FACTORS AFFECTING FARMER COOPERATIVE DISCONTINUANCES WITH SOME APPLICATIONS TO INDIAN AGRICULTURE

by

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Acknowledgment is gratefully made to all the staff members who so willingly offered to discuss certain points.

To my brother Gurdev Singh Sahota, who collected and provided certain publications from India for Chapter IV, I am especially grateful.
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FACTORs AFFECTING FARMER COOPERATIVE DISCONTINUANCES WITH SOME APPLICATIONS TO INDIAN AGRICULTURE

Chapter I
INTRODUCTION

One of the most important problems that farmers face with respect to cooperative businesses is to minimize discontinuances involving loss. Many times the resulting cost to members through discontinuances of cooperatives is not emphasized. Cooperatives were often started when factors unfavorable to success were present. Members and their leaders in some cases organized cooperatives too hurriedly without investigating in detail the existing facts and their implications. In other cases, however, this could not be done efficiently because of inadequate experience in cooperative business and membership relations. Of course, any new method of doing business cannot provide numerous successes in its early history.

The elements of discontinuance have been about 95.4 percent failures, 2.6 percent mergers, 1.7 percent selling the business at profit, and .3 percent reorganizations. (4,p.14) Since the 1920's mergers have been becoming more important than before. This is due to the trend toward large scale business. Because of their importance, failures and mergers provide the subject of
this study. The term "discontinuance" is used to refer to both failures and mergers.

The history of discontinuances is as old as the farmer cooperative movement. In the first 30 years of the 20th century, they occurred with great frequency. There are several factors responsible for discontinuances.

A major purpose of this study is to analyse the relative importance of each by integrating and correlating the results of some past studies with other relevant information. An attempt also is made to relate the working process of each to their possible effect. An understanding of all important factors and their process is essential to reducing the chances of discontinuance involving loss. The phase of the study dealing with factors affecting discontinuances aims to improve such understanding so that members may gain more by better control of these factors.

SCOPE

In the second chapter of this study some basic features and facts of agricultural cooperation in the United States are presented. These include the meaning of a true cooperative, development and promotion of cooperatives, legislative basis for organization and liquidation, failure in economic sense, and results of some previous studies.
In the third chapter the important factors affecting discontinuance are listed and discussed in detail. The next chapter deals with some basic facts about agriculture in India, marketing and purchasing, agricultural credit, cooperative movement with special reference to cooperative credit societies, liquidations, achievements, trend in type and scope of society, new efforts at increasing agricultural production, change in Reserve Bank's policy and its possible effect on cooperatives, and cooperative education.

PROCEDURE

It is assumed that farmer cooperatives are business organizations. Thus, the factors that account for their failure or discontinuance are also in most cases the same that are responsible for business failures of other forms of organization.

The factors considered important in inducing failures, as discussed in books on economic theory, were listed and appraised. These were compared with reasons given for discontinuance of a number of cooperatives. This comparison determined the relative importance of different factors. Then the importance of each factor are discussed with different emphasis and points of view. Relevant data from related sources are used when appropriate.
Information and evidence for the section on agricultural cooperation in India was obtained from Government of India's publications and reports, and United Nations publications. Business records of 149,277 cooperatives were obtained from one of the above sources. They covered about 23 of the 29 States of India. It is estimated that their working capital was about 575 million rupees.*

Because cooperative credit societies** were more important than the other types, only they were analysed in detail. The records pertain to the year June 30, 1950 to June 30, 1951.

*Indian rupee=21¢ U. S. money. A rupee in India buys about as much goods as a dollar in the United States, but it buys more labor services due to the relatively large supply when related to demand.

**In India the term cooperative society is more commonly used instead of cooperative association which is common in the United States.
Chapter II

GENERAL BACKGROUND

A TRUE COOPERATIVE

Formal cooperative business is usually traced to Rochdale store in England. In 1844, its founders laid down the basic cooperative principles. These have been followed by other countries with some variation necessary to fit local conditions. The rules set by the Rochdale pioneers are generally regarded as essentials for true business cooperation. The general rules are listed below:

1. Membership to be open to all who pay entrance fee or buy low value stock.
2. Interest on capital to be limited.
3. Each member to have one vote.
4. Savings to be distributed in proportion to patronage.
5. Full information to be given to members.
6. Association to be actually owned by members.

DEVELOPMENT AND PROMOTION OF COOPERATIVES

Like other institutions or movements, the cooperative effort was due to dissatisfaction arising from prevailing business conditions. Among United States farmers this
meant opinions and feelings about wide marketing margins, the result being excessive profits. Many believed that commercial firms maintained high margins by more or less fixing prices. To improve conditions, many farmers adopted the cooperative method. Both local initiative and leadership organized marketing cooperatives. Later on cooperation was also applied to production, finance, and insurance. Cooperative marketing, however, has so far reigned supreme. Because of larger number of production units, degree of product perishability, width of the market and weather effects, marketing has remained complex. This may explain largely the relative importance of cooperative marketing. Cooperatives provided real benefits to members in marketing and purchasing. They

(1) stabilize prices in the community.
(2) have done much to improve qualities of feed, seed, fertilizer, butter, cheese, etc.
(3) sometimes rendered a service not previously available.

LEGISLATIVE BASIS OF ORGANIZATION

Although it was lawful, according to common law, for farmers to sell and buy collectively, courts held such associations as illegal combinations which result in
restraint of trade. Before 1922 only a few states had legislation that legalized cooperative associations. New York State had a law passed in 1857, Michigan in 1865, Wisconsin and Nebraska in 1911, and Kentucky in 1922. This slow progress was due to the Sherman Anti Trust Act passed by Congress in 1890.

**Sherman Antitrust Act, 1890:**

This act declared every contract or combination, in the form of trust or otherwise, in restraint of trade and therefore illegal. It made no distinction between reasonable or unreasonable restraint. Later on in 1910, the "rule of reason" was recognized. This meant that mere size would not be considered in restraint of trade. It was to be investigated whether size actually restrained trade or not.

**Clayton Act, 1914:**

This particular act exempted nonstock cooperative associations from the provisions of the Sherman Act. However, the status of capital stock associations remained to be clarified.

**Capper-Volsted Act, 1922:**

This act clarified the position of capital stock associations. It also clearly authorized the association of cooperatives. This act forms an important landmark in the history of cooperatives in the
United States. Of course, cooperative associations were still illegal under the provisions of the Sherman Antitrust Act, if they actually restrained trade. (1, pp. 269-282).

Other legislation passed later has also favored the promotion and development of farmer cooperative associations. This means a public policy that is promoting orderly marketing of farm products, and to bring farmers as close as possible to the consumers of their supplies.

LEGISLATIVE BASIS OF LIQUIDATION

All business operates under a predetermined and evolving legal system. This system insists that obligations to pay money must be respected. When a concern or a person is unable to meet claims of creditors, then they are called insolvent. Creditors may cause the concern or person to go through bankruptcy which is a legal procedure. If reorganization is demanded, then the business continues after being reviewed by a receiver. (18, pp. 113-114).

Credit is the lifeblood of the business world. Whatever hinders its circulation damages the efficiency of the system. If obligations are not respected when due, settlement all along the line is retarded. In such a case, the function of bankruptcy and reorganization is to avoid this retardation. When a particular cooperative is in condition
of insolvency, it is a failure in the business sense.

