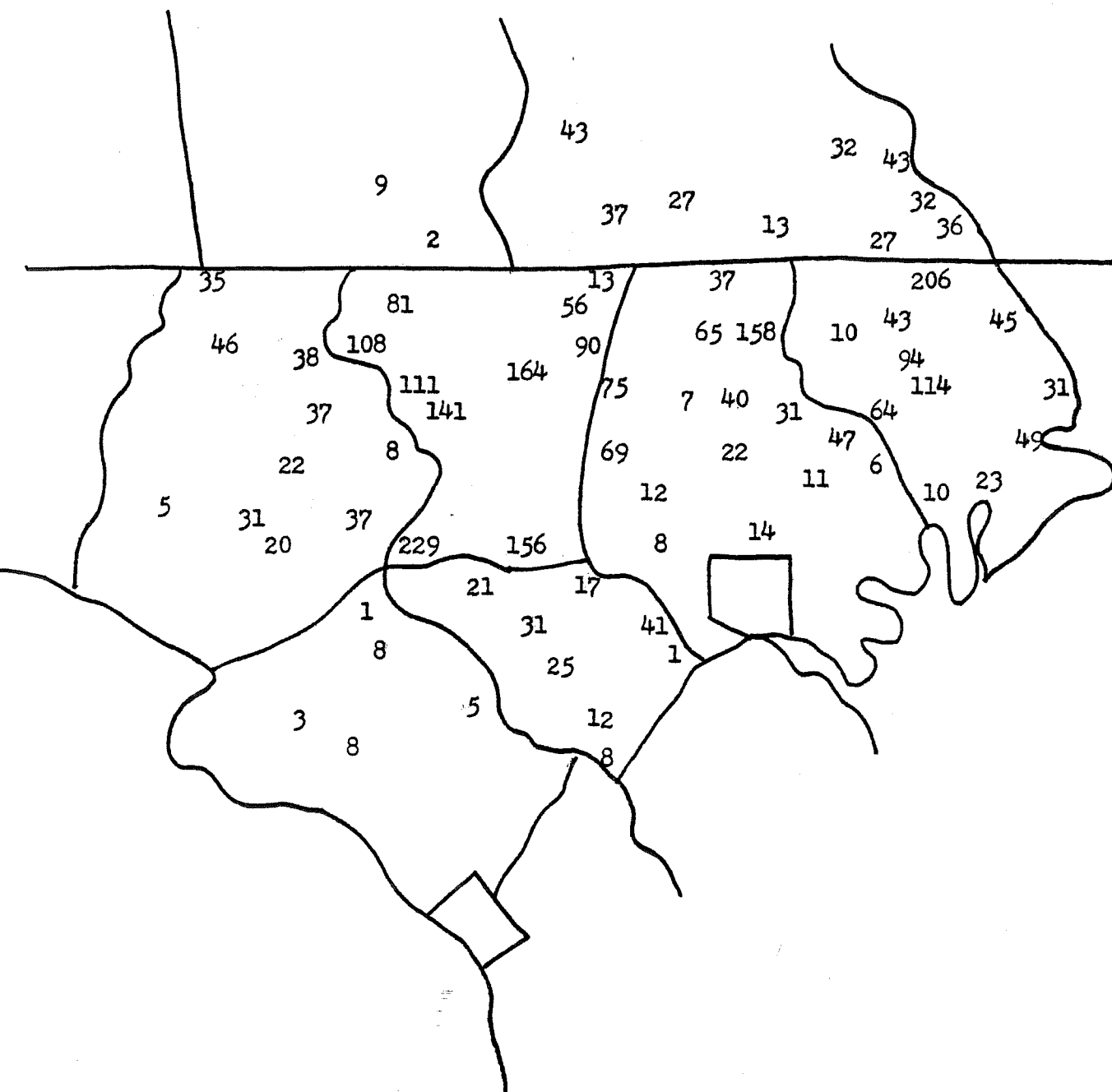
MAP 6

MSDA MEMBERS, 1929



MAP 7

MSDA MEMBERS, 1934



smaller herds than farmers from the same areas who shipped directly to the dairies. Although the herd size of all members who joined the association before 1921 averaged 14.3 cows, the average was 11.1 cows for farmers shipping to receiving stations and 15.1 cows for those shipping to dairies. Almost 1,000 members owned less than fifteen cows in 1920, but only ten farmers had herds larger than fifty cows. Dr. Robert Shermantine, who became president in 1936 and manager in 1938 after Heaps's death, owned the largest herd of 114 cows. As the association recruited members among the region's new dairy farmers in the late twenties and thirties, the size of new members' herds decreased. After farmers in the 1920s recognized the cooperative as an established institution in the market and as prices for other farm products remained low, more farmers turned to milk production. Truck drivers anxious to gain suppliers for their routes encouraged many, while others simply took advantage of the improved highways and the proliferation of receiving stations to enter commercial dairying for the first time.⁵ Thanks to the pledge of the MSDA to market all of the milk produced by its members, the milk check, no matter how small, became a welcome and guaranteed source of income. Said one farmer in 1930,

I don't know what in the world I would do if it wasn't for my milk check because it's about the only thing I have on the farm that I can get any ready money from. If I had to depend on the other things that I sell I sure would be one of the has-been farmers.

The average herd size of members joining after 1924 remained lower than for the original members. The largest herds could be found on farms closest to the city. Generally, farmers shipping to receiving

⁵ Maryland Farmer, 23 July 1920: 8.

⁶ Maryland Farmer, 1 April 1930: 8, 9.

stations had smaller herds than those shipping to dairies. Although Carroll County had the largest number of members, it also had some of the smallest herds. Throughout the early decades, Harford, Baltimore, and Howard Counties were the home of the largest dairy herds. Even the herds of Harford farmers who shipped to receiving stations were larger than the average.

After the MSDA gained authority in the market in the early 1920s and guaranteed payments to farmers for all milk sold, many farmers turned to commercial milk production. Milk prices remained higher than they had before the formation of the cooperative and also higher relative to the price of other farm products. The services provided by the cooperative in securing dairy feeds at low rates may also have persuaded farmers to join the cooperative. As the Health Department enacted regulations dealing with the handling of milk and care of animals on farms, the mediation of the MSDA on behalf of its members attracted other farmers.

The cooperative, very soon after its founding, gained a respectability in the rural community erasing any stigma attached by conservative farmers to a new type of farm organization. Supported by the Grange, the farmers' clubs, and the county agents, the MSDA persuaded farmers to join. Recognizing that farmers needed to be kept informed even after they no longer needed to recruit new members, the MSDA officers kept up the schedule of regular county meetings at least twice annually. Heaps and other officers discussed market conditions and urged farmers to improve milk quality and to even production throughout the year. The association also held its annual meetings and banquet each winter as well as the picnic each summer. At the meetings the association boasted of its accomplishments and provided educational programs and recreation for members and their families.

The cooperation of Baltimore dealers with the association also convinced farmers that they should join, especially after the leading dairies of the Milk Bottlers' Exchange decided to buy milk only from MSDA members.⁷ The association worked with dairies to make sure they paid members. In order to rid the market of the remaining unscrupulous dealers and further guarantee payments, the MSDA required all dairies doing business with the association after June 1920 to post a \$2,500 bond to be used to pay farmers if a dealer went out of business without paying for the milk he purchased.⁸

The bond requirement hastened the decline in the number of dealers. From 1918 to 1928, one hundred dairies went out of business in Baltimore. In 1920, most dealers still had small operations, buying from a few farmers and selling to consumers over a few delivery routes. Over the years, the number of these small dealers declined as a few dairies gained even larger shares of the market. Small dealers found it harder to compete with large dairies who had money for advertising and who owned storage and manufacturing facilities, modern bottling plants, and country receiving stations. In 1920, the three largest dairies controlled only 50 percent of the market. By 1924, 62 percent of all shippers delivered to only two dairies. When these dairies merged in 1929, their control exceeded 80 percent. The change in the distribution of dealers according to the number of shippers during the first fifteen years of the cooperative's operation is shown in Table 3.

The number of dealers also declined as several smaller dairies merged with the larger ones. The merger attracting the most attention

⁷Maryland Farmer, 2 July 1920: 10.

⁸Maryland Farmer, 23 July 1920: 17.

TABLE 3

BALTIMORE MILK DEALERS, 1920-1934

	1920	1924	1929	1934
Total	107	52	26	24
less than 10 shippers	84	32	18	14
11-25 shippers	16	10	3	2
26-100 shippers	3	8	4	4
101-500 shippers	4		1	3
501-1000 shippers		2		
over 1000 shippers			1	1

SOURCE: MSDA Membership Records

occurred between City Dairy, the largest, and Western Maryland, the third largest, in 1921. Irving Baxter, the owner of Western Maryland and chairman of the board of the new company, had a longer dairy career than that of City Dairy's Asa Gardiner, who became the new president of Western Maryland Dairy. Baxter started delivering milk in 1879 with two wagons and teams. By 1920, he had already purchased several smaller dairies, but the merger with City Dairy gave him access to new territory. Baxter built new country receiving stations and new dairy facilities in the city to replace the old plants of his dairy and the City Dairy with modern bottling and pasteurizing equipment.⁹

In 1928, Western Maryland further consolidated its control of the market by merging with the number-two dairy, Fairfield Farms, adding its city customers as well as a network of receiving stations in Carroll and Frederick Counties. The most adept dealer at using the press to

⁹Sun, 23 September 1921: 7.

create a name-brand identification and demand for dairy products, Fairfield's owner, Charles Bowman, had entered the dairy business in 1913 with only one wagon.¹⁰ By 1924, 575 members of the MSDA shipped to Fairfield and its receiving stations. The merger between Fairfield and Western Maryland was praised by farmers and accepted with few comments by consumers--quite a difference from the stir which greeted the city's first large merger when Asa Gardiner formed City Dairy in 1914. The editor of the Maryland Farmer shared the satisfaction of many other rural leaders that the merger would keep the dairy industry under local control; through its consolidation, the Fairfield-Western Maryland Dairy became strong enough to withstand the pressures of the National Dairy Products Corporation (Sealtest) which was buying dairies in other cities. Citing the dairies' elimination of waste after the consolidation, the Maryland Farmer believed that the merger would make milk distribution almost a public utility. Unperturbed that a monopoly had been created, the magazine said that the merger was "a great achievement for producers and distributors who have worked together for a common cause animated by the knowledge that, in the final analysis, to consider the rights of the consumer not only is moral high ground but is good business principle."¹¹

Led by the Western Maryland Dairy, other dealers cooperated with the MSDA to make milk distribution more efficient in the city. To encourage efficient delivery from the farms and to prevent farmers with small herds from holding milk for two days before shipping it, the dairies announced that, as of 1 March 1921, farmers would have to deliver at least

¹⁰ Bowman was the only dealer to advertise weekly in the newspapers; these advertisements featured pictures of children, the "Fairfield Farms Babies," sent by satisfied customers.

¹¹ Maryland Farmer, 15 January 1928: 1, 8; and 1 February 1928, 1, 4.

eight gallons every day or be cut off. Dealers wanted to stop the influx of sour milk or milk high in bacteria, brought to the city primarily by truck drivers serving small shippers who did not produce full cans of milk each day. Although some of this milk could be separated and used for butter, most had to be returned to the farmer, who had to pay the return freight charges.¹² To avoid duplication of railroad and truck routes, the dairies and the MSDA coordinated transportation in the country.¹³ With the Health Department, they also composed a scoring table for dairies to inform the public about the quality of milk sold.¹⁴

The cooperative, dealers, and county agents also worked with the Health Department to persuade farmers to improve the quality of milk sent. At special meetings during the summers when problems reached their peak, they first only encouraged farmers to build cooling tanks but, after 1928, coolers were required. As the Health Department increased its regulation of farm practices and temperature requirements, farmers often complained to the MSDA about being cut off. While the MSDA often interceded with the department on behalf of its members, Heaps reminded farmers:

Please do not lose any time cussing your association because the Health Department notifies you of high bacteria count, as we are in no way responsible but are doing all we know how to help our members when in trouble. We are, however, powerless to compel the City to accept milk above the standard allowed for bacteria.¹⁵

Despite the lack of contracts between the dealers and the

¹² Maryland Farmer, 18 March 1921: 12; and Aegis, 18 February 1921: 3.

