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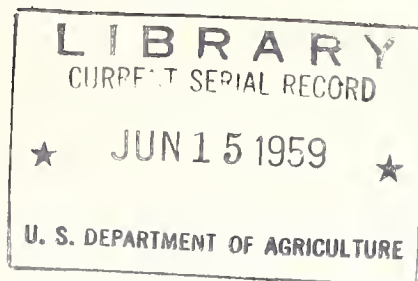
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General Report 61
May 1959

Integrated Operations...

Hamilton Farm Bureau Cooperative

by Martin A. Abrahamsen

FARMER COOPERATIVE SERVICE

U.S. DEPARTMENT OF AGRICULTURE

FARMER COOPERATIVE SERVICE
U. S. DEPARTMENT OF AGRICULTURE
WASHINGTON 25, D. C.

Joseph G. Knapp, Administrator

The Farmer Cooperative Service conducts research studies and service activities of assistance to farmers in connection with cooperatives engaged in marketing farm products, purchasing farm supplies, and supplying business services. The work of the Service relates to problems of management, organization, policies, merchandising, product quality, costs, efficiency, financing, and membership.

The Service publishes the results of such studies; confers and advises with officials of farmer cooperatives; and works with educational agencies, cooperatives, and others in the dissemination of information relating to cooperative principles and practices.

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Highlights

● This is the third in a series of case studies by Farmer Cooperative Service on the integrated operations of cooperatives. It is the first such study, however, of a local cooperative. While emphasis is on 1958 operations, limited information as to trends in association activities is shown from 1922 -- the date of beginning active business operations.

● The Hamilton Farm Bureau Cooperative, Inc., Hamilton, Mich. (hereafter referred to as HFBC), a local cooperative organized in 1920 by 140 farmers, now has nearly 2,000 active patrons. In 1958 it reported an annual volume of nearly \$6 million. Assets totaled about \$1 million, with over 95 percent of these accounted for by net worth. It primarily operates within a 10-mile radius of Hamilton, Mich. It thus largely serves farmers in the eastern half of Allegan County.

● Through a wide range of integrated and diversified operations, farmers are doing an effective job for themselves through this local association. Its operations primarily center on serving commercial egg producers and approximately 90 percent of its business is related to the poultry enterprise of patrons.

● The association estimates that in 1958 it provided the following percentages of selected production supplies for farmers in its trade area: feed, 66 to 80 percent; seed, 50 percent; poultry supplies

and equipment, 55 percent; baby chicks, 22 percent; fertilizer, 30 percent; petroleum products, 50 to 60 percent; machinery, hardware, and appliances, 25 percent; and building materials, 30 percent.

● In the same period it marketed the following percentages of farm products for patrons: eggs, 75 to 80 percent; dressed poultry, 75 to 80 percent; and grain, 50 to 60 percent.

● For the past several years the dollar volume of the association has been divided about equally between farm supplies and marketings.

● Principal integrating efforts of the association start with providing farm management and supervisory assistance, feed, and other production supplies for commercial egg producers. It rounds out its integrating efforts for the producers by marketing the eggs and fowl they produce.

● Of 22 important farm supply services related to egg production HFBC helps the farmer integrate his operations by providing 15 of these in whole or in part. Of the nine marketing services enumerated as related to marketing eggs and fowl, the association performs six of them.

● The association also provides farmers other than poultry producers with such production supplies as feed, fertilizer and lime, petroleum products, machinery,

hardware, appliances, and building materials.

● As a member of the Michigan Elevator Exchange, HFBC helps its farmers achieve greater integration in grain marketing.

● For greater service to farmers, this egg-oriented association may at some time want to examine further these possibilities: (1) Opportunities in the hatchery operation, (2) expansion of the fertilizer operations by obtaining more basic materials for fertilizer manufacturing from cooperatives or other suppliers, (3) providing food freezing and provisioning services, and (4) adjusting operations to such requirements

as may develop in the agriculture of the community.

● The operations of this association are dramatic evidence that a local association can successfully conduct extensive, integrated operations in the interest of its farmer members. Factors especially important in the accomplishments of this association are: (1) competent management, (2) an interested and informed membership, (3) sound financial structure, (4) a compact and concentrated area of operation, (5) effective credit control, and (6) a policy of performing substantially all basic services required by farmers in producing and marketing a highly specialized farm product -- eggs.

Integrated Operations . . . Hamilton Farm Bureau Cooperative

by **Martin A. Abrahamsen**

*Director, Purchasing Division
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This is the third in a series of case studies on the integrated operations of cooperatives to be undertaken by Farmer Cooperative Service.¹ It is the first such study, however, that deals specifically with the integration process as it has been developed by a local association. As such, it gives some indication of the ability of these organizations to adjust to the impacts of changing technology. Also, it focuses attention on the impacts of integration on production practices and marketing methods that local cooperatives must recognize and deal with if they are to serve members effectively.

Some measure of the local character of the operations of Hamilton (Mich.) Farm Bureau Cooperative, Inc., (hereafter referred to as HFBC) is indicated by the estimate of officials that 90 percent of all its business is done within a radius of 10 miles of Hamilton (figure 1). They further state that 95 percent of its farm supply and egg and poultry business and 100 percent of its grain marketing activities are with farmer members in its home county -- Allegan -- and primarily in the eastern half of this county. Three other local farm supply cooperatives also are located within the 10-mile radius in which HFBC operates, in Holland, Zeeland, and Benthim. The latter is a branch unit of the Dorr-Salem Cooperative. In addition a number of farm supply establishments other than cooperatives operate in the same area.

HFBC'S Agricultural Environment

A brief review of the agricultural environment of HFBC will be useful in explaining changes in the operations of that association.

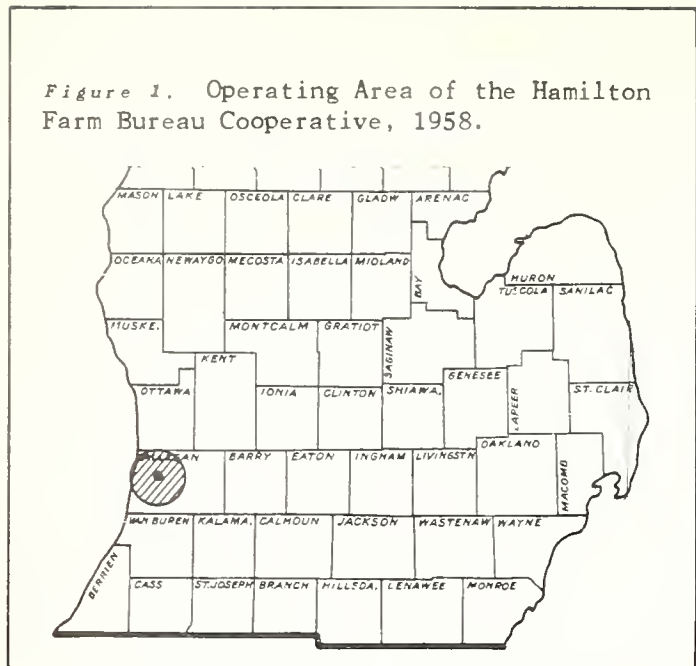
Table 1 shows the nature of trends in the agriculture of the area served by HFBC and the State of Michigan. In both Allegan County and the State the number

Note: Appreciation is expressed to Andrew G. Lohman, manager, and to other officials of the Hamilton Farm Bureau Cooperative, Inc., for their wholehearted cooperation in providing information and data on the operations of that association. Appreciation also is expressed for substantial help to John M. Bailey and J. Warren Mather, Farm Supplies Branch, and Harry E. Ratcliffe and John J. Scanlan, Poultry Branch, Farmer Cooperative Service.