FAIL URE IN ECONOMIC SENSE

Cooperatives at a given time may have relatively low unit costs while at other times they may be unable to even cover the variable costs that vary with volume of output. A number of cooperatives may be unsuccessful because of mistaken estimate of cost possibilities. Their position is relatively weak to withstand the effect of adverse conditions. If in the long run, any cooperative fails to cover average variable and fixed costs i.e. the unit costs, then it will have to cease operations.

In terms of economic analysis when a particular cooperative is unable to cover its average costs in the short-run, a failure in economic sense has been realized. However, this does not mean that it will have to cease operations. Generally, in practice such a quick liquidation is impossible. This is because assets may not be sold for more than their capitalized sum of future earnings. The equipment may be highly specialized and its cost of transfer to a new undertaking prohibitive. Under these conditions, so long a cooperative association can earn more

*Included in average costs is also normal rate of return on investment.*
than average return on scrap value, liquidation will not be preferrable. So long as it can meet fixed contractual charges such as interest on bonds or borrowed funds, liquidation through bankruptcy does not occur. (7, pp. 416-418).

RESULTS OF PREVIOUS STUDIES

The examination of some previous studies indicates that inefficient management, financial difficulties, insufficient business volume, and membership relations difficulties have been the generally believed reasons for discontinuance of cooperatives. The factors like promotion activity do not appear directly in the listing of various reasons. The cyclical movements, and technological changes such as substitutes, shifts in geographical production, transportation and pattern of scale have not been mentioned so frequently (see Tables 1, 2, 3). This is due to the fact that they are not so clearly observable as inefficient management, financial, and membership difficulties, and insufficient business volume. In this study consideration will be given to all of these factors.

For the last 30 years, with respect to cooperative associations, the effect of cyclical movements and technological changes is felt at a greater rate each year. Thus, factors need to be incorporated in the analysis. This means reconsideration of all relevant factors as units of the whole problem.
Table 1

Reasons Given by 1500 Cooperative Associations for Ceasing Operations, United States, 1926

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inefficient management</td>
<td>72</td>
</tr>
<tr>
<td>Insufficient working capital</td>
<td>24</td>
</tr>
<tr>
<td>Insufficient business volume</td>
<td>23</td>
</tr>
<tr>
<td>Too liberal credit to patrons</td>
<td>17</td>
</tr>
<tr>
<td>Voluntary dissolution</td>
<td>12</td>
</tr>
<tr>
<td>Dishonest management</td>
<td>8</td>
</tr>
<tr>
<td>Acts of providence**</td>
<td>6</td>
</tr>
<tr>
<td>Unfair competition</td>
<td>2</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>8</td>
</tr>
</tbody>
</table>


*Several associations gave more than one reason which explains why percentage total is greater than 100.

**Happenings such as droughts, floods, fire, etc.*
Table 2

Causes for Suspension of \( \frac{404}{4} \) Cooperative Associations, United States, 1928

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number of Associations</th>
<th>Cause</th>
<th>Number of Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary dissolution</td>
<td>90</td>
<td>Competition</td>
<td>14</td>
</tr>
<tr>
<td>Financial difficulty</td>
<td>65</td>
<td>Acts of providence*</td>
<td>7</td>
</tr>
<tr>
<td>Insufficient business</td>
<td>59</td>
<td>Miscellaneous</td>
<td>121</td>
</tr>
<tr>
<td>Mismanagement</td>
<td>49</td>
<td>Total</td>
<td>( \frac{404}{4} )</td>
</tr>
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</table>


*Happenings such as droughts, floods, fire, etc.
Table 3
Frequency Distribution of Reasons Given for the Discontinuance of 7376 Cooperative Associations, United States, 1939

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in the field of management</td>
<td>2,234</td>
<td>19.8</td>
</tr>
<tr>
<td>Difficulties in the field of membership</td>
<td>2,220</td>
<td>19.7</td>
</tr>
<tr>
<td>Natural or unavoidable causes*</td>
<td>1,231</td>
<td>10.9</td>
</tr>
<tr>
<td>Insufficient business for efficient operation</td>
<td>1,161</td>
<td>10.3</td>
</tr>
<tr>
<td>Financing and credit difficulties</td>
<td>1,079</td>
<td>9.6</td>
</tr>
<tr>
<td>Transportation problems</td>
<td>1,020</td>
<td>9.1</td>
</tr>
<tr>
<td>Opposition from competing enterprises</td>
<td>1,003</td>
<td>8.9</td>
</tr>
<tr>
<td>Declining prices</td>
<td>614</td>
<td>5.4</td>
</tr>
<tr>
<td>Consolidation and mergers</td>
<td>357</td>
<td>3.2</td>
</tr>
<tr>
<td>Technological changes</td>
<td>135</td>
<td>1.2</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>218</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,272</strong></td>
<td><strong>100.0</strong></td>
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*Crop failures, droughts, fire, bank failures, depression, etc.
Chapter III

FACTORS AFFECTING FARMER COOPERATIVE DISCONTINUANCES

Failure of any business in most cases depends upon unsound business policy and practice, and inability to adjust to dynamic economic forces. A farmer cooperative being a business institution is therefore no exception. "Cooperatives do not fail because they are cooperatives, but because they are business enterprises subject to business hazards". (Hall, p.25) This being so, failures also occur frequently in other business forms such as corporations, partnerships, and proprietorships (see Figure 1).

PROMOTION ACTIVITY AND DISCONTINUANCES

Cooperatives have been organized on both an informal and formal basis. Up to 1867, they grew on an informal basis to render a new service. Dairy, grain, livestock and fruit farmers attempted to apply the cooperative method to improve their businesses. Dairy farmers made more progress than others. Because the service of manufacturing cheese was lacking, attempts were made to provide it on a cooperative basis. It is learned that in 1810 a cheese factory was established at South Trenton, New York. By 1867, more than 400 cooperatives were processing dairy products. For the same period, because of
Figure 1. Number of Industrial and Commercial Failures, United States 1924-52.

Industrial and Commercial Failures

Series Revised to Exclude Real Estate and Financial Companies.

New Series Including Voluntary Discontinuances.

the slow development and informal growth, the rate of discontinuances was probably low. (9, pp. 1-2).

With the coming of the National Grange in 1867, the cooperative movement received a new stimulus. At that time farmers were complaining about burdensome expenses and high margins. To improve the conditions, there existed an intensive demand for new enterprises. The National and Local Granges recognized it by becoming concerned with both purchasing and marketing. This meant an extensive and intensive promotion activity. This is indicated by the fact that more than 20,000 granges were chartered during 1872, 1873, and 1874. A large number of them was concerned with cooperative purchasing or marketing or both. The result was that many cooperatives were organized whose services were not needed. As a consequence the discontinuance trend started at the close of 1870's. At this time, the organization of granges had almost ceased with their economic enterprises continuing but in decreasing numbers. At the beginning of the present century a few were alive but most of them had failed. (9, pp. 3-9).

In 1902, Farmers Educational and Cooperative Union of America, and the American Society of Equity came into existence. Both organizations gave a fresh start to almost dormant promotion activity. They also aimed at
improving the price situation and marketing of farm products. The number of associations organized each year began to increase. This was followed by a similar trend in the number of discontinuances. Up to 1922, the number organized remained greater than those discontinued. This means that the movement curve of active cooperative associations was climbing upward (see Figure 2). Since the number of discontinuances was higher in this period than any other, and promotion activity also was high, it seems that in this period many cooperatives were organized whose services were not needed.