¹³ MSDA Minutes, 17 January 1924.

¹⁴ Maryland Farmer, 1 August 1924: 4.

¹⁵ Maryland Farmer, 15 July 1924: 8.

cooperative, they maintained good relations. If disputes occurred, the two groups negotiated, often with the help of the arbitrator. Only in a few cases was the MSDA forced to hire lawyers to sue dealers who failed to pay farmers.¹⁶ The dealers remaining in the market after the mergers usually worked willingly with the MSDA and provided it with accurate records on the amount of milk they used and how much they sold as fluid milk or used as surplus. Dealers appreciated the association's intervention with farmers when it encouraged production during shortages and discouraged it during surplus periods. By controlling most of the milk entering the city, the MSDA satisfied dealers' demands for extra milk and found markets when dairies had a surplus. The MSDA eased its members' pain over dealers' new policies and worked with dairies to convince farmers that they needed to produce high quality milk. It also mediated in disputes between dealers and farmers, relieving dealers of the need to deal directly with irate shippers. By 1925, the attitude of many Baltimore dealers resembled that of one who told a national gathering of cooperative leaders that the MSDA

shouldered a good deal of the trouble of the dealers. There is no question about it, and speaking for the dealers in general, I think they are mighty pleased with the methods of marketing in the Baltimore territory.¹⁷

In return for this support, the MSDA could count on dealers to encourage their suppliers to produce good milk. Dealers aided the educational work of the Dairy Council and promoted increased milk consumption. In return for a guaranteed supply, dealers found new markets for the surplus milk. In 1929, Fairfield-Western Maryland installed drying

¹⁶MSDA Minutes, 31 July 1923.

¹⁷M. Stott, "Conference on Price Problems," AIC, 1925, p. 328.

plants at two receiving stations to make skim milk powder used for manufacturing and as feed for calves.¹⁸

As it learned to work with city dealers, the MSDA also sought to gain consumers' support. Although the leaders of the MSDA clearly stated from the beginning that they wished to cooperate with consumers, this process was sometimes slowed in early years by price disputes and legal problems. Heaps told leaders of Washington's Maryland-Virginia Milk Producers' Association that he believed that cooperatives should take the public into their confidence and to consider consumer demand as well as production costs when setting prices.¹⁹ He often held that the farmers' decision to organize was not intended "to increase prices to the consumer, but to improve marketing and regulate production so that both the producer and consumer benefit."²⁰ As spokesman for the association, he sought to counter accusations that the MSDA was a trust with explanations of the farmers' plight:

In fact, our business is all trust. First we trust the Almighty for suitable weather conditions in order to plant the crops, then we have to trust that we have a crop produced, then trust we can get it harvested, then the dairymen have to trust we can get money enough to buy dairy feed and some one to milk the cows, then trust the dealer will send our cans back to ship our milk, then last, but not least, we trust we will get paid for our milk. Now after thinking this all over I have come to the conclusion, after all, that the game of farming and dairying is the biggest trust in the world.²¹

The most severe test for Heaps's public relations campaign occurred in late 1921 when Maryland State's Attorney Robert Leach threatened a

¹⁸ Maryland Farmer, 1 November 1929: 13.

¹⁹ Maryland Farmer, 1 October 1920: 10.

²⁰ Heaps, "Control and Disposal of Surplus Milk," AIC, 1928, p. 390.

²¹ Maryland Farmer, 30 April 1920: 6.

Grand Jury investigation of the milk price situation in Maryland.

Accusing the MSDA of combining with the Bottlers' Exchange to fix prices, Leach told the Grand Jury that the dealers and producers had formed a "monopolistic combination that was in restraint of trade, and, therefore, illegal." He said that the MSDA was controlled by two or three large dairies trying to keep milk prices artificially high by diverting milk from the market.²² Citing a similar action by Chicago's district attorney, Leach stated that the problem of milk trusts had become a national one and urged the federal government to assist in the prosecution of Baltimore dealers and cooperative officials.²³ The Sun supported the investigation and suggested to Leach that he focus on whether a conspiracy to fix prices illegally existed rather than making another survey on what a fair price should be.²⁴ It cautioned, however, that only a public investigation with testimony by many experts, as well as former dealers and angry consumers, could help city officials reach an accurate judgment about the existence of a trust.²⁵ Consumers, who saw dealers' decisions to buy milk only from MSDA members as evidence that a trust existed, congratulated Leach on his investigation. Believing rumors that many farmers in the milk shed could not find a market for their milk, one consumer complained that the "sole purpose" of this milk trust was "to grind the last cent out of the public and to rob the unfortunate farmer who is not on the inside."²⁶

Primarily on the basis of testimony from two bankrupt dealers who had been granted immunity, the Grand Jury indicted twenty-six dealers,

²²Sun, 31 August 1921: 5.

²³Sun, 2 September 1921: 16.

²⁴Sun, 27 August 1921: 4.

²⁵Sun, 4 September 1921, sec. 2: 11.

²⁶Sun, 26 August 1921: 4.

six dairies, the Bottlers' Exchange, the MSDA, D. G. Harry, and I. W. Heaps for creating a monopoly and restraining trade.²⁷ All were released on \$500 bail. Especially irate over the two dealers' testimony that some dairies threw away surplus milk rather than giving it to charity or selling it at a lower price, many consumers applauded the decision.²⁸ The indictments drove the agricultural community together in support of the MSDA. County farm groups, the State Board of Agriculture, the Maryland Agricultural Society, and the Agricultural Corporation of Maryland all passed resolutions condemning the indictments. Asserting that the MSDA had been legally incorporated under state laws, the Agricultural Corporation stated that the cooperative was "composed of honorable men who would not be guilty of such acts." All organizations re-affirmed their belief in the integrity and independence of the MSDA. Dr. King, the arbitrator, defended both the farmers and the dealers, stating that the milk sold in Baltimore was both cheaper and of better quality than in most cities.²⁹

All who had been indicted remained out on bail over one year later, waiting further action. In the meantime, the U. S. Congress had enacted the Capper-Volstead Act (1922) legalizing farmers' cooperative associations and establishing marketing guidelines. Although the Justice Department, in early 1923, began its own investigation of the charges brought by Leach it found no violations of federal laws.³⁰ The

²⁷Sun, 3 September 1921: 11.

²⁸Sun, 3 September 1921: 20, 11; and 5 September 1921: 4.

²⁹Sun, 28 October 1921: 5; 28 August 1921: 7; 18 September 1921; 13; 5 October 1921: 12; Aegis, 28 October 1921: 3; Maryland Farmer 23 September 1921: 8; and 30 September 1921: 4, 6.

³⁰Aegis, 30 March 1923: 1; and Heaps, Milk Marketing, p. 26.

charges against the MSDA and the dealers were dropped in the summer of 1923.

Although prices had been too high in 1920, as evidenced by the large surplus on the market, the workings of supply and demand had already caused the price to fall before Leach began his investigation.³¹ The investigation came at the end of a period when the MSDA was trying to keep prices high to attract new members and help farmers recoup their losses from World War I. While they had not acted illegally, MSDA leaders gave production costs more weight in their early price demands than what consumers would pay for milk. Experience in the market and the intervention of the arbitrator soon helped the cooperative keep prices more in line with demand. With this experience would come acceptance by consumers. Even before the charges in the Leach investigation were dropped, most consumer antagonism toward both the MSDA and dealers had diminished. While the city Health Commissioner occasionally complained that his department had no power to keep milk prices from increasing if the arbitrator felt they should, the MSDA usually consulted representatives from the Health Department and the Women's Civic League before it changed prices.³²

The Health Department, dealers, and the MSDA applauded the Civic League's decision in 1920 to sponsor a nutrition program emphasizing the need for increased milk consumption. Increased consumption,

³¹Consumer prices fell from a high of seventeen cents per quart in early 1919 to twelve cents in May 1921. They fluctuated between twelve and fourteen cents for the rest of the decade. Heaps, Milk Marketing, p. 214.

³²The Health Department had originally helped to pay a share of King's expenses, but it stopped this support after July 1920. The expenses of \$75 per month for the arbitrator were then paid for by the Bottlers' Exchange and the MSDA. Sun, 31 July 1920: 18.

said the leaders of the association as they justified advertising expenditures to their members, would result in higher prices for farmers. MSDA officers, dealers, and representatives from the agricultural college worked with the Civic League to prepare a special milk exhibit to be used at Baltimore's annual Flower Show. Aimed at housewives, the exhibit featured movies and demonstrations of dairy foods. It also displayed dairy and farm equipment to give consumers better insight into the procedures followed on farms and in dairies to produce good milk. Home demonstration agents--the female counterparts of the county agents--showed women how to make special milk drinks such as the "5-Percent Special" and "Milk With a Kick" cocktails.³³

The exhibit became so popular that the Civic League repeated it several times during the summer at different locations in the city. The public enjoyed milk bars and exhibits at other city functions and at rural fairs as extension agents joined city consumer advocates in promoting increased milk consumption.³⁴ Recognizing that increased milk production required a corresponding increase in consumption, the MSDA and dealers sought to make nutrition education an ongoing part of their efforts to sell more milk. In 1920, they raised \$20,000 to finance the organization of the Baltimore Dairy Council. Most of the money for the council's operation, \$12,000, came from dealers who contributed one-fifth cent on every gallon of milk they handled. Producers contributed \$7,500 and the city and civic groups also gave some money. The Dairy Council used its funds to buy or develop educational materials and to hire a

³³ Sun, 10 May 1920: 5; 12 May 1920: 8; 27 May 1920: 26; Maryland Farmer, 7 May 1920: 6, 7; and 4 June 1920: 23.

³⁴ Maryland Extension Service Annual Report, 1921, p. 16.

staff to present its programs to civic groups, schoolchildren, and the public.³⁵ Dairy Council workers initiated their first education campaign in February 1921 when they presented a sample program on the theme of "More Milk--Better Health" to a luncheon attended by Baltimore school principals, representatives of men's and women's civic clubs, the Mayor, and the school board. This and future campaigns featured poster and essay contests for children, posters in public buildings, circulars distributed door-to-door, newspaper advertising, lectures, films, and plays involving children. The council worked with health nurses and parent-teacher groups to present material to adults and also arranged for city clinics to obtain free milk.³⁶

After 1925, the Baltimore Dairy Council became affiliated with the new National Dairy Council whose programs could be used by regional groups. The dealers and the MSDA continued to support the Dairy Council, increasing their contributions to its programs. Although the MSDA spent some money on its own advertisements, most of its promotional funds went into Dairy Council programs. As the quality of all milk sold in the city improved because of the Health Department regulations, dairies switched the emphasis of their advertisements from quality to encouraging consumers to improve their health by drinking more milk. In one Fairfield-Western Maryland ad, for example, the dairy stressed adults' need for more milk by showing "Mrs. Brown" who had "three children--a boy, a girl and a husband," all of whom needed milk.³⁷

³⁵Maryland Farmer, 20 May 1921: 6.

³⁶Aegis, 18 February 1921: 3; Maryland Farmer, 4 February 1921: 1, 2; and 16 March 1925: 1, 2.

³⁷Sun, 1 January 1932: 7.