¹Abrahamsen, Martin A. and Engberg, Russell C. Integrated and Related Operations of Central Carolina Farmers Exchange. Gen. Rpt. 44, Farmer Cooperative Service, U. S. Dept. of Agr. 1958.

Bailey, John M. and Engberg, Russell C. United Cooperative Farmers, Inc. - A Study in Economic Integration. Gen. Rpt. 45, Farmer Cooperative Service, U. S. Dept. of Agr. 1958.

Figure 1. Operating Area of the Hamilton Farm Bureau Cooperative, 1958.



of farms has decreased while the size of farms and the value of land and buildings per farm have increased. In all comparisons Allegan County, however, has shown less percentage change from 1940 levels than has the State.

The following tabulation indicates some of the relative changes in these items for both Allegan County and the State.

Comparison	Percentage increase or decrease 1954 over 1940	
	Allegan County	State
	Percent	Percent
Number of farms	-12	-26
Average acres per farm	+9	+24
Value of land and buildings per farm	+174	+219

Table 1. - Trends in number of farms, average acres per farm, and value of lands and buildings, Allegan County and State, 5-year intervals, 1954, 1950, and 1940

Year	Number of farms		Average acres per farm		Value of lands and buildings per farm	
	Allegan County	State	Allegan County	State	Allegan County	State
1954	4,225	138,922	86	119	\$12,620	\$15,495
1950	4,441	155,589	85	111	9,111	10,965
1940	4,775	187,589	79	96	4,615	4,865

Table 2 shows sources of cash farm income for Allegan County and the State of Michigan. Total cash farm income in the county and in the State has increased approximately three-fold since 1940. For both the county and the State increases have been relatively greater for crops than livestock. This is of special interest to the association, since its major emphasis is on service to egg producers. In its area of operations, however, returns from poultry and poultry products have increased relatively faster than have returns from other principal types of livestock and livestock products and from all crops.

The relative increase in cash farm income from 1940 to 1954 for selected items in Allegan County and in the State is shown in the following tabulation:

Item	Percentage increase 1954 over 1940	
	Allegan County	State
	Percent	Percent
<u>Livestock and livestock products</u>		
Dairy products	158	144
Cattle and calves	279	184
Hogs	275	199
Poultry and eggs	458	188
Other	(1)	43
Average	265	159
<u>Crops</u>		
Field crops	785	168
All other crops	214	386
Average	329	237
Average all items	287	187

¹Over 1,000 percent increase.

Table 2. - Trends in sources of cash farm income in Allegan County and State, 1954 and 1940

Item	Allegan County		State	
	1954	1940	1954	1940
\$1,000				
<u>Livestock and livestock products</u>				
Dairy products	4,174	1,621	174,499	71,394
Cattle and calves	1,560	412	76,619	26,996
Hogs	989	264	48,038	16,095
Poultry and eggs	4,484	804	70,238	24,372
Other	112	1	12,056	8,458
Total	11,319	3,102	381,450	147,315
<u>Crops</u>				
Field crops	2,902	328	151,789	56,695
All other crops	4,125	1,312	128,360	26,422
Total	7,027	1,640	280,149	83,117
Total all items	18,346	4,742	661,599	230,432
Percentage of total				
<u>Livestock and livestock products</u>				
Dairy products	22.8	34.2	26.4	31.0
Cattle and calves	8.5	8.6	11.6	11.7
Hogs	5.4	5.6	7.3	7.0
Poultry and eggs	24.4	16.9	10.6	10.5
Other	0.6	0.1	1.8	3.7
Total	61.7	65.4	57.7	63.9
<u>Crops</u>				
Field crops	15.8	6.9	22.9	24.6
All other crops	22.5	27.7	19.4	11.5
Total	38.3	34.6	42.3	36.1
Total all items	100.0	100.0	100.0	100.0

Table 3 shows trends in livestock numbers in both the county and the State: (1) "All cattle" numbers have shown steady increases, (2) the number of milk cows declined from 1940 to 1950 and then remained constant between 1950 and 1954, and (3) horse and mule numbers declined over 85 percent from 1940 to 1954.

During this same period sheep numbers declined nearly 50 percent in the

State but showed little change in the county. For the State, chicken numbers increased about 8 percent from 1940 to 1954. In the county, the increase was over 100 percent during this period. Expressed another way, Allegan County accounted for about 4.5 percent of all chickens in the State in 1940 and nearly 10 percent in 1954.

Comparative increases and decreases in livestock numbers in Allegan County

Table 3. - Trends in number of head of important classes of livestock, Allegan County and State, 1954, 1950, and 1940

Item	Allegan County			State		
	1954	1950	1940	1954	1950	1940
All cattle	44,953	42,542	39,029	1,839,326	1,696,054	1,540,768
Milk cows	20,265	21,318	24,696	777,643	794,341	923,779
Hogs	24,889	18,155	10,761	788,619	689,831	585,993
Sheep	4,832	3,340	4,493	464,774	387,684	857,232
Horses and mules	1,146	2,678	8,780	43,224	105,667	344,475
Chickens	1,055,110	589,155	458,233	10,773,064	8,456,310	10,023,267

and in the State from 1940 to 1954 were as follows:

Item	Percentage increase or decrease 1954 over 1940	
	Allegan County	State
	Percent	Percent
All cattle	+15	+19
Milk cows	-18	-16
Hogs	+131	+35
Sheep	+8	-46
Horses	-87	-88
Chickens	+130	+8

Table 4 shows trends in acreage for the principal grain crops grown in Allegan County. Since 1940 there has been an 80 percent increase in corn acreage coupled with a 42 percent increase in yield per acre. Restrictions on wheat acreages and a decline in fruit

and vegetable production coupled with good market outlets for feed as poultry production increased are important factors in explaining this trend. For instance census data indicate a decline in wheat acreage from 36,000 acres in 1950 to 22,000 acres in 1957.

More detailed information as to acreage trends shows that there was a change of +31 percent, +29 percent, -13 percent, and +60 percent, respectively, for corn, wheat, oats, and soybeans in the State of Michigan for the period 1955-57 as compared with 1940-44. During these same periods per acre yields increased 40 percent for corn, 36 percent for wheat, 14 percent for oats, and 47 percent for soybeans.