When the American Farm Bureau Federation appeared in 1919, many locals were already in existence. Naturally, it concentrated attention on federating them. The benefits of large scale organization of industrial concerns appealed to farmers and their leaders. This meant a different emphasis than before. Up to 1920, the formation of more and more cooperatives was emphasized, but since the early 1920's the emphasis has been on volume, efficiency and control. This means that the farmer cooperative marketing associations have been gaining membership and volume while decreasing the number of active associations. The number of farmers' purchasing associations has tended to stabilize while their membership and volume of business is increasing at a greater rate than before.
Figure 2. Cooperatives Organized, Discontinued, and Net Additive Growth by Specified Period, United States 1901-05 to 1936-39.

It is fair to say that promotion activity has contributed much to failures and mergers.

Relationship of Cooperatives Organized and Discontinued:

It has been said that in the period when many associations were being organized, a large number was also being discontinued. The hypothesis that there exists a direct relationship between them was tested. The Least-Squares method was used to analyze the data. It was assumed that when a cooperative is organized, on an average it takes about 5 years to cease operations. Because of this the number organized in 5 years was matched with the number discontinued in the next 5 years. The period represented was from 1901 to 1939.

The level of significance used was 5 percent. The calculated correlation coefficient value was .7052. The table value with 5 degrees of freedom at 5 percent significance level was .7545. On strictly statistical basis, since calculated value is smaller than table value, the hypothesis is rejected as being valid. However, for practical purposes there was a tendency for a large number organized in a given period to have a relatively large number of discontinuances five years later. The line in Figure 5 shows the relationship of cooperatives organized to those discontinued. It can be seen that the discontinuances tend to become greater as the number organized
Figure 3. Number and Membership of Marketing and Purchasing Cooperatives, United States 1929-49.

Figure 4. Dollar Volume of Business of Marketing and Purchasing Cooperatives, United States 1929-49.

Figure 5. Relationship of Cooperatives Organized to Cooperatives discontinued Based on 5 Year Averages, United States 1901-39.

Line Showing Relation Between Cooperatives Organized and Discontinued.

\[ r = 0.705 \]
\[ y = 103.144 - 0.497x \]
\[ n = 7 \]

increases. It is reasonable to conclude that there is direct relationship between them.

VOLUME OF BUSINESS AND DISCONTINUANCES

One main reason for the need of cooperatives is to reduce unit costs and pass on any net earnings to their patrons. There is a way in which unit costs respond to business volume and plant capacity. The technique of handling, efficiency of factors employed and their prices determine mainly the level of costs. To realize full benefits of these factors, optimum scale is necessary. (7,p.185).

Like other business firms cooperatives have two kinds of costs i.e., fixed and variable. In the short run fixed cost tends to remain constant regardless of volume of output. Variable cost varies with changes in output. Fixed and variable costs divided by volume of business result in average fixed and variable costs respectively. The adding of these gives average costs per dollar of volume of business.

Short Run Cost Behaviour When Business Volume Changes:

In the short run the assumption is to have a fixed plant capacity. As volume of business increases average cost usually declines first, then starts to increase. This is mainly governed by the behaviour of average fixed
and variable costs. Since fixed costs tend to remain constant, their average declines as volume of business increases. If volume of business increases at a lower rate than variable cost, the average variable cost rises. On the other hand, if volume of business increases at a greater rate than variable cost the average variable cost declines. If the rate of increase in both cases is the same, average variable cost remains constant. (7, pp.188-192).

To determine exact cost schedule of a particular cooperative, experimentally, is difficult. This is true even when it has reasonably accurate knowledge of average cost at existing level of business. At other levels the business can only have rough estimates.

However, to know the cost schedules of various cooperatives is not as important in the study of discontinuances as the distribution of unit costs of a number of cooperatives having various business volumes and plant capacities. This analysis is valuable because from a group of cooperatives, the ones with high unit costs are more likely to discontinue doing business than the others.

Distribution of Average Costs of Various Cooperatives:

At various agricultural experiment stations, a number of independent studies about average costs have been conducted. The cooperatives represented had different volumes of business and plant capacities. Generally, the
technique used in these studies has been simple or stratified random sampling.

They have shown a tendency for larger cooperatives to have lower costs. In Kansas such a relationship was shown by 48 elevators. The records covered the four year period from 1945 to 1948. "Analysis of the operations of the elevators on the basis of rated bushel capacity (size) gave clear evidence that the smaller houses usually required high buying margins merely to stay in business. This need of extra margin mostly is a matter of relatively higher operating costs associated with smaller volume of grain generally available in their trade areas". (2,p.37) Other studies have also shown similar relationships. (27,p.61);26,p.13).

As associations of different sizes are found in each stage of history, it is expected that a greater percentage of discontinuances have been coming from a group having less than average volume of business. A hypothesis, that a percentage as high as 80 of total discontinuances comes from less than average volume category, is tested. The $X^2$ method was used. A sample of 608 associations with volume of business for the last active year was recorded. The period represented was from 1900 to 1923. (10,p.67) The average volume of business for active associations representing the years 1913, 1915, and 1921 was $129,000$ dollars. This $129,000$ dollars was the figure below which 80 percent
of the discontinued cooperatives were with respect to their volume of business for the last active year. It was recognized that period of comparison was different. However, the historical pattern of discontinuances was such that about 60 percent of the 608 associations included ceased operations between 1913 and 1923. As a consequence it was supposed that selective years of 1913, 1915, and 1923 for active associations may not seriously affect the result.

The level of significance used was 5 percent. The calculated $X^2$ value was .199. The table $X^2$ value at the 5 percent significance level was 3.841. Since calculated $X^2$ value is smaller than table $X^2$ value, the hypothesis is accepted as being valid.

Because of the nature of the data available, the volume was divided into two categories. One was less than 99,000 dollars, the other was more than 100,000 dollars. Of 608 associations, 482 were in first category and 126 in the second category. Due to this classification the acceptance of the hypothesis means that 80 percent of total discontinuances in the population had a volume of less than $100,000 for their last active year. Since our purpose was to find whether associations had a volume of less than $129,000, (the average for active associations covering about the same period) the conclusion becomes conservative.

A generalization may be made that on an average 80
percent of discontinuances would be expected to come from less than average volume of business category. It may be further stated that as the class interval of business volume advances, the percentage of discontinuances of each declines.

There are many reasons for the greater percentage of discontinuances occurring in groups of smaller size cooperatives. The essential ones are summarized below:

1. The average cost is higher. This is partly due to the fact that advantages occurring from the effect of volume on fixed costs are not enjoyed to full extent. Small associations probably pay about as much for insurance, electricity, gas, and telephone as somewhat larger ones.

2. The ability to borrow, and employ trained management tends to be closely related to the volume of business. An association with a small volume is likely to find it more difficult to both borrow funds, and at least employ good management.

3. External and internal economies of scale that accompany, large volume, efficient management, and adequate capital simply cannot be realized by small associations.
Capital Requirements:

Every type and form of business requires capital to carry on operations. In the case of cooperatives, the capital is needed at two times. It is needed at the time of their promotion and organization or enlargement of present scale. The two situations demand answers to the following two questions (1) How much capital is needed? (2) How to obtain this amount? In the existing population of cooperatives, answers to the above mentioned questions are reflected in the amount of capital they have and sources employed to obtain it. Oregon cooperatives in 1950 employed varying amounts of capital. The 23 fruit and vegetable, 27 dairy, 18 grain and seed, and 6 nut and 3 farm supply cooperatives employed an average capital of 1,111; 692; 618; 388; and 276 thousand dollars respectively. The main sources of their capital were (1) member capital (2) borrowed capital and (3) other capital. (25,p.12).