The advertising campaign and the Dairy Council's educational work contributed to the increase not only in total fluid milk consumption but also in per capita use. Total milk sales increased from 10,676,477 gallons in 1919 to 18,808,414 gallons in 1928, and per capita consumption rose from .42 pints in 1912 to .464 pints in 1928.³⁸ Prices paid to farmers remained stable throughout this period, primarily because consumers had been persuaded to drink more milk. If consumption had not increased, the surplus problems occasionally plaguing the market would have been much worse. Surpluses continued to be most common in the early summer when, according to I. W. Heaps, "a great white wave of milk" flooded the city because many farmers bred their cows to freshen in the spring.³⁹ Surplus periods also coincided with times of high unemployment in the city when demand decreased. Milk production increased when prices for other farm products fell or milk prices rose drastically, also causing surpluses.

A combination of decreased demand and high prices taught the cooperative its first lessons about handling surplus milk. After World War I, the MSDA tried to keep the milk price high even though the prices of other agricultural products had declined. As Heaps later admitted, the officers wanted to attract new members by being able to point to the high prices, saying, "Look what your organization has done for you!"⁴⁰ Even dealers who agreed to handle surplus milk cut off some shippers when milk from surrounding counties flooded the market in late 1920.

³⁸ Health Department figures, MSDA historical file; and Heaps, Milk Marketing, pp. 196, 199.

³⁹ Maryland Farmer, 15 June 1927: 8; and 16 April 1920: 8.

⁴⁰ Heaps, "Control and Disposal of Surplus Milk," AIC, 1928, p. 389.

Demand also decreased because unemployment rose in the city after the war-time demand for goods declined. As a temporary measure, the dealers agreed to take the milk, selling it for the best possible price. The MSDA used the money in its brokerage fund to help make up the losses. Recognizing that the fund could soon be depleted, the directors voted to increase the brokerage by four-fifths cent per gallon and use the money to handle the surplus.⁴¹ Heaps used the image of fire insurance to explain the brokerage increase to members reluctant to have another deduction made from their milk checks. The fire, said Heaps, would come when the farmer was cut off by his dealer. The MSDA promised to buy extra milk at the going price and sell it for the best possible price, absorbing the loss.⁴² It also pledged to refund any excess in the fund to members on a revolving basis several years in the future.

When some dealers cut off 252 members in February 1921, the association managed to place all the milk with another dairy, but it recognized the need for a back-up facility to handle surplus in an emergency. Following at last the advice given by members almost two years before, the MSDA purchased an abandoned ice cream plant in the city. It paid \$15,375 in cash from the new reserve fund and spent another \$50,000 to renovate and equip the plant with cold storage, can washing, receiving, and weighing rooms.⁴³ Although it only used the plant as a distribution point for cream, preferring to allow dealers to manufacture all surplus milk, the MSDA retained the plant in case of emergencies. Heaps and the

⁴¹ Maryland Farmer, 25 February 1921: 19; MSDA Minutes, 27 November 1920; 6 January 1921; and 14 January 1921.

⁴² Maryland Farmer, 1 February 1922: 9.

⁴³ MSDA Minutes, 29 July 1921; 26 August 1922; Maryland Farmer, 15 April 1922: k, 8; and 22 July 1921: 10.

other officers believed that their plant acted as a deterrent to dealers who might otherwise refuse to take surplus milk, but a 1936 Federal Trade Commission report refuted this claim:

The general market peace that has prevailed in Baltimore is too valuable to be destroyed thoughtlessly, and this together with the opportunity for profits in handling the surplus for the cooperative are more ⁴⁴appelling reasons for continuing the present arrangements.

The MSDA used the reserve fund to finance the purchase and maintenance of the by-products plant and also to provide refunds to dealers for the surplus milk they took. Under a plan adopted in late 1925, dealers agreed to pay the highest price for the basic amount shipped by farmers; this amount was the average monthly fluid sales in August though November of the previous years. The arbitrator determined the surplus price for all milk produced over this basic amount according to the prices of butter and fluid milk and the amount of surplus. Dealers paid the surplus price for all milk in excess of fluid sales, but the cooperative reimbursed it for the difference between the surplus price and a lower manufacturing price for all milk purchased over 122 percent of fluid sales.⁴⁵ This plan established formulas to determine the surplus and manufacturing prices, allowing for adjustments according to the amount of surplus in the market. For the first time, the plan tried to correlate payments for farmers' basic milk with the amount of fluid milk sales, while at the same time providing enough extra milk to cover emergency and manufacturing needs.

When over \$500,000 had accumulated in the reserve fund in 1925,

⁴⁴FTC, 1936, p. 48.

⁴⁵Heaps, statement at Conference on Price Problems, AIC, 1925, pp. 316-9.

the MSDA began to refund some of this money to its members. After setting up a reserve of cash and securities of \$500,000 to cover losses from milk and operating expenses, the association began repaying money to shippers. It made the first payments to members who had shipped in February 1921 and then made them annually to members on the basis of the milk they shipped six years prior to the time of the refund.⁴⁶ Although never very large, the refund checks showed farmers the value of the MSDA to its members.

The enactment of the new price plan in 1925 ushered in the period of greatest stability in the early history of the association. Between 1925 and 1929, the number of producers remained fairly even, production was adequate to meet the needs of dealers but not too high to create surpluses, the relative price of dairy products remained slightly higher than for other farm products, and health officials finally excluded milk from shippers outside the Baltimore milk shed which had once been used to cut prices. Acclaimed by the editor of the Maryland Farmer in late 1924, the MSDA and other parties in the market had achieved stability and efficiency unknown before the organization of the cooperative.

By the co-ordination of the departments of production, distribution, health and finance there exist here conditions that stabilize the market and that make it possible to operate with less "spread" than in other fields with the result that the consumer, also is greatly benefited by a constant supply of the best and cheapest food. These are happy days on this milk shed and our hat's off to the devoted men who have built this era by earnest work and intelligence.⁴⁷

The maturity and skill of its leadership provided a key reason for the success of the cooperative in these years. Continuing their

⁴⁶Heaps, Milk Marketing, p. 115.

⁴⁷Maryland Farmer, 15 September 1924: 4.

activities in other agricultural organizations, MSDA leaders increased not only their own prestige, but that of the cooperative. President D. G. Harry became the first MSDA leader to be recognized on a national level for his involvement in farm groups. President of the Maryland Agricultural Society from 1920 to 1923 and State Lecturer for the Grange, Harry also served on the first executive committee of the Maryland Farm Bureau. Although he resigned as president of the association after his election as state senator from Harford County in 1923, he continued to serve on the board of directors until 1935. On the national level, Harry served on the executive committee of the National Milk Producers Federation in the early twenties and also represented Maryland on the committee to raise funds for the Temple of Agriculture, later erected in Washington by several farmers' organizations.⁴⁸ Selected as one of Maryland's two representatives to the National Conference on Agriculture called by Secretary of Agriculture Henry C. Wallace in 1922, Harry was appointed to several state agricultural boards, including a 1923 commission to draw up a comprehensive program for the development of agriculture in Maryland.⁴⁹

Harry's replacement as president, State Senator R. S. Snader, also served as a director of the National Milk Producers Federation. Other board members continued their involvement in farm organizations, often explaining MSDA actions and policies at their meetings. Because of their influence and that of leaders from other cooperatives, state agricultural organizations increased their study and support of cooperatives. The success of the MSDA brought its leaders a great deal of prestige which could be used to influence the programs of other groups.

⁴⁸Maryland Farmer, 16 April 1920: 29.

⁴⁹News, 3 May 1923: 8; and Sun, 8 January 1922: 9.

Extension Service employees, using the skills learned in organizing the cooperative in future jobs, benefited just as much as farmers from their experience with the MSDA. In their subsequent positions, they also spread the story of the cooperative's success. J. A. Gamble, dairy professor at the University of Maryland, had presented educational programs about feeding and the production of high-quality milk at MSDA meetings. In 1925, Western Maryland Dairy hired him to supervise quality control.⁵⁰ Harford County agent T. E. McLaughlin left the Extension Service in 1920 after he helped Maryland's tobacco growers organize their cooperative and joined the newly-reorganized Maryland-Virginia Milk Producers' Association as manager. McLaughlin's successor in Harford County, B. B. Derrick, left there in 1926 to join the USDA Division of Cooperative Marketing. In 1934, he served as Baltimore's Market Administrator for the Agricultural Adjustment Administration and became manager of the Maryland-Virginia Association after the collapse of the federal licensing agreement.⁵¹

Secretary-treasurer and manager I. W. Heaps became the Baltimore cooperative leader who gained the most prestige both in the milk shed and nationally. During the very early years of the cooperative, it would have been difficult to say which officer would achieve the greatest prominence, but, as the complications involved in the daily operation of the cooperative increased, Heaps shouldered more responsibility. He supervised the expanding office staff, including fieldmen and a statistician. Although he continued to supervise his own dairy farm in northern Harford

⁵⁰ Maryland Farmer, 15 July 1925: 6.

⁵¹ Knapp, Advance of Cooperative Enterprise, p. 93; Maryland Farmer, August 1934: 2; and February 1935: 8.

County, Heaps spent most of his time in the cooperative's offices and traveling to farmers' meetings. He also represented the association at government hearings and meetings, becoming the official spokesman for the cooperative to the press, city officials, farmers, and consumers. Heaps kept members informed through letters, meetings, and press releases in the Maryland Farmer, telling of price changes, new health regulations, and policy decisions made by the board of directors. Constantly involved in price negotiations and in the best position to see the changes in market conditions before other officers could, Heaps spoke of these events to members with much more knowledge and authority than other directors and officers, including the president.

Heaps soon gained a national reputation for his work in Baltimore. During the early 1920s when Washington's shippers reorganized their cooperative, Heaps worked closely with their officers, helping them draw up a membership contract and price plan based on that of the MSDA.⁵² He spoke to farmers' gatherings in the Washington milk shed, urging support for the cooperative and explaining the new contract. When Chicago milk shippers threatened a milk strike in 1928, the National Milk Producers' Federation sent Heaps and two other men to advise the farmers as they organized their cooperative. Performing the same job he had in Washington, Heaps met with producers and dealers to settle the strike and work out a marketing arrangement also based on the Maryland plan. He also arranged for Dr. King to act as arbitrator.⁵³

⁵²Maryland Farmer, 15 July 1925: 4; and News, 1 August 1925: 13.

⁵³Maryland Farmer, 1 February 1929: 1, 4; 15 February 1929: 4; and Heaps interview. Similar results occurred in Kansas City when its producers ended a strike by agreeing to adopt the MSDA marketing plan and accept King as arbitrator. Maryland Farmer, 16 December 1929: 4.

Among Baltimore's cooperative leaders, Heaps remained the most committed to the national cooperative movement. A featured speaker at several National Milk Producers' meetings, Heaps also participated regularly in the summer educational seminars sponsored by the American Institute of Cooperation. Formed in 1925 by cooperative leaders in all fields to promote the spread of cooperation, the institute's summer meetings were forums for the discussion of cooperative business methods. Heaps presented addresses at several of these meetings and also served on the organization's executive committee. At home, he urged his association to cooperate with neighboring groups by discussing common problems and sharing ideas.

Because of his national involvement, Heaps was the first of Maryland's leaders to perceive that the cooperative might have to expand its territory in the future. In 1927, the board voted to absorb the Annapolis Milk Producers' Association, taking over distribution of the milk sold to dealers in the state capital.⁵⁴ Although cooperative leaders had discussed a merger between the Maryland-Virginia Association and the MSDA as early as 1920, they did not take the first steps toward this alliance until 1929 when they appointed a committee to study a merger proposal. In January 1930, the two cooperatives formed the Eastern States Milk Marketing Association to market milk from both milk sheds. Each local association retained its own membership contracts and financial arrangement, but the board of directors, composed of three farmers from each group, marketed all milk. The association named R. S. Snader president, Heaps secretary-treasurer, and John McGill, manager of the Washington cooperative, manager. The founders of the Eastern States

⁵⁴ MSDA Minutes, 27 May 1927; and Maryland Farmer, 1 August 1927: 2.