Estimated production and farm sales for the principal grain crops grown in Allegan County, expressed in terms of

Table 4. - Trends in acres harvested and average bushel yield per acre of principal grain crops grown in Allegan County for 1957, 1950, and 1940

Crop	1957		1950		1940	
	Acres	Yield	Acres	Yield	Acres	Yield
Corn	63,900	47	37,681	46	35,323	33
Wheat	22,000	27	35,921	21	22,581	19
Oats	29,000	35	34,356	38	26,020	35
Soybeans	200	18	148	11	852	13
Total	115,100	-	108,106	-	84,776	-

annual averages, were as follows for the 3-year period 1955-57:

Crop	Production 1,000 bushels	Sales	
		1,000 bushels	Percent
Corn	2,831.0	1,379.0	49
Wheat	655.0	541.0	83
Oats	1,222.0	350.0	29
Soybeans	6.0	5.7	95
Barley	188.0	42.0	23
Total	4,902.0	2,317.7	47

Further indication as to the relative importance of Allegan County in agriculture is shown by its ranking among the 83 counties in the State in the production of selected crops and in livestock

numbers. For the crop year 1957-58 these were:

Item	Ranking among counties in Michigan
<u>Crops</u>	
Corn	7
Oats	9
Winter wheat	21
Barley	2
Hay	8
Soybeans	29
Beans	37
Potatoes	14
<u>Livestock</u>	
All cattle	8
Milk cows	6
Hens and pullets	1
Sows farrowing	10

Operations of HFBC

HFBC was incorporated in 1920 as a general purpose cooperative designed to provide both purchasing and marketing services for farmers. During its early years of operation, major emphasis was on farm supply activities. Membership in 1920 was reported at

140 and sales in 1923, the first year of active business, totalled \$101,000.

Since then HFBC has grown greatly; its range of services has expanded to meet most basic needs of members; and in 1957 it reported a total of 961 stockholders, 1,948 patrons and sales of \$5.5

Table 5. - Assets, net worth, total volume, and net savings for Hamilton Farm Bureau Cooperative, Inc., 1958-1946.

Year	Assets	Net worth	Volume (marketing and farm supplies)	Net savings
1958	\$984,960	\$959,416	\$5,923,717	\$156,740
1957	929,307	870,433	5,635,982	103,222
1956	861,701	835,248	5,922,834	150,080
1955	833,095	833,095	5,821,212	119,587
1954	817,892	817,892	5,858,258	131,368
1953	795,579	760,103	5,959,759	165,323
1952	708,394	673,869	5,756,900	120,503
1951	646,675	616,779	5,868,824	138,196
1950	511,903	497,099	4,500,792	128,600
1949	475,564	475,564	4,185,126	100,056
1948	426,110	395,317	4,507,977	81,266
1947	377,036	368,487	3,984,526	95,623
1946	326,630	233,061	2,925,291	74,761



Aerial view of the Hamilton Farm Bureau Cooperative, Inc., Hamilton, Mich., with buildings identified: (1) Office; (2) old egg plant; (3) new egg plant addition; (4) garage; (5) implement; (6) hardware and appliances; (7) building supplies; (8) south feed plant; (9) oil plant; (10) oil truck garage; (11) coal yard; (12) warehouse; (13) fertilizer plant; (14) bulk feed ingredient plant and grain elevator; (15) lumber drying shed; (16) saw mill; (17) poultry processing plant; (18) and (19) implement warehouses; (20) ear corn drying crib; (21) ear corn elevator; (22) corn cob storage; and (23) north feed plant and bulk storage.

million. Since its beginning, total sales have amounted to \$81.5 million.

Since 1946, assets of HFBC have increased approximately three times, net worth is up over four times, total volume has about doubled, and net savings, while showing greater fluctuations, also have increased. Volume increases largely occurred from 1946 to 1950 and since then have changed comparatively little (table 5).

Table 6 gives information on trends in marketing and farm supply operations. Notable increases have occurred in the distribution of fertilizer. Building materials, feeds and seeds, and oil and gasoline have remained rather constant. Machinery, hardware, and appliances have shown considerable fluctuation and other supply items have declined in volume from the early 50's but are higher than during the period 1954-56.

As for marketings, important increases have occurred for grains and

poultry and eggs. Total marketings about doubled during the period 1946-58. The association has discontinued the marketing of fruits and vegetables, dairy products and other farm produce.

Throughout the 13-year period, 1946-58 inclusive, the relative proportion of business accounted for by farm supplies and marketings has remained at around 50 percent of the total for each class of items. The period 1954-56 was an exception. Then marketings accounted for a greater proportion of total business, reaching a high of 60.1 percent in 1955.

While this report does not examine the operations of HFBC in detail, consideration of gross volume by principal items will be useful in gaining a better overall understanding of operations. For the fiscal year ending December 31, 1957, patrons' marketings and purchases and gross margins are shown on top of page 8.

Table 6. -Trends in the marketing and farm supply operations of Hamilton Farm Bureau Cooperative, Inc. 1946-58

Year	Purchasing farm supplies							Total
	Fertilizer and lime ¹	Oil and gasoline	Machinery, hardware, and appliances	Building material	Feed and seed	Other	Total	
1958	\$186,898	\$349,512	\$258,823	\$291,364	\$1,513,449	\$165,311	\$2,765,357	
1957	146,921	330,016	42,156	296,548	1,704,382	178,068	2,698,091	
1956	131,456	306,082	188,493	382,119	1,354,553	15,000	2,377,703	
1955	156,000	292,000	76,000	333,000	1,455,212	10,000	2,322,212	
1954	140,000	270,000	83,000	377,000	1,697,258	10,000	2,577,258	
1953	121,428	257,051	106,510	334,692	1,445,106	588,220	2,853,007	
1952	98,000	321,100	104,500	351,000	1,704,300	470,500	3,049,400	
1951	97,740	321,056	104,257	350,946	1,749,054	470,300	3,093,353	
1950	94,138	221,246	114,466	273,804	1,501,614	(2)	2,205,268	
1949	86,480	210,315	108,511	260,133	1,272,123	(2)	1,937,562	
1948	84,540	205,185	97,033	255,901	1,525,201	(2)	2,167,860	
1947	91,140	198,191	91,306	298,161	1,012,344	(2)	1,691,142	
1946	78,310	189,046	87,161	225,307	726,543	(2)	1,306,367	
Year	Marketing farm products				Total supplies and marketing			
	Grain	Poultry and eggs	Other	Total	Amount	Percent supplies	Percent marketing	
1958	\$304,000	\$2,854,360	(2)	\$3,158,360	\$5,923,717	46.7	53.3	
1957	198,000	2,739,891	(2)	2,937,891	5,635,982	47.9	52.1	
1956	700,000	2,845,131	(2)	3,545,131	5,922,834	40.1	59.9	
1955	710,000	2,789,000	(2)	3,499,000	5,821,212	39.9	60.1	
1954	760,000	2,521,000	(2)	3,281,000	5,858,258	44.0	56.0	
1953	215,211	2,891,541	(2)	3,106,752	5,959,759	47.9	52.1	
1952	400,000	2,300,000	\$7,500	2,707,500	5,756,900	53.0	47.0	
1951	424,000	2,343,833	7,638	2,775,471	5,868,824	52.7	47.3	
1950	279,759	1,979,125	36,640	2,295,524	4,500,792	49.0	51.0	
1949	141,000	1,912,745	193,819	2,247,564	4,185,126	46.3	53.7	
1948	135,000	1,978,994	226,123	2,340,117	4,507,977	48.1	51.9	
1947	165,000	1,903,032	225,352	2,293,384	3,984,526	42.4	57.6	
1946	156,562	1,418,267	44,095	1,618,924	2,925,291	44.7	55.3	