A cooperative may be overcapitalized or undercapitalized. It is overcapitalized when earnings are not large enough to yield a fair return on investment. It is undercapitalized when rate of return is relatively higher than what the same amount of capital employed in a
similar industry earns. (16,p.190) A particular cooperative may have inadequate capital to make efficient use of other factors. Because of this its rate of return would be lower than if adequate capital had been available. This also is a condition of undercapitalization. A cooperative that is undercapitalized due to inadequate capital usually faces greater difficulties in meeting its obligations than somewhat better financed cooperatives.

Cyclical Fluctuations:

The value of sales, stability and future earning ability of a cooperative are important factors that determine the level of its borrowing. They also influence the extent to which it is able to meet fixed obligations. The usual fixed obligations are the interest and principal payment, interest on bonds and dividends on preferred stock. The stability of earnings is mainly dependent on the way in which agricultural industry behaves in different phases of the business cycle.

Three elements appear in the cyclical movements of business activity. They are (1) changes in the value of goods and services, (2) changes in unit prices and (3) changes in production. The interaction between changes in goods and services produced and their unit prices causes fluctuations in the total value. (29,pp.1-2).

There is a difference in the way industries adjust
to price changes. Some modify output and quantities marketed while others have to adjust by modifying prices in most of the cases. With respect to agriculture the change occurs mainly in the price level. Because there exists a large number of producers, and the effect of weather cannot be controlled, it is difficult to make adjustment by varying the supply.

It is found that discontinuances have been more numerous during periods of declining agricultural prices and general business activity. In the early 1920's prices of farm products were declining at a relatively high rate. This trend continued up to about 1935. From 1916, discontinuances were becoming more frequent than before. During the five year period 1916-20 about 994 associations ceased operations. The number for succeeding periods was 1921-25, 2,351; 1926-30, 2,396; 1931-35, 2,117 and for 1936-39, 881. (4,p.16) This tendency of discontinuances to increase during declining agricultural prices means that there was some inverse relationship between them.

**Effect of Declining Prices on Cash Receipts:**

It is commonly believed and shown in previous studies that insufficient capital to meet obligations is an important factor inducing discontinuances. The problem of insufficient capital in most cases is due to imbalance between cash receipts and cash expenses. Usually the
problem becomes more pressing during periods of declining prices.

The volume of business or sales of farmer cooperatives tends to follow closely the movement of prices received by farmers. From 1926 to 1932, the price index dropped about 65 points. The index of total average sales volume of marketing and purchasing cooperatives covering the same period dropped by 50 points. The lowest points on both these indexes are the years 1932 and 1933. The base of both indexes is 1935-39-100 (see Figures 6 and 7). The movement or fluctuation of index of total average sales volume is, of course, related to the problem of cash receipts. It is easy to see that declining prices reduce the amount of cash receipts. Another derived effect of price decline is that the number of uncollectable accounts is increased. The income of some individuals declines and as a result their ability to pay declines.

The reduced cash receipts may cause no difficulty if expenses can be reduced by the same amount. Whether a particular cooperative can reduce cash expenses or not, it still must meet the claims of creditors.

From this analyses it can be concluded that declining economic activity and agricultural prices create conditions unfavorable to the success of inadequately financed cooperatives. The effect of these developments increases
Figure 6. Index of Prices Received by Farmers, United States 1919-51.

(1935-39=100)

Prices Index

Figure 7. Index of Average Dollar Volume of Business of Marketing and Purchasing Cooperatives, United States 1929-49.

(1935-39 = 100)

Dollar Volume Index

when inefficient management and membership relations difficulties interact with them. The existence of these other factors shows up during declining economic activity when management problems are numerous and difficult. It is true that all discontinuances do not occur during these periods, but some cooperatives do find it difficult to meet obligations. The result is more numerous discontinuances than before.

TECHNOLOGICAL CHANGES AND DISCONTINUANCES

Four main types of technological changes have been affecting the growth and development of farmer cooperatives. They are (1) substitutes (2) transportation (3) geographical shifts in agricultural production and (4) pattern of scale.

These developments and improvements give rise to a number of trends. Cooperative businesses and their managers do not possess equal abilities for adjusting to these trends. This means that from a group or total number, some cooperatives find it impossible to meet the challenge of these developments. Quite often they fail to understand technological processes and their effects. This is indicated by the fact that in previous studies this factor has failed to find an important place. This means that cooperatives and others reporting reasons and
opinions for discontinuing operations have not considered technological changes as really very important reasons. This condition has resulted because the impact of these factors is difficult to measure.

Substitutes:

A new commodity or an improved quality of the existing one may be defined as a substitute. To appeal to consumers the new product must be either of better quality, lower priced or both. Their appeal means that the relative share of total per capita consumption served by previous commodities is lower than it would have been in the absence of such substitutes.

This point is illustrated by citing the cases of butter and the cotton industries. The relative share of butter as of total per capita consumption of butter and margarine is much lower for 1951 than 1931. Whereas in 1931 the relative share of butter was about 91 percent, in 1951 it was only about 60 percent. The index of its relative share covering the period from 1931 to 1951 has indicated a general downward trend (see Figure 8).

In the case of textiles, the total per capita consumption includes cotton goods, synthetic fiber other than rayon, silk and wool. Of this total per capita consumption, the relative share of cotton goods has declined considerably. In 1931 the relative share of cotton
Figure 8. Relative Share of Butter of Total per Capita Consumption of Butter and Margarine, and Relative Share of Cotton Goods of Total per Capita Consumption of Textile Goods, United States 1931-51.

goods was about 83 percent and by 1951 it was down to 71 percent. This index shows that the relative share of cotton goods has generally declined (see Figure 8).

These developments and trends affect significantly the growth of farmer cooperatives. It means price competition and often a reduced demand for products handled. Proper adjustments become necessary. These can be made in two ways. Either price of products is reduced or their production is curtailed to equate declining demand.

Production history of agriculture provides the conclusion that curtailment is difficult. Thus the remaining alternative in most cases is to adjust prices in the absence of other temporary programs. This line of action affects adversely the revenue schedules of farmer cooperatives. Since the total costs per unit of output are likely to remain about the same the net return per unit decreases.

At any point of business history cooperatives differ with respect to total unit costs. Some with relatively high total unit costs are affected more intensely than others. When the full effect of trends caused by the development of substitutes is realized in terms of low net returns or negative net returns, some are likely to suspend business operations.
Transportation Development

Developments in means of transportation increase the range of alternatives for hauling goods. In the 19th century, the important means were steamers, railways and wagons. In the 20th century motor trucks and airplanes were added to the list of means of transportation.

The relative share of goods to be transported by certain means is determined by the principle of convenience and economy. Motor trucks are relatively more convenient than other means. To the extent they might be less economical, their flexibility has tended to more than offset this effect. The result is that with respect to many goods, the proportion of total receipts that arrives at principle markets by trucks is significantly different now than the early history of truck transportation.