Association believed it to be the only way that milk producers could compete with the "super-corporations" being formed by distributors. At the mid-winter meeting of the MSDA, Heaps told producers that large regional organizations would be the only means for farmers in the future to combat combinations of distributors and processors.⁵⁵ The largest of these combinations already threatened the Maryland area. By late 1930, the National Dairy Products Corporation controlled three large Washington dairies, and in December it moved into Baltimore, the last large market under local control, by purchasing Fairfield-Western Maryland Dairy. The take-over was peaceful, however, as National Dairy Products pledged its support of cooperatives and promised to retain local dairy personnel in their same positions.

Heaps's grasp of the need for large farm organizations to combat dealers' combinations was just one example of his marketing acumen. Although Heaps eventually achieved both local and national respect, the process by which he achieved dominance among a group of other farmers who had all established local reputations for their leadership skills had not been easy at first. As his son later recalled, Heaps's concern for the cooperative sometimes clashed with the tendency of some board members to put the interests of their own farms first. Heaps recognized that the cooperative's directors needed to be concerned primarily with the stability of the market, but occasionally, said Wilson Heaps, "we'd get a board member who'd be selfish enough that he didn't care how the

⁵⁵MSDA Minutes, 18 September 1929; 25 September 1929; and Maryland Farmer, 15 January 1930: 4, 9. Heaps envisioned that the eastern cooperative of the future would serve all the territory between Richmond and Boston.

⁵⁶Maryland Farmer, 15 December 1930: 4, 7; and Sun, 2 January 1931: 7.

market would go just so he'd get a big milk check for himself.⁵⁷

Most of the antagonism in the early years resulted from the failure of other directors to adjust to Heaps's growing authority and increased responsibilities. In 1925, some directors expressed concern about the decrease in the authority of the board over the daily operation of the association; however, the executive committee rejected a proposal made by Dr. Shermantine of Baltimore County that the president be paid a \$5,000 salary to relieve Heaps of some of his duties. It also urged directors to work out individual conflicts privately without involving the association.⁵⁸ A chain of events in early 1927, finally resulting in Heaps's establishment as the milk shed's dominant cooperative leader, proved how highly the dairies, farmers, and most directors regarded him. In February 1927, Heaps received an offer of a five-year contract as vice-president of Western Maryland Dairy. Citing "contention in the official family regarding details of policy," Heaps chose to accept the dairy's offer because he believed he had outlived his usefulness to the cooperative. Although he did not state it, the contention primarily existed between Heaps and his fellow Harford Countian D. G. Harry who seemed to resent Heaps's increased authority. Because most board members desired to find a way to keep Heaps and solve the conflict, the board appointed a special committee to study the situation. A few directors reported that some members thought that Heaps's current salary was too high, but other members, University of Maryland President Dr. Pearson, and

⁵⁷Heaps interview. Wilson Heaps was careful in this interview not to name these problem directors. He also made sure that I was aware that, as a group, the directors showed concern for the market and that they worked together for the common good.

⁵⁸MSDA Minutes, 2 November 1925 and 19 November 1925.

Dr. King pressed the board to do whatever possible to retain Heaps. The editor of the Maryland Farmer urged the board to consider the needs of the business and not let Heaps leave.

So big are the interests involved that any question of the rate of Mr. Heaps' compensation is of little relative importance. By comparison, both with the value of the product sold and the number of happy farm homes involved, Mr. Heaps' salary could not bar settlement of the difficulty. Surely the dollar mark is of minor consideration in this situation. The producers of over 22,000,000 gallons of milk annually for the Baltimore market with a constantly growing value now of over \$7,500,000 have paramount interests too great to be in the slightest degree jeopardized by any change in management.⁵⁹

The special committee decided to ask Irving Baxter, president of Western Maryland, to release Heaps from his contract and voted to offer Heaps the same salary proposed by the dairy. The committee and the board approved a new contract and annual salary of \$20,000 with only one dissenting vote, that of D. G. Harry. Heaps agreed to sign a five-year contract and on 1 April the board announced that the problem had been solved. Members and other observers applauded the decision as the triumph of business principles in the marketplace and congratulated the board for placing market stability ahead of dissension among individuals.⁶⁰

Under Heaps's management, the cooperative operated increasingly as a business, tuned to the changes in the market. Even during the prosperous days of 1928, Heaps remained acutely aware of the need to avoid surplus production. In an address to milk producers, he explained why the amount of basic milk should be controlled so that it would never be much greater than fluid consumption:

⁵⁹ Maryland Farmer, 1 March 1927: 1; 15 March 1922: 1; MSDA Minutes, 8 February 1927; 14 February 1927; 18 February 1927.

⁶⁰ MSDA Minutes, 23 February 1927, 23 March 1927; and Maryland Farmer, 1 April 1927: 1, 4.

- First, Because the public will only consume a certain amount of milk.
- Second, Because the dealer will only buy an amount of fluid milk that equals his sales.
- Third, Because the consumption of milk is fairly uniform while the production is very ununiform.
- Fourth, Because if there was no definite basic quantity set up and no report of consumption per month the dealer would undoubtedly put surplus milk in the bottle.
- Fifth, Because the farmers' production is controlled by price and not by market demands.
- Sixth, Because without production control we could not hope to receive our present price for basic milk.
- Seventh, Because our policy protects the individual shipper against over production by his neighbor.
- Eighth, Because our policy eliminated fluctuations in basic price.
- Ninth, Because we can market advantageously increased quantities of milk.
- Tenth, Because we can under our policy return a better price for surplus or Class 2 Milk.
- Eleventh, Because our average price for all milk is higher under this plan.
- Twelfth, Because under this policy the income from milk per farm has been greatly increased.⁶¹

Through the adjustment of the surplus price and the basic amounts, the association exerted its best control over production. Especially during the depression, it decreased the basic amounts to reflect the falling demand for milk. In periods of even production and demand, farmers received the Class 1 (fluid) price for the entire base amount produced in the fall months; however, during surplus periods, they only received the higher price for a percentage of this amount. Although farmers often complained when their base was cut, the association argued that market stability depended on matching the base to fluid consumption. During the hard times of early 1931, Heaps criticized the members who complained about the low bases but never came to association meetings to learn why the market conditions demanded the decrease in basic allotments. Stating that farmers should "thank God that we're just holding our own," Heaps

⁶¹Maryland Farmer, 1 September 1928; 1.

described the effects of the depression on the city:

Do you know that there are thousands of people in this city who have no money to buy milk? Yet you people--not you but the fellow back home--are eternally writing me letters and coming into the office and telling me "You've got to give me more basic milk."⁶²

As in all surplus periods, Heaps urged farmers during the depression to cull poor producers, cut back on the use of high-priced feeds, and use more dairy products at home. Nothing angered Heaps more than to hear that the same farmers who criticized him for low milk prices used margarine at home. The MSDA and the dairies encouraged farmers to keep more milk at home and to make sure that local grocery stores stocked good butter. Dairies began selling their butter at the country receiving stations where farmers could purchase it on their daily trips. The Dairy Council and home demonstration agents sent recipes to farm women, telling them how to make ice cream and other dairy foods. The Council increased nutrition work at rural schools, fairs, and farmers' meetings to encourage the use of milk on farms. In a 1932 MSDA advertisement in the Maryland Farmer, Heaps listed some "Don'ts for Milk Producers!" summing up the advice he had given during all surplus periods since the association's inception:

1. Don't continue to produce more milk than the market demands.
2. Don't fool yourself into believing that the public will buy more milk than they want.
3. Don't put all your eggs in the milk basket.
4. Don't expect scrub cows to bring in profitable returns.
5. Don't be surprised if those cows giving a large flow of milk show a low butterfat test.
6. Don't expect an increase in your basic average⁶³ just because you increased your production--please.

⁶²Maryland Farmer, 2 February 1931: 4, 15.

⁶³Maryland Farmer, 1 September 1932: 1.

The events of the early years of the depression and the actions taken by the MSDA in response to those events not only reflect the mistakes the association had previously made, but also the maturity it gained from these experiences. Certainly many of the cooperative's problems in the early thirties had been caused by economic circumstances beyond its control. Increases in urban unemployment, for example, had always been coupled with a decline in milk consumption. It is to the credit of the educational work done by the Dairy Council that per capita consumption did not fall until after 1930 and, at its lowest point, remained higher than in the years before nutrition work began.⁶⁴ Retail prices, averaging 13.5¢ per quart in the twenties, did not change until 1931 when they dropped to 12¢. They fell to their lowest level of 10¢ in May 1933, before starting to rise slowly and, by 1936, they again reached 13¢.⁶⁵

When retail prices decreased in April 1931, the producers' price for basic milk dropped from thirty-three to twenty-nine cents per gallon. Although the association had tried since early 1930 to persuade producers to cut production by lowering the surplus price, production increased as more farmers entered the market or purchased extra cows. The MSDA, the Extension Service, and the USDA had warned as early as 1928 that production should not be increased. Production had slowed in the mid-twenties during the peak of tuberculosis testing in the milk shed, but it soon increased as farmers bought better cows to replace those

⁶⁴Health Department figures in MSDA historical file. Per capita consumption rose from .464 pints in 1928 to .4769 in 1930 and then decreased to .4453 in 1932. Because relief agencies distributed milk, consumption rose in 1934 to .4838, only to fall to .4528 in 1936 after this distribution was halted. Only .4472 in 1938, consumption would then rise, reaching a peak of .7428 in 1946. It averaged .6259 in the fifties.

⁶⁵Heaps, Milk Marketing, p. 214.

destroyed as TB reactors. By 1928, when federal inspectors declared the milk shed tuberculin-free, production had already moved far ahead. Although the average annual production per cow in 1925 had only been 496 gallons, MSDA members reported an average production of 610 gallons in 1929.⁶⁶ Even during the devastating drought of 1930, milk production in Maryland increased as farmers fed winter rations after the pasture died.⁶⁷

New shippers, flooding the market in the late twenties to take advantage of high milk prices, continued to enter the market in the early thirties because prices for other products remained low. Heaps and other MSDA leaders urged farmers not to switch into dairying, but high milk prices convinced Farm Bureau officers that its members should concentrate on the production of dairy products.⁶⁸ Although it is evident that MSDA officials seriously believed that, as early as 1928, surplus production was the greatest threat to the stability of the association and the market, they did not lower the basic price until no other alternative remained. In early 1931, a few dealers forced the April price cut by offering farmers outside the association flat rates rather than the base and surplus prices given by the cooperating dealers. Because the independent dairies did not handle any surplus milk, they could offer higher prices than the average price received by MSDA members.⁶⁹

⁶⁶U. S. Census of Agriculture, 1925, vol. 1, The Northern States, p. 298; vol 2, The Southern States, pp. 100-102; and Maryland Farmer, 15 May 1929: 9.

⁶⁷Maryland Farmer, 1 December 1930: 8.

⁶⁸Sun, 10 January 1931: 5.

⁶⁹Maryland Farmer, 15 August 1931: 4; and October 1934: 2. At one point in the early thirties these independent dealers marketed 10 percent of the city's milk, but this proportion decreased to 7 percent in 1934 as more shippers returned to the MSDA because it handled surplus milk and paid premiums for milk high in butterfat.