¹The handling of lime was discontinued in 1941.

²Not reported separately.

<u>Item</u>	<u>Marketings for and purchases by patrons</u>		<u>Gross margins</u>	
	<i>Amount</i>		<i>Amount</i>	<i>Percent of volume</i>
Elevator	\$1,425,584		\$226,647	15.9
Coal	31,719		1,721	5.4
Fertilizer and lime	146,801		19,616	13.4
Oil and gasoline	240,988		20,192	8.4
Eggs	2,455,331		101,753	4.1
Poultry	263,125		(2,512)	.9
Machinery	42,136		(1,624)	3.9
Hardware, appliances, and labor	175,983		19,035	10.8
Building materials	282,879		11,988	4.2
Total	5,064,546		396,816	7.9

By years the following are among the more important developments in opera-

tions as reported by management in the growth of this cooperative:

- 1922 - South elevator built 60' x 36'.
- 1923 - West part of pickle factory warehouse purchased.
- 1924 - Coal yards built and creamery bought.
- 1925 - Oil department established - tank truck for delivery to farmers purchased.
- 1926 - Egg buying started.
- 1929 - Garage built. Cars sold.
- 1931 - Eggs were shipped to New York.
- 1932 - Office and egg plant built.
- 1933 - First poultry dressing plant established and horse sheds were remodeled for feeding poultry.
- 1934 - Hammer mill installed for feed grinding.
- 1936 - Celery trucked to Chicago. Built first fertilizer plant.
- 1937 - Addition to garage built.
- 1939 - Silos for grain storage built.
- 1940 - North elevator purchased.
- 1942 - Building for appliance store purchased.
- 1945 - Purchased 25 acres for expansion. Silos built to increase grain storage.
- 1946 - Building and supply business started. Built saw mill and began lumber yard operations.
- 1947 - New poultry dressing plant completed.
- 1948 - New cement block warehouse built.
- 1949 - Bulk feed delivery started. New fertilizer building built.
- 1951 - Grain dryer installed.
- 1952 - Bulk mixed feed storage building built.
- 1953 - Bulk fertilizer spreading service started. Bulk feed ingredient storage building and new wheat elevator built.
- 1955 - Ear corn drying and storage facilities erected.
- 1956 - Corn elevator and cob storage built. New hardware and appliance store completed.
- 1957 - A 60' x 154' addition to egg plant was completed.
- 1958 - New electronic egg handling equipment installed. Hamilton premium egg quality program started.

Integrated Services for Poultrymen

The HFBC primarily centers its operations on the commercial egg enterprise of its members. In 1958, for instance, between 75 and 80 percent of its dollar volume was accounted for by poultry feed, eggs and poultry.

Moreover, the \$1.2 million of farm supplies handled in addition to poultry feed included a number of items used on poultry farms. In this amount was building material; farm machinery, hardware, and appliances; petroleum and related products; and fertilizer.

When these items are taken into account it seems reasonable to estimate that 90 percent of the business of HFBC can be attributed directly to the poultry enterprises of its patrons. In addition, however, grain is marketed for, and a wide range of production supplies also is distributed to, other farmers.

In this report attention primarily is given to the contributions of the association to the commercial egg enterprise of its farmer members. Also included is a brief review of the other services provided by HFBC.

Production Services

In this study the production services provided by the Hamilton Farm Bureau Cooperative, Inc., were classified as follows: grower service programs, furnishing baby chicks, feed milling, and related activities.

Grower Service Programs

HFBC has an active program of grower service. Through field-service activities, it provides assistance to



Electronic egg handling equipment installed by Hamilton Farm Bureau Cooperative to expedite the commercial egg enterprise of its members, the major operation of this co-op.

growers on problems of feeding, sanitation, and quality control. Within the past year a retired poultry specialist from Michigan State University has been employed to enable grower members to get the benefits of the association's own "extension program."

The association places special emphasis on helping members improve the marketability of their eggs through better handling practices on the farm. It gives advisory assistance on such matters as gathering, washing, cooling, and packing eggs. For details on this program see procedures outlined in appendix A. While it has been the accepted practice of the association to permit members to follow their own wishes with regard to compliance with improved production practices, producer acceptance of the quality egg program has continued to gain ground.

A premium egg program was initiated on July 1, 1958. Basic provisions of this program include following approved practices and cash inducements for quality production. As of October 1, the association reported that half of the member eggs were under this program. At that time a 1 cent premium per dozen was given growers. This program provides that producers agree to: (1) Market at least 95 percent of the eggs through HFBC, (2) deliver eggs to the association at least twice weekly, (3) feed only HFBC feeds, (4) produce only in fertile eggs, and (5) produce eggs that grade at least 80 percent Grade A.

The association, in turn, maintains the right to: (1) Declare flocks ineligible for premiums when over 1 percent of the eggs show blood spots, and (2) determine premium payments on the 15th of each month (the amount to be determined by the demand for such eggs and grade price differentials according to seasonal considerations). The contract also provides for Federal and State grading. For further details as to agree-

ment provisions of this program see appendix B.

Furnishing Baby Chicks

Providing baby chicks, pullets, and breeding birds are the only related services that are not a part of the integrated egg program of HFBC. While it handles baby chicks for members, these are obtained from a local private hatchery for which the association serves as a dealer. No specific program exists for providing pullets and breeding birds, but through its field service and the advice of management the association often is in position to help members in their flock improvement programs.

Feed Milling

HFBC has been in the feed business since 1923. Its first feed mill began operations in 1923 and the second one was purchased in 1940. The association started grinding feed in 1920 with a portable grinder and a tractor. Bulk delivery of feed was started in 1949 and at the present time the association estimates that 50 percent of its feeds move to farms on a bulk basis. In 1956 HFBC installed corn cob crushing and storage facilities.