The average percent hauled by trucks in 1939-45 was 48.5. For the same commodities this percentage increased to 62 in 1950. The change in proportion over the same period has been greater with respect to animal products than fruits or vegetables. Among animal products the change is relatively greater in dairy and poultry products than sheep, cattle, calves, and hogs. Among fruits and vegetables the change is greater with respect to fruits (see Table 4). This means that if any other innovation in transportation will not appear in the near future, the
### Table 4

Changes in proportion of Total Receipts of Selected Commodities by Truck at Principal Markets, United States, 1939-45 to 1950

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Hauled by Truck, 1939-45</th>
<th>Hauled by Truck, 1950</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>Butter</td>
<td>30</td>
<td>56</td>
<td>26</td>
</tr>
<tr>
<td>Cream</td>
<td>36</td>
<td>66</td>
<td>30</td>
</tr>
<tr>
<td>Shell eggs</td>
<td>54</td>
<td>93</td>
<td>39</td>
</tr>
<tr>
<td>Dressed poultry</td>
<td>47</td>
<td>79</td>
<td>32</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>27</td>
<td>43</td>
<td>16</td>
</tr>
<tr>
<td>Oranges</td>
<td>21</td>
<td>33</td>
<td>12</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>34</td>
<td>44</td>
<td>10</td>
</tr>
<tr>
<td>Milk</td>
<td>65</td>
<td>79</td>
<td>14</td>
</tr>
<tr>
<td>Live poultry</td>
<td>84</td>
<td>99</td>
<td>15</td>
</tr>
<tr>
<td>Calves</td>
<td>67</td>
<td>78</td>
<td>11</td>
</tr>
<tr>
<td>Cheese</td>
<td>22</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Hogs</td>
<td>70</td>
<td>79</td>
<td>9</td>
</tr>
<tr>
<td>Cattle</td>
<td>69</td>
<td>79</td>
<td>10</td>
</tr>
<tr>
<td>Apples</td>
<td>62</td>
<td>64</td>
<td>2</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>58</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>Potatoes</td>
<td>36</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>Lettuce</td>
<td>43</td>
<td>41</td>
<td>-2</td>
</tr>
<tr>
<td>Average</td>
<td>48.5</td>
<td>62</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Source: Bureau of Agricultural Economics, U. S. Dept. of Agriculture; Transportation of Selected Agricultural Commodities by Rail and Truck, 1951, p.10.
share of total receipts hauled by motor trucks will continue to increase because of their convenience.

**Effect of Transportation Developments on Farmer Cooperatives:**

Before the advent of truck transportation, in the early 1920's the emphasis had been to organize farmer cooperatives with the aim of using rail shipping service. This is indicated by the fact that there were about 3,500 cooperatives of this kind in 1925. Since the 1930's these shipping associations began to feel the effect of truck transportation. "The number of local rail shipping associations decreased about 80 percent from the peak period in 1925, as a result of consolidations, the expanding truck shipping, and establishment of interior packing plants and concentration yards." (1,p.54).

**Geographical Shifts in Agricultural Production:**

Some areas and states that used to emphasize the production of particular commodities have lost their comparative advantage. Midwestern states promoted wheat production and thus establishment of grain elevators. In 1857, the first cooperative elevator was established in Wisconsin. Now that state no longer produces any sizable amount of grain.

Shifts also have taken place with respect to relative share of production by geographical regions. The
North Atlantic, South Atlantic, North Central, and South Central regions contribute proportionately less to total wheat production now than 30 years ago. The share of the North Atlantic region has also decreased in terms of bushels. Generally, the production of wheat has been moving westward (see Table 5).

Similar types of shifts have taken place with respect to the production of cotton. The relative share of the South Eastern region as percent of total cotton production has been declining while the relative share of the Southwestern region has been increasing (see Table 6).

**Effect on Farmer Cooperatives:**

A general reduction of production of certain commodities in a particular region and state means a lower volume supplied by members to their cooperatives. This is contrary to the fact that when a cooperative is organized and physical plant built, the volume usually is expected to rise in the future.

Due to geographical shifts in productions, the volume may fail to increase as much as expected. This means that many cooperatives are left with excess plant capacities. With less volume, their variable costs decline to some extent but total fixed costs remain constant. If prices do not rise in the future to compensate for the resulting higher average unit costs, the relatively
<table>
<thead>
<tr>
<th>Region</th>
<th>1921a 1000</th>
<th>Percent of total</th>
<th>1931b 1000</th>
<th>Percent of total</th>
<th>1941c 1000</th>
<th>Percent of total</th>
<th>1951d 1000</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Atlantic</td>
<td>34,839</td>
<td>14.3</td>
<td>26,686</td>
<td>3.5</td>
<td>24,789</td>
<td>2.6</td>
<td>31,257</td>
<td>3.2</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>28,233</td>
<td>23.3</td>
<td>33,206</td>
<td>2.6</td>
<td>30,585</td>
<td>3.2</td>
<td>29,277</td>
<td>3.0</td>
</tr>
<tr>
<td>North Central</td>
<td>481,485</td>
<td>59.1</td>
<td>570,777</td>
<td>63.4</td>
<td>565,803</td>
<td>60.0</td>
<td>554,971</td>
<td>56.6</td>
</tr>
<tr>
<td>South Central</td>
<td>80,227</td>
<td>9.8</td>
<td>141,443</td>
<td>15.6</td>
<td>89,039</td>
<td>9.5</td>
<td>63,918</td>
<td>6.5</td>
</tr>
<tr>
<td>Western</td>
<td>169,621</td>
<td>23.3</td>
<td>128,107</td>
<td>14.2</td>
<td>232,911</td>
<td>24.7</td>
<td>301,387</td>
<td>30.7</td>
</tr>
<tr>
<td>United States</td>
<td>814,405</td>
<td>100.0</td>
<td>900,219</td>
<td>100.0</td>
<td>943,127</td>
<td>100.0</td>
<td>980,010</td>
<td>100.0</td>
</tr>
</tbody>
</table>


2. South Atlantic Region--Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia.
4. South Central Region--Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Oklahoma, Texas.
Table 6
Geographical Changes in Cotton Production by 10 Year Periods, United States 1921-51

<table>
<thead>
<tr>
<th>Region</th>
<th>1921a 100 bales</th>
<th>Percent of total</th>
<th>1931b 100 bales</th>
<th>Percent of total</th>
<th>1941c 100 bales</th>
<th>Percent of total</th>
<th>1951d 100 bales</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Eastern</td>
<td>2,346</td>
<td>29.50</td>
<td>3,239</td>
<td>18.95</td>
<td>1,627</td>
<td>15.15</td>
<td>2,390</td>
<td>15.78</td>
</tr>
<tr>
<td>South Central</td>
<td>5,520</td>
<td>69.40</td>
<td>13,452</td>
<td>78.68</td>
<td>8,401</td>
<td>78.19</td>
<td>9,905</td>
<td>65.42</td>
</tr>
<tr>
<td>South Western</td>
<td>79</td>
<td>.99</td>
<td>393</td>
<td>2.30</td>
<td>691</td>
<td>6.43</td>
<td>2,841</td>
<td>18.75</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
<td>.11</td>
<td>12</td>
<td>.07</td>
<td>25</td>
<td>.23</td>
<td>8</td>
<td>.05</td>
</tr>
<tr>
<td>United States</td>
<td>7,954</td>
<td>100.00</td>
<td>17,096</td>
<td>100.00</td>
<td>10,744</td>
<td>100.00</td>
<td>15,144</td>
<td>100.00</td>
</tr>
</tbody>
</table>


1. South Eastern--Virginia, North Carolina, South Carolina, Georgia, Florida.
2. South Central--Missouri, Tennessee, Alabama, Mississippi, Arkansas, Oklahoma, Texas, Louisiana.
3. South Western--New Mexico, Arizona, California.
inefficient cooperatives are likely to have negative net returns, and finally are forced out of business.