Heaps did his best to persuade farmers not to increase production, but his exhortations did not convince farmers that they should cut their surplus. MSDA officials hesitated to use the most important means to cut production, a price decrease, for several reasons. The history of the association had been built on its efforts at securing high prices for farmers. The cooperative's leaders feared the members' criticism of a drastic decrease, even though prices of feeds and some other necessities had decreased. They believed that a large drop in prices would also drive shippers to the independent dealers who, by refusing to handle surplus, would only create more chaos in the market. MSDA officers, as full-time commercial dairy farmers, recognized that many farmers had become dependent on their milk checks, investing more money in dairy equipment and good cows. In the 1930s, two types of farmers still shipped the city: those who had decided to specialize in dairying and those who went into dairying only because of low prices for other farm products, viewing it as a cushion during hard times. Although price reductions would hurt both groups, the farmers with the greatest investment would be most affected.

Although the MSDA, like other U. S. dairy cooperatives, campaigned extensively in the milk shed to persuade farmers to reduce production, producers' prices continued to fall. Baltimore prices remained higher than in many other milk sheds and consumers paid less than in Washington, Richmond, and New York.⁷⁰ Because of milk producers'

⁷⁰ Maryland Farmer, December 1933: 8. According to the Farm Credit Administration, Baltimore farmers received an average of \$2.18 per hundredweight; they received \$2.45 in Richmond, \$2.82 in Washington, \$1.99 in Philadelphia, \$1.57 in Boston, and \$1.37 in New York. Retail prices were 11.79¢ per quart in Baltimore, 12.5¢ in Richmond, 13.6¢ in Washington, 10.57¢ in Philadelphia, 11.44¢ in Boston, and 12.87¢ in New York.

precarious situations in many milk sheds, the Agricultural Adjustment Administration began to devise a program to supervise milk marketing in cities. The AAA proposed that producers and dealers in each city work under a licensing system dictating marketing procedures and prices. The process of establishing the agreement in Baltimore followed that in many other cities; after public hearings and meetings between Heaps and AAA officials, the plan became effective on 29 September 1933. The agreement retained the three-class price structure which had been adopted by the MSDA in September 1932. The highest, Class 1, price would be for fluid milk and was set at 22.5¢ per gallon. Class 2 prices, set at 17¢, were for milk used for cream and the Class 3 price would be paid for all other milk. It was the highest possible average monthly price for which milk could be sold for manufacturing. The license required all dealers to pay the same price regardless of whether or not they bought from the MSDA or whether milk was delivered directly to dairies or to receiving stations. All milk would be purchased on a classified basis, even if obtained from non-members of the cooperative. The same brokerage fee would be deducted from all milk, with the brokerage from non-members administered by the Maryland Dairy Council, successor to the Baltimore Dairy Council.⁷¹

This first marketing agreement collapsed when some dealers refused to shoulder the burden of surplus milk and pay the classified rates. Abuses by dairies increased farmers' discontent with the first AAA system. Because of the dissatisfaction with the procedures for setting and enforcing both producers' and retail prices, Secretary of Agriculture Henry Wallace terminated the marketing agreements for Baltimore and

⁷¹Maryland Farmer, September 1933: 1; and December 1933: 2, 5.

twelve other areas as of 1 February 1934.⁷² A new license was put into effect in April, but, by continuing to pay farmers a flat rate for their milk, independent dealers prevented scheduled price raises from going into effect. Recognizing the failure of the licensing system to control production or affect prices, market administrator B. B. Derrick joined Heaps in a campaign to limit production voluntarily and to stop patronizing independent dealers.⁷³

After the AAA made one last attempt to enforce prices in September 1934, it abandoned all efforts to regulate prices in Baltimore because independent dealers again prevented the price increase from taking effect. When the federal license ended, the market was left, according to Heaps, in "a far more demoralized condition than before."⁷⁴ After the courts declared the AAA and a state control law unconstitutional, the MSDA and dealers resumed their former cooperation, allowing prices to fluctuate according to supply and demand. From the low of eighteen cents reached in 1933, prices for Class 1 milk rose slowly to a high of twenty-six cents by the end of 1936. By July 1936, the MSDA abandoned the three-price system and returned to the two-price, base-surplus plan.

Dealers and the association also began working to solve some of the old problems still common in the milk shed. Dealers had been pressuring the association to revise its membership contract to prevent the abuses by farmers who contracted to sell milk to cooperating dealers for six months in the spring and then sold to independents in the fall when prices increased. To prevent this switching, dealers urged the cooperative to draw up a contract requiring members to ship for a period longer

⁷²Maryland Farmer, January 1934: 6; and Sun, 18 January 1934: 34.

⁷³Maryland Farmer, May 1934: 2, 3. ⁷⁴Heaps, Milk Marketing, p. 160.

than six months. Recognizing the need to maintain the goodwill of dealers who had worked with their association for several years, MSDA officials decided to change contract provisions. They also decided to make these revisions part of the overall reorganization needed to comply with the requirements of a new state cooperative marketing act.

Because the new law required cooperative associations to identify themselves as cooperatives in their names, the Maryland State Dairymen's Association now became the Maryland Cooperative Milk Producers, Inc. A new three-year contract was the major change as price structures, officers, and the procedures for electing directors remained the same. By forcing them to sign for a longer period, the new contract prevented shippers from leaving the association temporarily to sell their milk to independent dealers. These dealers would now be forced to obtain milk from the association, assuming the responsibility for part of the surplus. When incorporated on 1 June 1935, the Maryland Cooperative Milk Producers already had persuaded 90 percent of the members of the MSDA to sign the new contracts. By February 1936, 99 percent of the MSDA members had signed contracts.⁷⁵

⁷⁵ Maryland Farmer, February 1936: 2; and Heaps, Milk Marketing, pp. 129-133.

CHAPTER VIII

CONCLUSION

After being immersed in the accounts of the growth of the Maryland State Dairymen's Association, it is difficult to view its accomplishments and failures objectively. If one listed both the triumphs and disappointments, these lists would prove that the faith of rural observers who praised the cooperative as "the Milk Monument of Baltimore" had been justified.¹ Dairy farmers created the MSDA in response to the problems they faced during World War I. Older Maryland farm organizations, emphasizing education and social activities for the elite rural community, did not help practical farmers deal with wartime inflation, labor shortages, and increased government regulation of their dairy enterprises. The founders of the MSDA capitalized on the changes occurring in farm groups both within Maryland and across the nation which abandoned the independent, self-help rhetoric of the old rural elites in favor of joint action by all farmers to affect the workings of the market. Trained by their experience in earlier farm groups and in rural politics, the new leaders shared a commitment to full-time dairying. They led the ranks of a growing number of central Maryland farmers who had decided to invest in dairy equipment and good cows and make dairying their major farm enterprise. The cooperative's success in guaranteeing payment for all milk, in

¹W. C. Watkins, "Introduction," in Heaps, Milk Marketing, p. viii. Watkins was editor of the Maryland Farmer.

working with the Health Department and dealers to increase milk consumption and in protecting the market from milk from other regions gave other farmers the confidence to specialize.

The MSDA leaders epitomized the new type of central Maryland farmer who turned to a variety of farm organizations to benefit his specialized occupation. As seen in their acceptance of the county agents, these farmers continued to believe in the value of education and scientific farming. They sought to retain the values and spirit of the rural communities in their local Granges, but, unlike the early farm leaders, officers of the modern cooperatives, Granges, and Farm Bureau wanted to expand all farmers' involvement in organizations. For the first time, owners of small farms and tenant farmers were encouraged to join with progressive farmers in rural groups. Able to participate in cooperative activities, county fairs, and educational meetings, these farmers learned better farming methods. Through their involvement in these activities, they became enthusiastic about the accomplishments of their organizations.

Fortunate to have the support of county agents and agricultural college personnel, the MSDA gained the respect of consumers, city officials, and dealers. Because they had made large investments in new equipment following the passage of the pasteurization ordinance of 1917, dealers depended on the cooperative to provide adequate supplies of milk daily. The dairies remaining after the mergers of the early twenties were led by men who had decided to support the farmers' association as the best means of guaranteeing this adequate supply.

As they dealt with members, MSDA leaders sought to keep enthusiasm for the association high. Through the fieldmen, the county meetings,

the annual picnics and banquets, letters, and articles in the Maryland Farmer, they informed members of policy changes and addressed farmers' concerns. In return, members displayed confidence in their leadership by retaining many of the directors for many terms. At least five directors served until their deaths in the 1930s. In the first twenty years of the association's operation, only twenty-six men served on the board of directors; two of the original board still served in 1938. It had only three presidents and one manager. This continuity in leadership differed not only from earlier Maryland farm groups but also from other cooperatives. During the same period, for example, the Maryland-Virginia Association had four managers.

The benefits of this continuity were heightened by the decision of the association to delegate much authority to its manager. The managerial abilities and concern for the market possessed by I. W. Heaps became key ingredients in the success of the MSDA. Heaps emerged in the early years as the cooperative's dominant leader. While probably not universally loved, Heaps was respected by government officials, dealers, members, and national cooperative leaders. He gained this respect through daily attention to the market and through his constant emphasis on market stability and continuity rather than quick gains. He remained aware of the problems caused by surplus production, disagreements between members and dealers, and conflicts within the association. Working with government agencies such as the AAA when he believed they would stabilize the market, Heaps also maintained the belief that cooperation between all parties in the market could regulate prices and production and solve most problems threatening market peace.

One cannot read about the farm groups of the post-war period,

especially the MSDA, and not be impressed with the pride members felt for their cooperative, despite some of its failures. Members occasionally left the cooperative to sell to independent dealers or refused to heed its leaders' advice to decrease production. Conflicts sometimes flared between dealers and farmers but the arbitrator helped resolve them. The cooperative and dealers did not always act wisely and sometimes set prices too high to sustain consumer demand. Because many farmers began dairying after the MSDA achieved high prices and market stability, the cooperative frequently had to deal with a surplus as the price of its success. In all fairness to the MSDA, however, cutting surpluses remained a national problem which continues to demand a solution.

In spite of its problems, members' pride in their association remained justified. During its first twenty years, the Maryland State Dairymen's Association organized a higher proportion of its milk shed's shippers than any other dairy cooperative. It developed a price plan which other associations copied and which is recognizable in the system used under today's Federal Orders. One of the most prestigious cooperatives in the nation, it survived the worst of the depression, investigations, government regulation, court fights, and reorganization to emerge financially sound and still in control of almost all milk sold in Baltimore. It earned respect from consumers who received good milk at a fair price and loyalty from members who could now rely on their monthly milk checks. Even government investigators who had studied many urban milk markets added their praise, noting the peace in the market and the business acumen of the cooperative's leaders. They believed that "the success obtained by the cooperative suggests that its operations could be studied to advantage by other milk cooperatives." ²

²FTC, 1936, pp. 46-47.

APPENDIX 1

PARTICIPATION IN RURAL ORGANIZATIONS, 1880-1900

This data is based on information gleaned from newspapers about the members and leaders in central Maryland farm organizations. To be counted in the final tally, individuals had to be a delegate to a State Farmers' Association meeting or belong to at least one of the following organizations: Farmers' Alliance, Agricultural Society, Grange, a local farmers' club, or the United Milk Producers' Association. Table I lists the number of rural leaders belonging to each organization and the percent of the total sample for that county. Table 2 lists the percent of farm leaders according to the number of organizations they belonged to in an effort to determine the depth of participation in rural groups by individual farm leaders.