Trends in tons of feed handled and values of sales to farmers, for the past 5 years were:

<u>Year ended</u> <u>December 31</u>	<u>Tons</u> <u>handled</u>	<u>Estimated</u> <u>value</u>
1958	13,565	\$1,883,335
1957	12,373	1,712,144
1956	12,160	1,219,098
1955	11,719	1,309,691
1954	12,982	1,527,533

On the basis of 1954 census data, HFBC handled an estimated 35 to 40 percent of all the poultry and dairy feed



In its trade area, the co-op furnishes from two-thirds to four-fifths of the feed purchased by farmers. Pictured is the south feed plant.

used by farmers in the county. This suggests that the association provided between two-thirds and four-fifths of the feed used by farmers in its trade area -- the eastern half of the county. This primarily was poultry feed but in addition a limited amount of dairy and other feeds were handled for members.

Related Activities

HFBC handles a complete line of producers' poultry equipment and supplies. In addition it provides petroleum and related products; fertilizer and lime; building material; and machinery, hardware, and appliances -- all items needed to round out the successful oper-

ation of modern poultry farms. These are discussed in detail in the section that considers other business services beginning on page 13.

Marketing

The marketing program of the association as it relates to the poultry enterprise is concerned with the sale of commercial eggs and the processing and sale of fowl.

Commercial Eggs

Egg marketing activities were first started in 1926 and since then stress on



Loading bulk feed in a delivery truck from overhead bins. The association now delivers about half of its feed in bulk to farmers.

improvement in quality has been continuous. Currently emphasis is on selling eggs in Michigan through jobbers in the larger cities of Michigan under the association's quality brand -- "Hamilton Eggs." The marketing program always has been geared to market conditions and prices. For instance, eggs were first shipped to New York in 1931 and for a number of years Eastern cities were important outlets.

In 1958 the association installed electronic egg handling equipment. This is among the most modern equipment of its type in the world and as far as is known it is used by only three other cooperatives in the United States. The quality determination features made possible by this equipment provided the basis for the association's going into its premium egg quality program.

On the basis of Census data for 1954, HFBC marketed between 50 and 60 percent of the eggs produced in Allegan County and about 75 percent of eggs produced in its trade area.

Trends in the egg business of HFBC for the past 5 years are shown the following summary:

<u>Year ended</u> <u>December 31</u>	<u>Cases of</u> <u>eggs sold</u>	<u>Sales</u>
1958	205,892	\$2,638,963
1957	196,234	2,421,857
1956	198,903	2,569,942
1955	182,196	2,502,588
1954	173,861	2,219,212

In addition to fresh eggs, limited amounts of eggs are frozen and canned. These primarily are marketed through bakeries and provide an outlet for cracked and broken eggs as well as some eggs that do not qualify for the association's shell pack top grades. The value of such eggs handled in 1958 amounted to approximately \$70,000.

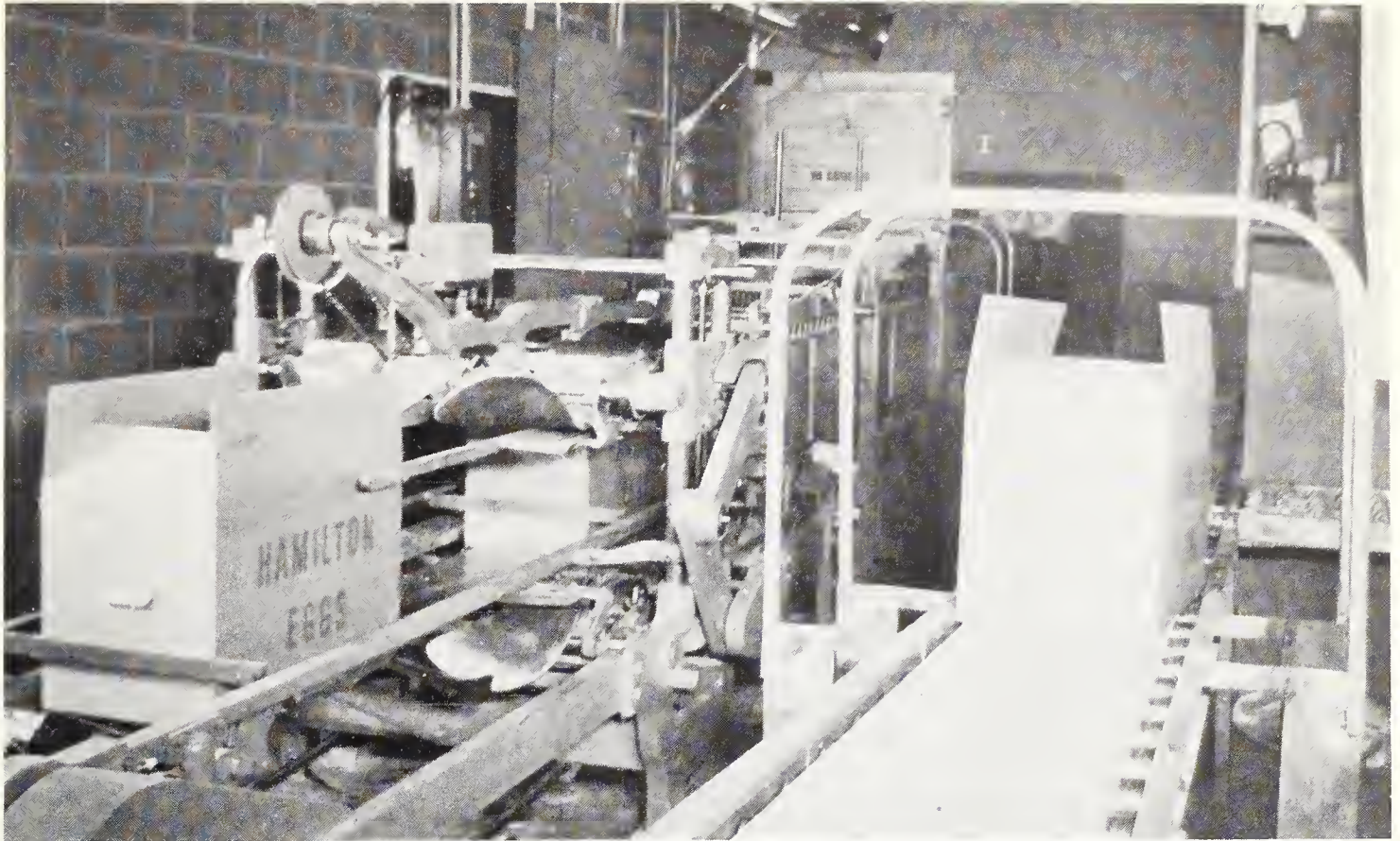
Processing Fowl

A supplementary service provided by HFBC is processing fowl. Its first poultry dressing plant began operations in 1933. In 1958 the association re-designed its poultry processing plant. It now rounds out these operations with the sale of its commercial eggs.