Change in the Pattern of Scale:

Business organizations in the United States have been increasing their scale of operations since the beginning of the 20th century and to some extent in the 19th century. Cooperatives started to emphasize scale benefits in the 1920's. At that time efficiency of scale to lower unit costs received relatively less attention than holding the produce and raising the price level. In the late 1930's economies of scale and efficiency of handling farm products received much attention. (9, pp.17-18).

The organization of business on a larger scale requires the presence of many conditions. The important ones are better communication and transportation facilities, larger volume, wider market and area of supply. In the case of agricultural cooperatives, the volume to be handled depends largely upon the supply area.

The development and improvement of means of transportation and communication along with mass production techniques has made it possible to enlarge the scale, the result being many mergers and consolidations. The merger and consolidation movements have tended to stabilize or reduce the number of cooperatives. For example in 1929 there were 12,000 farmer marketing and purchasing
This number declined to 10,035 by 1949. During the same period membership has more than doubled and volume of business increased three times. (43,p.666)

Although part of the increase in business volume is due to higher prices in 1949 than 1929, the pattern of growth is clear.

INEFFICIENT MANAGEMENT AND DISCONTINUANCES

In theory, the management of a cooperative rests with the membership. Members delegate this responsibility to a board of directors that is usually elected on the basis of one member one vote. The board formulates broad policies both with respect to finance and business management. To carry out the detailed management of these policies, the board hires a manager. This means that the manager is responsible to the board while the members of the board are responsible to the membership.

Managerial and directorate ability like other kinds of ability is not equally possessed by all individuals. Due to this variation some can do a better job in combining the factors of production than others. Directors may sometimes fail to realize and appreciate this difference and hire inefficient managers whose services are likely to be disadvantageous in the long run.
Distribution of Responsibilities:

For certain functions of a cooperative business the manager has a high percentage of responsibility while for other functions members and directors are relatively more responsible. The same thing is true with respect to errors made in carrying out their functions and duties. For example, the mismanagement of fixed and variable capital is chargeable, in most cases, to the errors of a hired manager while ill-conceived financial policy and sources of capital are chargeable to relatively poor judgements made by members and directors. In the presence of one, the beneficial effects of the other cannot be realized to the fullest extent. This means that an efficient manager may not be able to make the business succeed when its financial policy is not well conceived and vice versa.

Inefficiency in Management:

Inefficiency in management is difficult to define. However, with respect to this discussion it will mean the deviation of actual net returns from the maximum net returns. The management of some cooperatives may wish to maximize immediate net returns while the management of others may wish to maximize ultimate net returns. Others may develop some balance between these two alternative policies. Regardless of which policy is followed it is necessary for all cooperatives to adjust to the basic trends of a dynamic business economy in order to avoid
discontinuing operations.

Because of variation in abilities and training, all cooperatives can not meet equally the demands of dynamic economic forces. Similarly all cooperative associations do not have the same physical input and output relationships. During the life history of any cooperative some mistakes and bad judgments are made in solving technical business problems. Inefficient management simply makes more mistakes than efficient management.

With respect to discontinued associations, numerous types of mistakes and bad judgments were made by the board and the manager. A number of such mistakes are listed below.

1. Employed an inexperienced manager.
2. Overhead expenditure was kept out of proportion with service required.
3. Declared dividends in attempt to convince membership that belonging to the cooperative is worthwhile.
4. Associations bought much property instead of leasing until definite needs were discovered.
5. Attempted to operate many delivery points.
6. Produce was held up to obtain higher prices.
7. Directors failed to realize importance of paying adequate salaries for competent management.
8. Association failed to develop sound relationships with its principal creditors.

9. Credit was extended unwisely.

10. Failed to build sufficient reserves and surpluses.

11. No attempt was made to find out what a cooperative could promise and could not promise.

12. Reserve capital was used to meet competition of private agencies.

13. High pressure tactics were used to retain part of the membership.

14. Failed to insure for fire protection.

15. Selected poor location for the establishment.


17. Inadequate records were kept.

18. In some cases where cooperative was operating satisfactorily, directors became negligent of their responsibilities.

19. Failed to file application for tax exemption.

20. Directors took too much interest in certain phases of operations. Thus, failing to recognize their own responsibilities and give management full authority for carrying out policies and getting results.

21. Improper finance for early cooperatives. Many had to borrow from commission firms. They sold
a few thousand dollars worth of stock, spent it all on buildings and thus started off in debt.

22. Deterioration of goods during storage. Failed to sell for what they would bring.

23. Cooperative associations were built around one man. (15, p.3), 49, p.13), 23, p.6,12) and 28, pp. 15-16).

The effect of most of these mistakes becomes manifested in higher unit costs. As a result different cooperatives give origin to different financial ratios. The comparison of similar types of financial ratios measure the relative efficiency and soundness of capital structure. The meaning of some of the important ratios and financial comparison of a number of cooperatives follows.

**Current Asset to Current Liability Ratio:**

This ratio measures the ability to pay short-term debts. Generally recommended minimum standard is 2 to 1. If the ratio is too low it means less capital for operating expenses. Some cooperatives tend to have lower ratios than others. For example, an analysis of 36 purchasing associations in the State of Mississippi for a three year period from 1946 to 1948 showed that 13 associations had current ratios below the group average. The group average was 1.9 to 1. (24, p.26).
Net Worth to Total Assets Ratio:

This particular ratio estimates the ability to pay long term obligations. It also shows the percent of total assets financed by owners. The percent commonly recommended varies with type of business. If fixed costs are low, .7 to 1 is considered satisfactory. With larger fixed costs, .5 to 1 is the minimum recommended.

It is interesting to note that in 1951 the average purchasing association in Arkansas had about 70 percent of total assets financed by member owners. (5, p.11) A similar analysis of 119 Oregon marketing and purchasing associations for the year 1951 showed that 53 percent of the total assets were financed by owners. However, the ratio varied considerably among associations. (25, p.12).

Accounts Receivable to Current Assets:

This ratio shows the extent to which cooperatives are operating on a cash basis. It is desirable to keep this percentage below 30. (5, p.12).

Net Savings to Net Worth Ratio:

This ratio is important because it estimates the earning power. A low ratio is likely to discourage owners and potential investors. (5, p.14).

There are some difficulties in analysing a particular cooperative with respect to management efficiency on the basis of financial ratios. The same difficulties are
encountered when the soundness of financial policy is to be judged. This is because all ratios may not point in the same direction. The result is that the unfavorable effect of some may be off-set by the favorable position of others. This means that human judgment along with financial ratios must play an important part in indicating efficiency or inefficiency of management. The type of business, operating policies and economic conditions will also have to be considered.