TABLE 1

MEMBERSHIP IN RURAL ORGANIZATIONS

	Baltimore (n=186)		Carroll (n=54)		Frederick (n=67)		Harford (n=245)		Howard (n=69)	
	No.	%	No.	%	No.	%	No.	%	No.	%
State Farmers' Meetings	47	25.3	38	70.4	23	34.3	52	21.2	18	26.1
Farmers' Alliance	4	2.2							49	71
Roads League	23	12.4	1	1.8			36	14.7	13	18.8
Agricultural Society	57	30.7	9	16.7	46	68.7	112	45.7		
Grange	83	44.6	1	1.8	12	17.9	9	3.7	10	14.5
Farmers' Clubs	24	12.9	7	13			160	65.3		
United Milk Producers	24	12.9	7	13			12	4.9	2	1.5
County meetings	39	21					57	23.3		

TABLE 1--Continued

	Baltimore		Carroll		Frederick		Harford		Howard	
	No.	%	No.	%	No.	%	No.	%	No.	%
Tariff Reform	5	2.7					8	3.3		
Farmers' Institutes	27	14.5					6	2.5	1	1.5
Breed Associations	16	8.6	1	1.8	5	7.5	2	.8	1	1.5
Fire Insurance Co.	1	.5					23	9.4		
National Banks							16	6.5		
Railroads	1	.5					16	6.5		
Canners							11	4.5		

TABLE 2

PARTICIPATION IN FARM ORGANIZATIONS,
BY NUMBER

Number of groups	1	2	3	4	5	6	7	8
Baltimore	57.5%	21%	11.8%	3.2%	3.8%	2.2%	.54%	
Carroll	85.2	11.1	1.9	1.9				
Frederick	82.1	11.9	4.5	1.5				
Harford	49.8	25.7	11.4	5.7	3.7	2	.4	1.2%
Howard	75.4	18.8	5.8					

APPENDIX 2

BY-LAWS OF THE

MARYLAND STATE DAIRYMEN'S ASSOCIATION, INC.

ARTICLE I

Name

Section 1. This Association shall be known as the Maryland State Dairymen's Association, Inc., and shall be incorporated under the laws of the State of Maryland. Its principal office shall be located in the City of Baltimore, Maryland.

ARTICLE II

Objects

Section 1. The objects of this Association shall be to encourage better and more economical methods of milk production; to secure better results in marketing and advertising the dairy products of its members; to buy supplies in a co-operative way; to rent, buy, build, own, sell and control such buildings and other real and personal property as may be needed in the conduct of its operations; to cultivate and develop the co-operative spirit among dairymen and to perform any other work which may tend to the betterment of the members and the general benefit of the industry.

ARTICLE III

Membership

Section 1. Any bona fide milk producer in any territory served by this Association may become a member of the Association by agreeing to comply with the requirements of these by-laws.

Section 2. Upon entering into such an agreement and the payment of membership fee, the Association shall issue a certificate of membership to the applicant. Such certificate of membership shall not be transferable.

Section 3. At any time that the Board of Directors determines that a member has ceased to be a bona fide milk producer, his membership shall be terminated and his membership certificate shall be cancelled.

ARTICLE IV

Fiscal Year, Meetings

Section 1. The fiscal year of the Association shall commence August first and end on the thirty-first day of the following July.

Section 2. The annual meeting of the Association shall be held at the office of the Association in the City of Baltimore, Maryland, on the fourth Friday in August of each year.

Section 3. Special meetings may be called at any time by the president. He shall call such meetings whenever twenty-five (25) members shall so request in writing.

ARTICLE V

Quorum

Section 1. One-tenth of the members in good standing shall constitute a quorum for the transaction of business at any meeting.

ARTICLE VI

Directors and Officers

Section 1. The Board of Directors of this Association shall consist of nine members, who shall be divided into three classes. After the adoption of these By-Laws, the members shall elect from among themselves three directors of the first class for a term of one year, three directors of the second class for a term of two years, three directors of the third class for a term of three years. At the expiration of the terms of the directors so elected their successors shall be elected in like manner, for terms of three years. Directors shall hold office until their successors shall have been elected and qualified, and shall have entered upon the discharge of their duties. Vacancies shall be filled, for the unexpired terms, at any annual meeting, or at any special meeting called for the purpose, in the manner provided for the original election of directors.

Section 2. The Board of Directors shall meet within ten days after the first election, and after each annual election, and shall elect by ballot a president and a vice-president from among themselves, and a secretary-treasurer who may or may not be a member of the Association. Such officers shall hold office for one year or until their successors are duly elected and qualified.

Section 3. Any vacancy in the Board of Directors shall be filled, for the unexpired terms, at any annual meeting, or at any special meeting called for the purpose, in the manner provided for the original election of directors.

Section 4. Five members of the Board of Directors shall constitute a quorum at any meeting of the Board of Directors.

Section 5. Any director or officer of the Association may, for cause, at any annual, or at any special meeting called for the purpose, at which twenty-five per cent (25%) of the members shall be present, be removed from office by vote of not less than two-thirds of the members present. Such director or officer shall be informed in writing of the charges at least five days before such meeting and at such meeting shall have an opportunity to be heard in person, by counsel, and by

witnesses, in regard thereto.

ARTICLE VII

Duties of the Directors

Section 1. The Board of Directors shall manage the business and the affairs of the Association, and make the necessary rules and regulations, not inconsistent, with law or with these by-laws, for the management of the business and the guidance of the officers, employees and agents of the Association. They shall fix the compensation of the secretary-treasurer.

Section 2. The Board of Directors may employ and dismiss for cause a business manager, who may or may not be the secretary-treasurer, and fix his compensation. He shall have charge of the business of the Association under the direction of the Board of Directors.

Section 3. The Board of Directors shall require the treasurer and all other officers, agents and employees charged by the Association with responsibility for the custody of any of its funds or property, to give bond with sufficient surety for the faithful performance of their official duties.

Section 4. The Board of Directors shall meet on the first Saturday of September, December, March and June at the office of the Association in the City of Baltimore, Maryland. Special meetings shall be held upon call of the president, or upon written request of three members of the Board.

ARTICLE VIII

Duties of the Officers

Section 1. The president shall:

a. Preside over all meetings of the Association and of the Board of Directors.

b. Call special meetings of the Association and of the Board of Directors, and perform all acts and duties usually required of an executive and presiding officer.

Section 2. In the absence or disability of the president the vice-president shall preside and perform the duties of the president.

Section 3. The secretary-treasurer shall:

a. Keep a complete record of all meetings of the Association and of the Board of Directors.

b. Sign as secretary-treasurer all checks, notes, deeds and other instruments on behalf of the Association.

c. Serve all notices required by law and by these by-laws.

d. Receive and disburse all funds and be the custodian of all the property of this Association.

e. Keep a complete record of all business of the Association and make a full report of all matters and business pertaining to his office to the members at their annual meeting, and make all reports required by law.

f. Act as business manager if the Board of Directors shall so direct.

g. Perform such other duties as may be required of him by the Association or by the Board of Directors.

ARTICLE IX

Duties and Powers of the Business Manager

Section 1. Under the direction of the Board of Directors, the business manager shall employ and discharge all employees, agents and laborers. He shall secure information relative to production and market conditions and furnish the same to the members on request. He shall encourage the production of clean and pure dairy products. Subject to the terms of the contracts made by the members with the Association for the marketing of their dairy products, the order of the Board of Directors, and the by-laws and rules of the Association, the manager shall have entire charge of the sale and marketing of such products.

ARTICLE X

Membership Fee and Finance

Section 1. Each member shall pay in advance to the Association a membership fee of one dollar (\$1.00).

ARTICLE XI

Emergency Captial

Section 1. At the time of uniting with the Association, or any time thereafter, when called upon by the Board of Directors, each member shall give a negotiable promissory note, payable on demand, to the order of the Association. Such note shall be for the sum of one dollar (\$1.00) for each cow owned by the member, the milk of which is to be marketed through the Association. But in no case shall the note be for a less sum than fifteen dollars (\$15.00).

Section 2. These notes shall be the property of the Association for the purpose of being pledged by the Board of Directors as collateral security for any loan that may be necessary in the conduct of the Association's business. Any member's note may also be available in the settlement of any liquidated damage that may result from failure of said member to live up to his contract with the Association. These notes shall not be used for any other purpose.

ARTICLE XII

Quality of Product

Section 1. All milk shall be delivered in pure and unadulterated state, suitable for sale in the City of Baltimore or other markets, designated by the Association.

ARTICLE XIII

Contracts and Agreements

Section 1. Every member of this Association shall enter into a contract with the Association in the form required by the Board of Directors, subject to the following provisions:

a. That the member, by said contract, appoints The Maryland State Dairymen's Association, Inc., his sales agent to sell all dairy products he has for sale or such part thereof as shall be satisfactory to the Board of Directors, as shall be specified in the contract, and binds himself to deliver such products for sale at such time and place as the Association directs.

b. That said contracts shall run continuously unless cancelled by the member before the expiration of any contract period by giving written notice to the Association at least thirty days prior to said date that he desires to cancel his contract, subject to any indebtedness due from him to the Association.

ARTICLE XIV

Duties And Right of Members

Section 1. A member shall have the right to give away or retain for his own use such of his dairy products as he may wish, but he shall not sell any product contracted to the Association to an outside party, except products offered to and rejected by the Association.

Section 2. In case any member is offered a price in excess of the price then obtainable by the Association, said member shall turn over said bid to the Association for filling from products promised to the Association.

Section 3. On or before the expiration of each contract period each member shall report to the Association the number of cows to be kept by him during the succeeding period and the number of cows, the milk of which he promises to market through the Association. From time to time each member shall furnish such information concerning the milk pledged to the Association as may be requested by the manager.

Section 4. Each member of the Association shall have only one vote. This shall not be exercised except when all debts and dues owed by him to the Association have been fully paid. Except in case of the removal of a director or officer, as provided in Article VI, Section 5, of these By-Laws, absent members may vote on specific question by ballots transmitted to the Secretary of the Association by registered mail and such ballots shall be counted only in the meeting at the time at which such vote is taken.

Section 5. Any member may withdraw from the Association at the expiration of any contract period after giving the prescribed notice, provided that the Board of Directors may, in an emergency, waive this requirement; but such withdrawal shall not affect any right or lien which the Association has against the retiring member or his property until his indebtedness to the Association is fully paid.

Section 6. Any member having a grievance or complaint against the Association may appeal to the Board of Directors. No member shall be suspended or expelled or deprived of the benefits of the Association without having charges preferred against him, reasonable notice thereof having been given and a hearing before the Board of Directors.

ARTICLE XV

Indebtedness, Membership Liability

Section 1. The amount of indebtedness which may be incurred by or on behalf of this Association shall at no time exceed ten dollars (\$10.00) per member, unless specifically authorized by vote of the members at a regularly called meeting.

Section 2. Each member shall be responsible for his per capita share of all contracts, debts and engagements of the Association up to and including the maximum indebtedness, prescribed in Section 1 of this Article; but if any member's share of such contracts, debt and engagements shall prove uncollectable, each remaining member shall be responsible, as his additional liability for such unpaid share or part thereof to an amount equal to such member's original liability. No member shall be liable to the Association for any contract, debt or engagement arising out of any specific transaction between the Association and any member or members thereof in which he does not participate, unless and until the Association shall have exhausted every legal recourse and failed to enforce satisfaction from the member or members participating therein. In all cases any member who voluntarily or otherwise, contributes to the payment of the debt or obligation of another member or members shall have an action, several or joint as he may elect against such defaulting member or members for reimbursement.

ARTICLE XVI

Expense and Payments

Section 1. The expenses of operating the Association shall be met by a percentage charge laid upon returns for produce sold, or by a uniform fixed price per gallon or hundred pounds, and upon supplies purchased, the amount of such charge to be fixed by the Board of Directors.

ARTICLE XVII

Co-operative Purchase of Supplies

Section 1. All supplies purchased by the Association for any member shall be paid for in cash by the member ordering such supplies at the time of ordering the same, or the money may be deposited with some bank, approved by the Board of Directors, at the time of ordering.

Section 2. In case there are local dealers handling the supplies desired they may be given an opportunity to bid on the order before it is placed with an outside agency.