On the basis of Census data for 1954, the association marketed between 50 and 60 percent of the poultry in the county and from 75 to 80 percent of the poultry in its trade area.

The accompanying tabulation gives the volume and value of poultry processed for the period 1954-58:

<u>Year ended</u> <u>December 31</u>	<u>Poultry processed</u>	
	<u>Pounds</u>	
1958	1,035,890	\$215,375
1957	1,100,545	235,146
1956	1,062,107	275,188
1955	1,003,033	288,470
1954	1,208,763	302,676



An endless belt carries the loose and cartoned eggs in cases to be closed and sealed mechanically, part of the association's modern egg handling equipment.

Other Farm Supply and Marketing Services

The association provides a wide range of production supply services and limited additional marketing services for members. These include handling such supply items as fertilizer; petroleum products; farm machinery, hardware, and appliances; building materials; and automobile sales agency and garage facilities. It also markets grain and in previous years marketed fruit and vegetables and dairy products.

Farm Supplies

The farm supply services provided members of HFBC considered in this report include: Fertilizer, petroleum

products, farm machinery, hardware and appliances, building materials, and garage operations.

Fertilizer

HFBC has provided members with fertilizer since 1920. In 1936 it constructed a fertilizer mixing plant and since then the volume of business has grown steadily. Bulk fertilizer spreading services were first made available in 1953 and by 1958 the association estimated that 50 percent of its fertilizer tonnage was on a bulk basis. Lime operations have been discontinued since it is now shipped in by boat and spread direct from dock to farmers.

Some indication of the importance of this phase of its business is indicated by the following tabulation:

<u>Year ended</u> <u>December 31</u>	<u>Fertilizer</u> <u>handled</u> <i>Tons</i>	<u>Value</u>
1958	2,028	\$186,898
1957	1,753	146,921
1956	1,404	131,456
1955	1,748	156,000
1954	1,572	140,000

As closely as can be determined, HFBC in 1958 furnished about 15 percent of the fertilizer used by farmers in the county. When this volume was related to its trade territory, indications are that the association supplied about 30 percent of the fertilizer used by farmers in the area.

Petroleum Products

HFBC has been in the oil and petroleum business since 1925 when it purchased a tank truck for delivery to farmers. It maintains a bulk storage capacity of 160,000 gallons and in 1958 had 2 tank truck drivers delivering to farmers. These drivers are paid on a salary basis. As of 1958, approximately 1,000 patrons were served on its bulk tank routes. In 1958 the association used two sources of supply for its petroleum products. One was The Farmers Petroleum Cooperative, Inc., Lansing, Mich., an affiliate of the Michigan Farm Bureau, and the other was a well established petroleum company that is not a cooperative. Indications are that HFBC distributes between 25 and 30 percent of petroleum products used by farmers in Allegan County. In its trade territory this proportion ranges between 50 and 60 percent.

The volume of petroleum business reported by the association for the past 5 years follows in next column:

<u>Year ended</u> <u>December 31</u>	<u>Volume</u>
1958	\$349,512
1957	330,016
1956	306,082
1955	292,000
1954	270,000

The oil and petroleum phase of the association's business is supplemented with the complete line of tires, batteries, and automotive accessories handled through its garage.

Farm Machinery, Hardware, and Appliances

The association serves as an agent for one of the well established machinery companies in the United States. It also handles a rather complete line of hardware and appliances for members. Data are not available as to the proportion of these items handled by the association either in Allegan County or in its trade area. In addition HFBC provides a machinery repair service.

The total value of farm machinery, hardware, and appliances distributed for each of the past 5 years follows:

<u>Year ended</u> <u>December 31</u>	<u>Value</u>
1958	\$258,823
1957	42,156
1956	188,493
1955	76,000
1954	83,000

Building Materials

To round out its farm supply operations the association handles building materials, particularly roofing, various steel products, and related items. Part of the association's building material program is unique in that it has operated its own sawmill since 1946. There is no

basis for estimating the proportion of building material either in Allegan County or in HFBC trade territory that is handled by the association. The value of building materials during the past 5 years was as follows:

<u>Year ended</u> <u>December 31</u>	<u>Value</u>
1958	\$291,364
1957	296,548
1956	382,119
1955	333,000
1954	377,000

Garage Operations

HFBC maintains an authorized sales agency for a popular make of car. It also furnishes a complete automotive repair service through its garage.

Grain Marketing

The association is a member of the Michigan Elevator Exchange and through that association it markets members' grain. To a limited extent such items as corn, oats, and barley are also pur-

chased from farmers for its own feed milling operations. The association estimated that in 1958 it bought between 20 and 25 percent of the grain sold by farmers in Allegan County. This meant that it handled between 50 and 60 percent of the grain marketed by farmers in its trade area.

The volume of sales through the Michigan Elevator Exchange for the past 5 years are indicated by the following tabulation:

<u>Year ended</u> <u>December 31</u>	<u>Volume</u> <i>Bushe ls</i>	
1958	\$291,600	162,000
1957	205,200	108,000
1956	200,000	102,000
1955	205,800	98,000
1954	220,000	105,000

While no other farm products are marketed at this time, the association previously has handled fruits and vegetables and cream -- items that have been discontinued with agricultural changes in the county.

Appraisal

This appraisal of the integrated and diversified operations of HFBC will consider: (1) Degree of diversification and integration, (2) opportunities for greater service, and (3) factors contributing to success. Each of these points is now considered.

Degree of Diversification and Integration

The operations of HFBC demonstrate that it is possible for a local cooperative to achieve a considerable degree of success in performing diversified business operations. Moreover, this organization's record of operations has shown

it to be remarkably successful in providing members with the types of services desired in the further integration of their farm operations.

The following tabulation summarizes the proportion of various farm supplies provided members and the proportion of farm products marketed in Allegan County and its trade area by the association in 1958. It also gives the year that HFBC began the various services listed on page 16.

This tabulation indicates that HFBC, while restricting its operations primarily to a 10-mile radius of Hamilton, Mich., provides a large number of essential production supply and marketing

Item	Proportion of total provided in		Year HFBC began service
	Alleghan County Percent	Trade area Percent	
<u>Farm supplies</u>			
Feed	35-40	66-80	1923
Seed	25	50	1923
Poultry supplies and equipment	40	55	1936
Baby chicks	5	22	1955
Fertilizer	15	30	1920
Petroleum products	25-30	50-60	1925
Machinery, hardware, and appliances	10	25	1936
Building materials	10	30	1945-6
<u>Marketing</u>			
Eggs	50-60	75-80	1926
Poultry	50-60	75-80	1933
Grain	25-30	50-60	1923

services for patrons. It also is evident that operations primarily are oriented to the poultry enterprise of its farmer members. It is desirable, therefore, to bring together information relating to the extent to which the association does or does not provide various services needed by egg producers.