It has been shown that some cooperatives in a certain group tend to have financial ratios that are below the average for the group. Some of these unfavorable ratios may, of course, be, wholly or partly, due to the inefficiency of management. Even if other favorable factors such as large volume and a sellers market were present, discontinuances would still occur due to inefficient management. A greater proportion of discontinuances would come from the category of associations having lower than average ratios.

MEMBERSHIP RELATIONS DIFFICULTIES AND DISCONTINUANCES

Cooperation brings together individuals with different opinions and ideas. A cooperative association, thus calls for such adjustments in opinions and group behavior
that would best serve the common economic interest. The primary responsibility of members, of course, is to finance their association and provide patronage. However, if non-members help in finance, their interests shall receive due consideration.

Many membership difficulties have been partly due to the way associations were organized. In the early history of agricultural cooperation many organizers believed it necessary to have from 75 to 95 percent of the producers in the community as members. It, therefore, became the aim of most membership campaigns to persuade large numbers to join the association. The members' willingness to cooperate, ability to finance, produce, pack, and grade failed to receive due consideration. Some farmers being members of the community joined merely to avoid social pressure.

Some contracts provided no withdrawal provisions after a certain minimum period. The effect was friction among membership, uncertainty of supply of products being produced, and lack of loyalty. This meant some associations were relatively unstable, unless favorable developments like relatively high prices cushioned their economic position. (49,p.11).

Membership friction also has been due to the special features of rural life. Individual isolation, lack of
business experience and the fact that farmers were able to choose an individual way of life even though it may be less profitable, made it difficult to easily follow cooperative principles. The main difficulties that were encountered in membership relations of discontinued associations are listed below:

1. Some members expected the impossible from their association.
2. Few were convinced that the manager was responsible to the board of directors while the members of the board were responsible to them.
3. Members failed to realize the importance of competent manager.
4. Engineering of elections and appointment of officers by self-perpetuating group was allowed.
5. Membership was lacking capital.
6. Because many cooperatives were hastily formed, some members failed to grasp the underlying economic goals.
7. Members did not stick together during hard times. This was due mainly to lack of loyalty and better bargains at other places of business.
8. Often undue dissension existed among members.
10. In few cases relations remained poor due to already existing quarrels or jealousies. (15,p.3 and 49,p.13) and 1,p.243).

The membership relations problem resolves into a question of how can members work harmoniously with their fellow men. Relations are improved when a manager or a board treats all members alike. When partial treatment is extended to some, other members soon find out about it. The usual result naturally is friction between membership and the board or the manager.

Even if similar treatment is extended to all, some may still leave the association because their expectations are not realized. Similarly others may leave if better services and bargains exist elsewhere. For the manager and the board it is highly valuable to know the general opinion of the membership and their reasons for joining the association. It also is desirable to find why some leave their institution.

It helps to explain to members the principles of cooperation and more importantly its role in the community. A program of education may be carried forward by the management. It is, of course, desirable and may be beneficial to have disagreements based on full understanding and discourage conflicts resulting from a misunderstanding.
of members' opinions and ideas.

In the area of mutual relations, mistakes and bad judgments can be easily made by leaders, manager, and members alike. For example a manager and a member of the board may treat some members favorably. The association may be operated for the private advantage of few individuals. When these things happen, many members are likely to lose faith in the association. The final result in some cases may mean suspension of the organization. "A cooperative is doomed as soon as the membership realizes that it is being operated for the private advantage of few individuals or of the cooperation itself rather than the good of its members." (30, p. 224).

COMPETITION AND DISCONTINUANCES

Competition as a reason for discontinuance is not as frequently mentioned as other factors. Although its importance is often minimized, some understanding of it during the life history of cooperative associations is necessary.

In the early history of agricultural cooperation when associations were formed, opposition and competition from local dealers was frequently experienced. This was due to the fact that cooperative associations reduced the
volume of their competitors. Farmers became members of cooperatives because marketing margins of non-cooperative businesses were often excessive.

Because of competition from local dealers, some cooperatives failed in the early years of their existence. It is at the time when associations are financially weak, lack experience, and volume, that they are most vulnerable to competition. The consequence has been that a greater proportion of total discontinuances occurred during the first five years. As the age of cooperatives increased, the chances of discontinuance decreased.

Out of 927 associations that suspended business between 1900 and 1923 about 60 percent were in existence less than 5 years. Only about 4.3 percent were in existence over 15 years (see Table 7). It is easy to see that as the class interval of years in existence advanced the proportion of discontinued associations from each tended to decline. This also means that the older the association, the less are the chances for suspension.

The strength to compete at each stage of growth depends largely on unit costs. Like cooperative associations, local dealers also had different unit costs. Since unit costs are related to volume of business, local dealers or in some cases cooperatives started the price competition. In some cases cooperatives were unable to
### Table 7

**Life Span of 927 Associations, United States, 1900-1923**

<table>
<thead>
<tr>
<th>Years in Business</th>
<th>No. of Associations</th>
<th>Percent Reporting</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>73</td>
<td>7.9</td>
<td>7.9</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>126</td>
<td>13.6</td>
<td>21.5</td>
</tr>
<tr>
<td>2 to 3 years</td>
<td>145</td>
<td>15.6</td>
<td>37.1</td>
</tr>
<tr>
<td>3 to 4 years</td>
<td>116</td>
<td>12.5</td>
<td>49.6</td>
</tr>
<tr>
<td>4 to 5 years</td>
<td>93</td>
<td>10.0</td>
<td>59.6</td>
</tr>
<tr>
<td>5 to 6 years</td>
<td>81</td>
<td>8.7</td>
<td>68.3</td>
</tr>
<tr>
<td>6 to 7 years</td>
<td>41</td>
<td>4.4</td>
<td>72.7</td>
</tr>
<tr>
<td>7 to 8 years</td>
<td>38</td>
<td>4.1</td>
<td>76.8</td>
</tr>
<tr>
<td>8 to 9 years</td>
<td>30</td>
<td>3.2</td>
<td>80.0</td>
</tr>
<tr>
<td>9 to 10 years</td>
<td>21</td>
<td>2.3</td>
<td>82.3</td>
</tr>
<tr>
<td>10 to 11 years</td>
<td>37</td>
<td>4.0</td>
<td>86.3</td>
</tr>
<tr>
<td>11 to 14 years</td>
<td>52</td>
<td>5.6</td>
<td>91.9</td>
</tr>
<tr>
<td>15 to 19 years</td>
<td>35</td>
<td>3.8</td>
<td>95.7</td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>24</td>
<td>2.6</td>
<td>98.3</td>
</tr>
<tr>
<td>25 to 29 years</td>
<td>8</td>
<td>.9</td>
<td>99.2</td>
</tr>
<tr>
<td>30 and over</td>
<td>7</td>
<td>.8</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>927</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Elsworth, R. H., Development and Present Status of Farmers Cooperative Business Organizations; U. S. Dept. of Agri. Bul. 1302, 1925 p. 66.
compete and failed while in others the local dealers succumbed. Of course, in many instances there was sufficient volume for both and they now operate side by side in the marketplace.

**RANDOM HAPPENINGS AND DISCONTINUANCES**

Floods, earthquakes, tornadoes, and wars are called random happenings because their behavior is unpredictable. The risk of these acts of providence is not insurable. In cases when the risks can be transferred, the cost is likely to be high.

Such happenings have caused some associations to fail in the affected areas. They destroy physical plant, goods, and raw material. This means that the assets are mostly destroyed, but the claims of creditors remain. Whatever is left usually goes to fulfill these claims. The affected associations very likely suspend operations.