ARTICLE XVIII

Savings and Damages

Section 1. After the season's expenses are paid and a proper sum set aside to cover the depreciation of the Association's property, and provision is made for a contingent fund to be fixed by the Board of Directors, the balance of the season's savings on products shall be divided among

member and non-member patrons, if any, in proportion to the amount (or value) of their products sold, and the balance of the season's savings on supplies purchased shall be divided in like manner. In case of a non-member patron, any part of such sums of money owing him as such, may be applied to the payment of membership fees for him, and if so applied, when such fees are fully paid a membership certificate shall be issued to him. When any non-member offers his product and the Association accepts it for sale, such offer and acceptance shall be deemed an application for membership.

Section 2. Any member who fails to carry out his agreement, or fails or refuses to deliver to the Association for sale the pledged products, shall pay to the Association, as liquidated damages, the sum of four cents for each gallon of milk not delivered by him; said sum may be deducted from any money in the possession of the Association due the member. Any such claim shall be a lien upon the member's loan note. A like amount will be considered as liquidated damages for failure of the Association to fulfill the provisions of its contract.

ARTICLE XIX

Accounts and Auditing

Section 1. This Association shall install a standard system of accounts, and provide accounting appurtenances that may be necessary to conduct the business in a safe and orderly manner.

Section 2. A complete annual audit of the books and business of the Association shall be made by a competent accountant previous to the date of the regular annual meeting, at which meeting a report of such audit shall be presented in full. Special audits shall be made upon order of the Board of Directors, or upon a majority vote of the members at any regular or called meeting.

ARTICLE XX

Amendments

Section 1. These By-Laws may be amended at any meeting by a two-thirds vote of the members present in the affirmative, provided, that notice of such amendment is included in the call of said meeting.

AMENDMENTS

Amendment 1. Regularly proposed and adopted at Annual Meeting held August 23rd, 1919. Section 1 of ARTICLE VI is hereby amended as follows:

The Board of Directors of this Association shall be increased from nine to twelve members. These additional members shall be divided into three classes, in the same manner as provided for the original number. Upon approval of this amendment, the members of the Association shall elect from among themselves, in addition to the three necessary to fill the places of those whose terms are regularly expired, three directors; one for a term of one year, one for a term of two years, and one for a term of three years. At the expiration of the terms, of the directors so elected, their successors shall be elected for terms of three years, after the manner originally provided in Section 1 of ARTICLE VI.

Amendments regularly proposed and adopted at the annual meeting held August 27, 1927:

ARTICLE III

Section 4. Any member violating his contract with the Association shall forfeit his rights to any equity that he may have in the reserve fund, or other property of the Association.

ARTICLE VI

Section 3. A vacancy in the Board of Directors shall be filled for the unexpired term by the other directors, and such new director shall hold office until the election of his successor.

Section 5. Upon charges preferred, and sustained, after full hearing by the Board, an officer or member may, by a three-fourths vote of the entire Board, be suspended, pending action by the Association at a regular, or called, meeting, to be held within thirty (30) days of such action by the Board.

ARTICLE XI

Section 3. The Association shall establish a reserve fund of at least \$500,000, to insure its members against loss by failure of dealers to pay the producer for his product, or for any other exigencies pertaining to the orderly marketing of the Association's milk.

Amendments regularly proposed and adopted at the annual meeting held August 25, 1928:

ARTICLE IV

Section 2. The annual meeting of the Association shall be held at some suitable place in the City of Baltimore, on the last Saturday in August of each year.

ARTICLE VI

Section 1. The Association shall call a meeting of its member producers, each year, in each county in which a director's term expires to be held at the county seat, or some other suitable place. The member producers present at such meeting shall, by a majority vote, elect two member producers from that county as delegates to serve on a nominating committee with delegates elected in like manner from other counties in which a director's term expires. The delegates so elected shall serve with four member producers appointed by the president and representing those counties which have no directors to elect, and these twelve members so appointed shall constitute the Nominating Committee, the duty of which shall be to meet at the annual meeting and nominate men to be voted on, at the annual meeting, for directors for the three years following.

In the event a county fails to elect such delegates, or the delegates so elected fail to attend the annual meeting, the president of the Association shall then appoint delegates to act for such county.

These county meetings shall be held at least fifteen (15) days prior to any annual meeting.

ARTICLE VI

Section 4. Seven members of the Board of Directors shall constitute a quorum at any meeting of the Board of Directors.

Amendments regularly proposed and adopted at the annual meeting held August 31, 1929:

ARTICLE V

Section 1. The fiscal year of the Association shall be the calendar year.

Section 2. The annual meeting shall be held at some suitable place in the City of Baltimore, to be selected by the Board of Directors, as soon after the end of the year as deemed advisable by the Board of Directors, but in no case later than January 31st.

SOURCE: I. W. Heaps, Twenty Years of Cooperative Milk Marketing in Baltimore, pp.4-14.

APPENDIX 2

CONTRACT OF

THE MARYLAND STATE DAIRYMEN'S ASSOCIATION, INC.

Contract of.....P. O. Address.....

County.....

Whereas, the dairymen of the State of Maryland have entered into a Co-operative Association in order to encourage better and more economical methods of milk production; to secure better results in marketing and advertising the dairy products of its members; to cultivate the co-operative spirit among dairymen and to perform any other work which may tend to the betterment of its members and the general benefit of the dairy industry.

This agreement, made this.....day of..... 192..., by and between the Maryland State Dairymen's Association, Inc., party of the first part, hereinafter known as the Association, and of....., party of the second part, hereinafter known as the Producer.

Witnesseth, That, in consideration of One Dollar (\$1.00) paid by the Producer to the Association as a membership fee, the receipt of which is hereby acknowledged, and of the covenants and agreements herein contained, the said parties have agreed, and do hereby agree as follows:

1. That the Producer hereby agrees to consign and hereby does consign to the Association as agent, for a term of years, for sale, all milk produced on the farms controlled by the Producer except such milk as is required for home, farm or local consumption for and during the term beginning....., 192..., to192..., and thereafter for six months periods, unless thirty days notice is given in writing by either party before the expiration of any contract period, and the Producer further agrees to deliver said milk, pure and unadulterated in condition suitable for sale in the city of Baltimore, or other markets designated by the Association, to such shipping stations, condenseries, milk plants, creameries, cheese factories or other dairy marketing and distributing plants or buyers of milk and dairy products, as may be designated by the Association, or if the Association shall be unable to sell or otherwise dispose of said milk during any portion of the contract period said Producer shall be notified and in such an emergency it shall be optional to the Producer to manufacture said milk into milk products at home or otherwise dispose of them, but said

inability of the Association to sell or dispose of said milk, when said notice thereof is given, shall in no event be considered a breach of or failure to perform this contract.

2. The Association agrees, as such agent of the Producer, to sell and dispose of the said milk consigned to it by the Producer to the best advantage possible, and to remit the proceeds thereof to the Producer, less the commission hereinafter mentioned, and at its option may authorize the purchaser of milk from it to pay direct to the Producer all of the purchase money except the amount due it as the commission hereinafter mentioned.

3. It is further agreed that the Association shall receive commission from the proceeds of the sales, of one cent for each gallon of milk sold during the term of this contract and the said commission of one cent for each gallon shall be deducted from the proceeds of sales and be paid to or received by the Association, therefore, and the Association shall receive a proportionate commission for cream sold by it.

4. It is agreed that in case the Producer fails to deliver his milk as required by this contract, he shall pay to the Association, as liquidated damages, the sum of four cents (4¢) per gallon for each gallon of milk not so delivered. A like amount will be considered as liquidated damages for failure of the Association to fulfill the provision of its contract.

5. The said Producer agrees that, in case he is offered a price for his dairy products in excess of the price then obtainable by the Association, he will turn over said bid to the Association to be filled from products promised to the Association.

6. The said Producer agrees that, at the time of uniting with the Association as a member, or at any time thereafter (during the continuance of this agreement), when called upon by the Board of Directors of the Association, he will give a negotiable promissory note, payable on demand, to the order of the Association, in the sum of one dollar (\$1.00) for each cow owned by the said Producer, the milk of which is to be marketed through the Association; provided that in no case shall said note be for a less sum than Fifteen Dollars (\$15.00).

7. It is mutually agreed by the said Association and the said Producer that the said notes shall be available in the settlement of any liquidated damages that may result from the failure of the said Producer to perform his contract with the Association, that such notes shall be the property of the said Association for the purpose of being pledged by the Board of Directors of the Association as collateral security for any loan that may be necessary and authorized in the conduct of the business of the Association, and that such notes shall not be used for any other purpose.

8. It is mutually agreed, by the said parties to this agreement, that the By-Laws of the Maryland State Dairymen's Association, Inc., shall be deemed a part of this contract and its provisions shall be applicable to all points not specifically covered by this agreement.

In witness whereof, the parties to these presents have hereunto set their hands and seals, the day and year first above written.

SOURCE: I. W. Heaps, Twenty Years of Cooperative Milk Marketing in Baltimore, pp. 15-17.

APPENDIX 4

MEMBERSHIP RECORDS

From the time the MSDA received its first membership contract, it kept cards on each member listing the member's address, the dates he shipped to certain dairies or receiving stations, and the number of cows he owned when he first joined the cooperative. The herd size was recorded because the membership contract required each member to give a promissory note totalling one dollar for every cow, or a least fifteen dollars, to the association for use in emergencies. Because all old contracts and records have been destroyed, these cards are the only remaining documents about individual farmers. Some of them have also been lost. The records studied for the following tables include only those members who signed contracts in 1936 when the cooperative was reorganized. Although these cards do not contain information on all members, they do indicate the trends in geographic distribution and herd size discussed in other sources. The following tables present the data on MSDA members for four years during the early history of the cooperative. By 1920, membership in the association had reached over 2500 and included about 97 percent of all Baltimore's shippers. Membership grew to 3800 by 1924 and remained at that level for the rest of the decade, with only a few fluctuations. I selected 1929 because it was the last year of good prices before the depression hit the Maryland dairy industry and 1934 because it was the last full year the cooperative operated as the Maryland State Dairymen's Association.

TABLE 1

NUMBER OF MEMBERS PER COUNTY

	Number of farmers per county				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams	3	10	10	11	.2	.5	.5	.3
Baltimore	298	357	474	589	20.7	19	19.2	18.4
Carroll	513	681	879	1163	35.6	36.5	35.6	36.3
Frederick	120	153	182	279	8.3	8.2	7.4	8.7
Harford	352	451	550	689	24.4	24.1	22.3	21.5
Howard	49	67	125	156	3.4	3.6	5.1	4.9
Montgomery	2	11	15	25	.1	.6	.6	.8
York	105	138	234	290	7.3	7.4	9.5	9.1
Total	1442	1868	2470	3202				

TABLE 2

NEW MEMBERS PER COUNTY

	Number of members per county				Percent of total			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams	3	7	1		.2	1.5	.2	
Baltimore	298	67	123	107	20.7	13.8	19.2	15.6
Carroll	513	193	208	271	35.6	39.9	32.4	39.5
Frederick	120	40	39	86	8.3	8.3	6.1	12.5
Harford	352	109	105	130	24.4	22.5	16.4	19
Howard	49	21	57	36	3.4	4.3	8.9	5.3
Montgomery	2	9	5	10	.1	.2	.8	1.5
York	105	38	104	46	7.3	7.9	16.2	6.7
Total	1442	484	642	686				

TABLE 3

NUMBER OF MEMBERS, BY DISTANCE FROM BALTIMORE

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
under 10 miles	7	7	11	17	.5	.4	.5	.5
11 to 20 miles	237	281	375	458	16.4	15	15.2	14.3
21 to 30 miles	506	592	807	1019	35.1	31.7	32.7	31.8
31 to 40 miles	467	669	863	1144	32.4	35.8	34.9	35.7
41 to 50 miles	169	251	339	469	11.7	13.4	13.7	14.7
51 to 60 miles	56	68	75	95	3.9	3.6	3	3
Total	1442	1868	2470	3202				