Examination of table 7 indicates a fact commonly overlooked in considering integration as it relates to cooperatives. HFBC, like many other associations, is not completely integrated. It is partially integrated. Integration is relatively complete as far as such on-the-farm items as farm management assistance and providing production supplies for poultry farmers is concerned. Exceptions are HFBC's hatchery arrangement and limited access to basic sources of raw material in fertilizer manufacturing operations.

As to marketing, the association, through its sales program, goes further than most cooperatives. It takes the farmer's eggs and poultry through market channels to wholesalers and jobbers (chains and independents). At this time there is no indication that it would be

advantageous for the association to consider an extensive retail operation. In fact retail selling represents a degree of integration that a local association specializing in eggs and poultry usually is not in a position to consider except in and around its local trade territory.

Grain marketing operations are integrated through the Michigan Elevator Exchange except for purchases for feed milling operations and for local farmer demand.

Opportunities for Greater Service

In examining opportunities for greater service to farmers, attention is given to the hatchery operation, fertilizer distribution, food freezing and provisioning, and new developments. These are approached from the standpoint both of HFBC and other local associations that may be facing similar or related programs.

The Hatchery Operation

It is not the purpose of this report to consider whether or not the HFBC

Table 7. - *Extent of cooperative integration in egg production and marketing, Hamilton Farm Bureau Cooperative, Inc., 1958*

Important types of services needed by egg producers	Did HFBC provide services?	
	Yes	No
<u>Purchasing</u>		
Supplying farm management and supervision		
Feeding.....	X)	
Sanitation.....	X) -- One field man to	
Quality control.....	X) assist farmers	
Furnishing replacement stock		
Breeding flocks.....		X
Hatcheries.....		
Owned.....		X
Contracted.....	X	
Pullet program.....		X
Distributing feed		
Cooperative procurement.....	X	
Manufacture.....	X	
Grower contracts.....	X	
Delivery service.....	X	
Handling farm supplies		
Feed.....	X	
Seed.....	X	
Poultry supplies and equipment.....	X	
Fertilizer and lime.....	X	
Oil and petroleum products.....	X	
Machinery, hardware, and appliances.....	X	
Building materials.....	X	
Providing patron finance		
Chicks.....		X
Feed.....		X
Housing.....		X
Bulk bins.....		X
<u>Marketing</u>		
Processing eggs		
Farm trucking service.....		X
Candling and grading.....	X	
Cartoning.....	X	
Processing fowl		
Farm trucking service.....		X
Dressing.....	X	
Marketing eggs and fowls		
Wholesaling and jobber service.....	X	
Trucking to wholesalers and jobbers.....	X	
Use of own brand name.....	X	
Retailing.....		X

should undertake its own hatchery program. Since such ownership, however, would be a step in the further integration of farming activities by members, mention here is limited to listing factors that farmers should consider in arriving at any decision they might make on this matter. These factors might include: The possible savings that could be realized (the influence of size of operation on costs), and ability to develop or obtain the most desired strain of breeding stock. In any event, the declining number of hatcheries in the State and Nation has demonstrated that greater volume than that achieved by many plants is necessary to operate efficiently.

Fertilizer Distribution

The preceding tabulation indicated that among the important production supplies distributed by HFBC the proportion of fertilizer was lower than any other item. This indicates a possible area for further expansion. It also suggests the desirability for careful study of such factors as influence of size of operation on costs, availability of basic raw materials through cooperatives or other suppliers, and possibilities in expanding area of service to include other farmers or nearby local associations.

While the latter suggestion may not appeal to HFBC in view of its deliberate policy of limiting its operating territory, it is possible that other locals might find it advisable to explore such a possibility should they encounter a somewhat comparable situation.

Food Freezing and Provisioning

The association is considering adding frozen food provisioning and processing services. This would fit in well with the development of market outlets for its processed poultry. Such processing

services also might be provided for other farm products should sufficient interest exist on the part of members. Moreover, there may be a number of patrons who would desire to supplement their home freezing facilities with frozen food lockers if such services were made available.

Other New Developments

In providing well rounded and integrated production and marketing service for farmers, an association such as HFBC always must be in a position to make the adjustments that changing conditions in agriculture will require. While HFBC cannot be expected to maintain its own research staff to keep abreast of all agricultural developments, it nevertheless can avail itself of a wide range of information on subjects of broad general interest to its members. It is just as reasonable to expect that this association, for instance, would seek the assistance of its State experiment station, its extension service and the various agencies of the U. S. Department of Agriculture on economic problems as it is to use these same agencies on problems of flock management, feed formulation, and poultry breeding.

Factors Contributing to Success

Since HFBC has demonstrated that under specific conditions local associations can successfully help farmers achieve further integration in their operations, it seems desirable to consider some of the factors that helped HFBC achieve its present status.

Competent and Progressive Management

HFBC has competent and in some respects unusual management -- management that has been alert to the needs of members and generally willing to



Closeup of the egg handling machine placing the eggs in fillers and cartons according to grade.

adjust operations to changing agricultural conditions. Evidence of this is the policy of discontinuing the marketing of certain farm products that were declining in volume and the aggressiveness with which the association moved to install the most modern electronic egg grading and packaging facilities. (As used in this report the term, "management," includes directors as well as the manager and his staff.)

Like many local associations HFBC, however, is confronted with the necessity of being constantly alert to the needs for developing competent understudies for its important top management positions. To assure that farmers are served effectively its management, as well as the management of most local associations, need to give special consideration to employee selection, training programs, realistic salary schedules, and various employee benefit provisions that are fast becoming a part of modern business management.

Interested and Informed Membership

A large proportion of the territory served is populated by farmers of Dutch extraction. These farmers place particular emphasis on economies in the operation of their association and have developed impressive records in their own farm operations. Another important advantage of HFBC limited trading territory and the homogeneity of its membership is that it is relatively easy for this cooperative to carry on an effective membership information program.

Sound Capital Structure

The association at all times has maintained an extremely high proportion of net worth to total assets. For instance, during the past 8 years net worth has always accounted for 90 percent or more of total assets. As a result, HFBC

has been in an enviable position to undertake those improvement and development programs that seemed necessary.

A Compact and Concentrated Area of Operation

HFBC has deliberately followed the policy of restricting its trading territory and intensifying service to members in the area it serves within a 10 mile radius of Hamilton, Mich. This has definite advantages. Costly transportation services are held to a minimum for in the case of HFBC, members have accepted the policy of delivering all their eggs and poultry to association processing plants.

This simplifies both local assembling and distributing problems for the association. Moreover, since its members concentrate primarily on poultry production, the organization is in position to provide the kinds of services that a large proportion of farmers in its operating area desire. These considerations are important factors in helping to explain the success of this cooperative.

Effective Credit Control

Credit problems are practically non-existent as far as HFBC is concerned. While undoubtedly seasonal requirements are sometimes higher, information for the past 5 years indicates that accounts receivable at the end of its fiscal year never have been over 2 percent of total annual sales. Except for the limited accommodation credit indicated, no special finance programs are in effect or contemplated for such items as chicks, feed, housing, bulk bins, and specialized facilities. Five factors appear responsible for this favorable situation: (1) A firm policy on the part of management, with respect to credit control; (2) the thrifty nature of

many of the association's members; (3) the nature of the commercial egg enterprise, an enterprise from which farmers receive regular returns; (4) the diversified nature of the association's operations, which enable it to deduct member obligations for production supplies from returns from products marketed for them; and (5) the practice of maintaining close working relations with the local Production Credit Association, which maintains its headquarters on the top story of HFBC's office building. The cooperative has worked closely with the PCA at all times to maintain a very favorable financial position.

Specialization of Service

This report has emphasized that the operations of the association primarily are geared to the poultry enterprises of its members. Over 90 percent of its business relates to providing production supplies for commercial egg producers and to marketing their eggs and poultry. The very nature of this enterprise is such that it does not place excessive financial requirements on either farmers or the association. Frequent checks for eggs put the farmers in a favorable position to meet their production supply bills. Concentration of services on one farm enterprise enables even a large local (although still a relatively small business establishment) to provide the many varied and basic services members require.

In general, the operations of Hamilton Farm Bureau Cooperative, Inc., demonstrate that a local association under "the right" conditions of management, capital structure, credit control, membership relations, and specialization of service can be extremely beneficial to its farmer patrons by enabling them to carry on the integration process for their own economic advantage.

Appendix A

CARE OF EGGS AT THE FARM

by

J. M. MOORE

Poultry Consultant

Hamilton Farm Bureau Cooperative, Inc.

GATHERING. When an egg is laid, its temperature is 106° - 107° F. In order to preserve its quality, this animal heat must be removed as rapidly as possible. If eggs are to be washed they should be washed as soon after gathering as possible and before being cooled. Because 75% of all eggs are laid by noon, one egg gathering should be made in the middle of the morning, then at noon, and the last gathering at 4:00 - 4:30 p.m. In hot weather, for best results, egg gathering should be increased to four or five times daily rather than three. During hot weather egg shells become thinner and should be handled more carefully to reduce breakage.

WASHING. Eggs may be washed but must be washed properly. Washing is no substitute for cleanliness in production or handling. Improperly done, it does you and the Egg Industry great harm.

1. Use clean equipment.
2. Use fresh, clean water each time you wash eggs. Eggs wash easier if they are washed soon after gathering.
3. All solutions (washing, spray, or rinse) must always be warmer than the eggs. 115° - 120° is recommended. Hotter water may be used for spray.
4. Immerse for *one* and not more than *three* minutes.
5. Clean equipment after each use.
6. It will be to your advantage to wash *dirty* eggs only. Remember, the *more often* eggs are gathered the *fewer dirty* eggs will be found.

NESTING MATERIAL. Check nests frequently and remove all dirty material. Clean nesting material is a must in producing clean eggs.

COOLING. *Cool Eggs Quickly.* Wire baskets strong enough to hold their shape are best for gathering eggs. Do not fill them too full or do not bump baskets, to avoid cracks. Wire baskets allow air circulation around eggs which help to remove animal heat rapidly. Pack eggs point down in clean flats and fillers as soon as possible after they have been cooled.

Keep empty flats and fillers in a cool, moist place. It is important to store empty cases properly. A dry, warm, case will absorb as much as a pint of water mostly out of the eggs placed in it.

COOLING ROOM. The egg cooling room should be cool and moist, but free from moulds and objectionable odors. To provide extra moisture, pans with water, wet burlap sacks or moist sand are methods used to increase the moisture content of the cooling room. A fan blowing on wet burlap or across the water pan, *but not directly on the eggs* will help in keeping the humidity high in the egg cooling room. If possible cooling room temperature should be 55° to 60° F.

PACKING. As soon as eggs have been thoroughly cooled, they should be placed in cool, moist cases. Some poultrymen pack today's eggs tomorrow, but no eggs should remain in the baskets more than 24 hours.

Eggs are packed small end down to keep the yolk centered in the large end of the egg. Yolks of fresh eggs rise and come close to the shell if the eggs are placed on their side (as in baskets) or if the small ends are pointed upwards in the cases. This results in higher grades than when the egg is placed small end up in the case.

Appendix B

HAMILTON FARM BUREAU

EGG PREMIUM AGREEMENT

This agreement between Hamilton Farm Bureau of Hamilton, Michigan, herein called the "ASSOCIATION", first party and the undersigned Member Producer of Eggs, herein called the "PRODUCER", second party:

In consideration of the responsibilities of the ASSOCIATION to find the best possible year-around market of the producer's eggs, to insure a continuous volume of eggs to supply such a market and to pay a premium for all eggs received from the top-quality flocks marketing their eggs through the ASSOCIATION:

1. The PRODUCER agrees to market at least 95% of all the chicken eggs he produces each month through the ASSOCIATION.
2. The PRODUCER agrees to deliver his eggs to the ASSOCIATION at least twice weekly.
3. The PRODUCER agrees to feed HAMILTON FARM BUREAU feeds.
4. To qualify for this premium the PRODUCER must have had at least 80% grade A egg quality in the eggs he has delivered to the ASSOCIATION during the current month.
5. The PRODUCER agrees to produce only infertile eggs.
6. The PRODUCER shall deliver only clean eggs to the ASSOCIATION. All eggs shall be cleaned in such a way that no moulds or other bacterial infection can be detected.
7. The ASSOCIATION maintains the right to declare any flock ineligible to receive this premium when the eggs produced by this flock show more than one percent blood-spots by candling.
8. The ASSOCIATION agrees to pay a premium for all eggs sold by the PRODUCER. The amount of this premium will depend on:
 - A. The demand created for Hamilton Double A quality eggs.
 - B. The price-grade-differential for eggs according to the season of the year.
9. The ASSOCIATION shall pay the premium to the producer on the fifteenth of each month for all eggs produced during the previous month.
10. The grading of all eggs for quality and size shall be determined by the supervisor for Federal-State grading for the ASSOCIATION according to the standards set up and used by the U.S.D.A. and the Michigan Department of Agriculture.
11. As this egg quality program develops the ASSOCIATION may find it necessary to add to or delete from this agreement such qualifications that will benefit the PRODUCER and will tend to improve the ASSOCIATION'S Egg Merchandising program.
12. Any PRODUCER who wilfully misrepresents or violates the terms of this agreement shall lose the privilege of participating in this premium program for a period of one year.
13. This agreement shall become effective when signed by both the PRODUCER and the ASSOCIATION and will continue in force until terminated by thirty (30) days' notice in writing, of either party hereto, to the other to so terminate the same.

Executed this _____ day of _____, 19_____

HAMILTON FARM BUREAU CO-OPERATIVE, INC.

By _____

PRODUCER

By _____

(Name)

(Address)