TABLE 4

NEW MEMBERS, BY DISTANCE FROM BALTIMORE

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
under 10 miles	7	1	3	6	.5	.2	.5	.9
11 to 20 miles	237	52	97	86	16.4	10.7	15.1	12.5
21 to 30 miles	506	96	217	209	35.1	19.8	33.8	30.5
31 to 40 miles	467	228	216	250	32.4	47.1	33.6	36.4
41 to 50 miles	169	90	98	120	11.7	18.6	15.3	17.5
51 to 60 miles	56	17	11	15	3.9	3.5	1.7	2.2
Total	1442	484	642	686				

TABLE 5

AVERAGE HERD SIZE FOR NEW MEMBERS

	All members				Members shipping to dairies				Members shipping to Receiving stations			
	1920	1924	1929	1934	1920	1924	1929	1934	1920	1924	1929	1934
Adams	13.3	13.6	19		13.3	13.6	19					
Baltimore	15.2	12.9	14.8	17	17.2	13.1	15.3	17.8	9.9	8.7	11.2	9.5
Carroll	13.1	11	11.3	11.4	13.7	12.2	12.4	12.2	10.3	10.6	11.2	11
Frederick	12.7	11.5	13.4	12.6	12.7	11.4	14.4	16.4	10.8	11.5	13.2	11.8
Harford	16.8	14.3	18	15.4	17.5	16.6	16.4	16.2	14	13.1	20.8	13.3
Howard	15.3	15.9	15.6	15.3	15.5	15.9	15.6	15.3	8			
Montgomery	19	10.6	12.6	11.8	24	20	14	11.8	14	9.4	7	11.8
York	10.5	10.8	10.6	10.6	10.5	11.2	14.7	14.6	10.5	10.5	8.5	10.1
under 10 miles	20.6	18	15.3	24	20.6	18	15.3	24				
11 to 20 miles	17.2	15.3	16.1	19	18.3	15.4	16.1	19.4	11.2	11	16	12
21 to 30 miles	14	13.1	14.4	13.2	14.8	13.5	14.8	14	10.1	11.6	12.7	9.8
31 to 40 miles	14.1	11.9	13.1	12.3	15	12.7	13.9	13	11.9	11.7	12.7	11.8
41 to 50 miles	11.9	10.4	10.5	11.5	12.3	12.9	10.6	16.1	10.2	9.8	10.5	11
51 to 60 miles	12.3	12.9	11	11.1	12.3	11	19	11.5	9.1	16.5	10.2	10.9
Total	14.3	11.6	13.5	13.3	15.1	13.7	15	15.5	11.1	10.1	11.8	11.3

TABLE 6

MEMBERS SHIPPING TO DAIRIES

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams	3	9	10	10	100	90	90.9	90
Baltimore	214	297	396	495	71.8	83.2	83.5	84
Carroll	418	337	299	397	81.8	49.5	34	34.2
Frederick	103	82	44	54	85.8	53.6	24.2	19.4
Harford	284	275	324	393	80.6	61	58.9	57
Howard	48	66	125	155	98	98.5	100	99.4
Montgomery	1	3	6	9	50	27.3	40	36
York	59	68	58	24	61.9	49.3	24.8	8.3
under 10 miles	7	7	11	17	100	100	100	100
11 to 20 miles	198	253	346	422	83.5	90	92.3	92.1
21 to 30 miles	418	503	626	808	82.6	85	77.6	79.3
31 to 40 miles	325	241	202	224	69.2	36	23.4	19.6
41 to 50 miles	139	94	56	46	82.2	37.5	16.5	9.9
51 to 60 miles	43	39	21	20	76.8	57.4	28	21.1
Total	1130	1137	1262	1537	78.3	60.9	51.1	48

TABLE 7

MEMBERS SHIPPING TO RECEIVING STATIONS

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams		1	1	1		10	9.1	9.1
Baltimore	84	60	78	94	28.2	16.8	16.5	16
Carroll	95	344	580	766	18.2	50.5	66	65.8
Frederick	17	71	138	225	14.2	46.4	75.8	80.6
Harford	68	176	226	296	19.4	39	41.1	43
Howard	1	1		1	2	1.5		.6
Montgomery	1	8	9	16	50	72.7	60	64
York	46	70	176	266	38.1	50.7	75.2	91.7
<hr/>								
under 10 miles								
11 to 20 miles	39	28	29	36	16.5	10	7.7	7.9
21 to 30 miles	88	89	181	211	17.4	15	22.4	20.7
31 to 40 miles	142	428	661	920	30.8	64	76.6	80.4
41 to 50 miles	30	157	283	423	17.8	62.5	83.5	90
51 to 60 miles	13	29	54	75	23.2	42.6	72	78.9
<hr/>								
Total	312	731	1208	1665	21.7	39.9	48.9	52

TABLE 8

NEW MEMBERS SHIPPING TO DAIRIES

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams	3	7	1		100	100	100	
Baltimore	214	64	109	97	71.8	95.5	88.6	90.7
Carroll	418	46	61	82	81.8	23.8	29.3	30.3
Frederick	103	11	5	12	85.8	27.5	12.8	14
Harford	284	38	69	82	80.6	34.9	65.7	63
Howard	48	21	57	36	98	100	100	100
Montgomery	1	1	4	4	50	11.1	80	40
York	59	16	25	5	61.9	42.1	24	10.9
under 10 miles	7	1	3	6	100	100	100	100
11 to 20 miles	198	50	95	82	83.5	96.1	98	82
21 to 30 miles	418	78	166	168	82.6	81.3	76.5	80
31 to 40 miles	325	47	57	48	69.2	20.1	26.4	18.8
41 to 50 miles	139	17	9	12	82.2	18.9	9.2	10
51 to 60 miles	43	11	1	2	76.8	64.7	9.1	13.3
Total	1130	204	331	318	78.3	42.2	51.6	46.4

TABLE 9

NEW MEMBERS SHIPPING TO RECEIVING STATIONS

	Number of members				Percent of total members			
	1920	1924	1929	1934	1920	1924	1929	1934
Adams								
Baltimore	84	3	14	10	28.2	4.5	11.4	9.3
Carroll	95	147	147	189	18.2	76.2	70.7	69.7
Frederick	17	29	34	74	14.2	72.5	87.2	86
Harford	68	71	36	48	19.4	65.1	34.3	37
Howard	1				2			
Montgomery	1	8	1	6	50	88.9	20	60
York	46	22	79	41	38.1	57.9	76	89.1
under 10 miles								
11 to 20 miles	39	2	2	4	16.5	3.9	2	4.7
21 to 30 miles	88	18	51	41	17.4	18.7	23.5	20
31 to 40 miles	142	181	159	202	30.8	79.9	73.6	81.2
41 to 50 miles	30	73	89	108	17.8	81.1	90.8	90
51 to 60 miles	13	6	10	13	23.2	35.3	90.9	86.7
Total	312	280	311	368	21.7	57.8	48.4	53.1

SELECTED BIBLIOGRAPHY

Cooperative Records

Unfortunately for the historian, most of the records belonging to the Maryland State Dairymen's Association were destroyed in the 1950s when the cooperative moved to new offices. Of the remaining documents, the Minutes books are the most valuable source. Beginning with the first meeting of the reorganization committee in 1918, the books contain reports of all directors' meetings, special committee meetings, and the annual meetings. They also contain the officers' reports made at the annual meetings. The cooperative also has a small historical file which includes copies of some health department statistics, annual meeting programs, some government reports on the association, and copies of the licensing agreements with the Agricultural Adjustment Administration. To commemorate certain anniversaries, the cooperative prepared short histories, usually basing them on the book written by the first manager, I. W. Heaps. Twenty Years of Cooperative Milk Marketing in Baltimore (privately printed, 1938) remains the best source for information on the development of the cooperative's marketing plan. Heaps included copies of the relevant documents such as the by-laws and membership contract in addition to detailed tables on milk prices in Baltimore.

Periodicals

Because of the paucity of the records retained by the cooperative, local periodicals remain the best sources for information about the development of Maryland farm organizations, including the MSDA. The Sun, Baltimore's leading daily newspaper, focused a great deal of attention on farmers' activities, especially if they affected city residents. Because of the necessity of milk for protecting the health of city children, the newspaper remained interested in the activities of dealers and milk producers.

Central Maryland rural papers are much harder to find. The

best paper to use to study rural reactions to developments in the city is the weekly Harford County Aegis, published in Bel Air. In print from the 1860s to the present, the Aegis was often edited and owned by farmers. It covered the activities of the local farmers' clubs, the rise of rural politicians, and the growth of local cooperatives. Its editorials provide an excellent summary of rural opinions on the events of the era.

In 1918, the Maryland Farmer resumed publication following a hiatus of several decades. Its editors supported the new cooperatives in the state which, in turn, used the magazine as their official organ. The MSDA, the Maryland-Virginia Association, and the Tobacco Growers' Cooperative sent the magazine to all their members. Beginning as a weekly, it was published twice monthly during the twenties. In 1929, the MSDA purchased the periodical, but it retained the current editor and kept it as a general farming magazine. In the early thirties, the Maryland Farmer began to publish only one issue per month.

Government reports

Although periodicals remained the best sources, several government reports provide valuable information on the changes in the Baltimore milk market. The earliest report on urban milk supplies was the report of the USDA Animal Industry Bureau (Bulletin 46), The Milk Supply of 200 Cities and Towns, written by H. E. Alvord and R. A. Pearson in 1903. Several useful articles on cooperatives and milk marketing appeared in the USDA Yearbooks during the 1920s. A valuable USDA study on milk transportation in the milk shed was: "Transportation of Milk by Motor Truck," in Public Roads: A Journal of Highway Research, July 1924: 1-18. A comprehensive study on milk distribution and sale in Baltimore and several other cities was released on June 4, 1936 by the Federal Trade Commission.

Other primary sources

Some of the best information on agricultural conditions in Maryland are found in the reports of the county extension agents. First appearing in Maryland in 1912, the Extension Service encouraged agricultural development in Maryland. County agents combined statistics on crops, livestock, and organizations with their personal observations on the farmers they served in their annual reports. These reports,

available on microfilm at the McKeldin Library at the University of Maryland, were summarized in the published reports of the state director of the Extension Service.

Other useful published reports are those of the Maryland Agricultural Society and its affiliates and the American Institute of Cooperation (AIC). The AIC reports provide excellent information on the concerns of the founders of the early marketing cooperatives. As in the speeches of I. W. Heaps, who appeared at many AIC meetings, the discussions and talks given by these leaders display their marketing philosophies.

Secondary Sources

General information on the national cooperative movements and the dairy industry can be found in: Roland W. Bartlett, Cooperation in Marketing Dairy Products (Springfield, Illinois: Charles C. Thomas, 1931); Joseph G. Knapp, The Rise of American Cooperative Enterprise: 1620-1920 (Danville, Illinois: The Interstate Printers and Publishers, 1969) and The Advance of American Cooperative Enterprise: 1920-1945 (1973); and Ralph Selitzer, The Dairy Industry in America (New York: Dairy and Ice Cream Field and Books for Industry, 1976).

Few sources are available which describe the development of farm organizations in Maryland. A mediocre account of the growth of the state Grange is: Mary and Eben Jenkins, The First Hundred Years: Maryland State Grange, 1874-1974, published by the Grange in 1974. The dairy industry is also ignored in Baltimore business histories. The most useful source on the development of city health regulations and their effects on dealers is: William Travis Howard, Public Health Administration and the Natural History of Disease in Baltimore, Maryland, 1797-1920 (Washington: Carnegie Institution of Washington, 1924).