The crop of a particular region may also be affected considerably due to diseases and ravages of insects. Thus these and other acts of God also weaken the financial position of farmer members.
Chapter IV

AGRICULTURAL COOPERATION IN INDIA

For a general understanding of agricultural cooperative societies in India, it is necessary to provide a broad background of the agriculture in the country.

GENERAL AGRICULTURAL BACKGROUND

Production and Population

According to the 1951 census, the population of India is 360 million. The annual rate of growth is 1.25 percent. Therefore to increase per capita physical goods, the annual production rate must be higher than 1.25 percent. The production of certain goods may, of course, increase at a greater rate while of others may lag behind. For example, the index of industrial production with 1948 = 100 was 124 in 1953. (52,p.22) On the other hand, the index of agricultural production with 1935-39 = 100 was 102 in 1951-52. (51,p.47) The comparison of these indexes indicates that agricultural production has remained relatively fixed. However, it will be necessary to increase agricultural production as much as possible so that more exchange reserves may be used to buy capital goods.

Education and Income Level

About 70 percent of the total population depends upon
agriculture. This means 252 million people in 500,000 villages live off the land. In 1950-51, the 70 percent dependent upon agriculture received about 50 percent of the total national income. The per capita income in 1950-51 was about 265.2 rupees. Therefore for those in agriculture, it was less than 265.2 rupees.

The level of literacy in India is very low. Only about 20 percent are literate. Moreover in rural areas not even 20 percent may know how to read and write. However, illiteracy does not mean that they may not be wise or lack sound judgment. But it certainly indicates that printed word can not be an important vehicle of communication. Therefore it may be justifiable to subsidize the purchase of a radio for each village council which now is usually elected by popular vote.

Area and Holdings

The total area of India is about 811 million acres with 266 million acres being devoted to crop production. This means 1.06 acres per person for those dependent on agriculture. Food grains are produced on 78 percent of the area under crop production. (19, p.77).

It can be seen that the holdings are very small and subsistence type farming is the rule. The size of the holding may vary from less than 1 acre to 13 acres. On an average 60 percent of them are less than 5 acres.
Most of them are fragmented and scattered about the village. This is due to the nature of inheritance law and pressure of population on land. Legally each heir has a right to a proportionate share of each type of land.

**Land Tenure Systems**

In India three different kinds of tenure systems have been prevailing for many years. They are described below.

Permanant settlement—Under this system a single landlord may own as much as four districts. It is called permanant because the revenue is fixed forever. The system was designed by Lord Cornwallis in the early 19th century to create benevolent landlords who will aid in prompt and regular collection of revenue.

Temporary settlement—The only difference between the two systems is that under temporary settlement revenue could be revised after 20, 30, or 40 years.

The effect of both these settlement plans has been the stifling of initiative and spirit of enterprise. By the time, the plan was extended to 55 percent of the area, its limitations were obvious. Therefore subsequent settlements were made directly with cultivators. This system is known as Ryotwari.

For the last 4 or 5 years the land reform activity has been intensified each year. This has been mainly due
to the promises made in the last general election. Many states by passing legislation are giving the lead. The Danish example is being followed by setting an upper limit on the size of individual holdings. For example the upper limit in the state of Uttar Pradesh is 30 acres, in Punjab 50 "standard" acres i.e. the difference in land fertility and other advantage will be adjusted to make 50 standard acre equivalents. A landlord may be permitted a prescribed limit for personal cultivation. (19,p.89) This cultivator owner philosophy is also held by Sir Manilal Nanavati, the President of Indian Society of Agricultural Economics and a graduate of Wharton School of Finance, Pennsylvania.

**Dependency on Rainfall**

Satisfactory crop yields mainly depend on the monsoons. Most of the rain comes during July, August, and September. Although the average for India is 46 inches, many months and particular areas suffer greatly from its uncertainty and inadequacy. The result is that on an average 2 out of 5 years tend to be relatively better crop years than the others. It also means the widespread use of irrigation. At present about 19 percent of the net sown area is irrigated. Of the net sown area, canals irrigate 8 percent, indigenous wells and electric
or diesel pumps 5 percent, tanks 3 percent, and others 3 percent.

The importance of canals and wells is likely to increase in the near future. This is indicated by the fact that in 1950-51 eight multipurpose schemes, one major irrigation scheme, and three power schemes each costing Rs 100 million, and 24 schemes each costing between Rs 20 and 100 million, and 90 schemes costing less than Rs 20 million were under actual construction. (39,p.270) A number of these projects rival T. V. A. and Boulder Dam. (36,p.529).

One of the projects recently completed is Nangal Dam located 225 miles north of New Delhi. Its gates were opened on July 8, 1954. This new concrete and tile-lined system is the longest irrigation networks in the world with one channel 240 miles long. Nearby the Bhakra project, 680 feet high, is being constructed under the supervision of Harvey Slocum. He also supervised the construction of the Grand Coule and Shasta Dams in the United States. This particular dam in height would be topped only by the 726 foot Hoover Dam. (34,p.14).

Probably no other problem is receiving as much attention as the development of multi-purpose hydro-electric projects. They would also improve communications and facilitate industrial development.
With irrigation farming and limited size, the intensive agriculture will, of course, be the rule. Much emphasis needs to be given to increasing production per acre and animal. For research in agricultural economics it would mean maximization of net returns per acre and per animal rather than per farm which is the emphasis given on extensive type farms. Extensive emphasis may mean in most cases low yields or net returns per acre, but not low income per farm because farms are large. The former objective will tend to promote employment and high physical production that best fits conditions in India.

**Indian Farmer and Marketing**

Marketing consists of all activities that are carried on from the time small surpluses of individual farms leave and ultimately reach consumers. Some of the activities may be performed by the farmer. For instance he is engaged in marketing when he packs and carts the surplus produce to the market. However, marketing differs from farming. Usually, therefore, marketing functions are performed by persons of special knowledge and resources, who know when demand is strong, price relatively high and act accordingly.

A farmer may sell his produce to a travelling dealer or haul it to the nearest market. The distance to market
may vary from one to ten miles. Because highways are poor and means of transportation slow, the time enroute varies directly with distance.

Marketing costs: These are always middlemen's charges for services. Information relating to charges is scanty. However, the available information indicates that in 1937 wheat farmers received 61 percent of the consumers' price. Similarly in 1941, rice producers received about 51.6 percent of the consumers' price. This high marketing cost is mainly due to the relatively poor means of communication and transportation. Transportation costs alone have been estimated to be about 20 percent of the consumers' price. (6, pp. 57-58) Another important reason may be the high profit earned by the middlemen.

Market malpractices: These malpractices include manipulation of scales, weights, measures, large samples of produce, unnecessary business and charity charges, and secret price making.

In 1928, the state of Punjab made a study concerning accuracy of weights and scales in five districts. Out of 1,407 scales tested about 69 percent were incorrect. Similarly, out of 5,907 weights 29 percent were incorrect. (17, p. 65) These findings indicate that big business and middlemen do not hesitate to take advantage of the farmers lack of knowledge about marketing. They also indicate
lack of frequent inspection of market practices and facilities.

Many times bargains between the agent and the buyer are made secretly. These may involve the manipulation of figures. The farmer generally is not able to understand this manipulation and therefore is at a disadvantage.

Sometimes a particular farmer might have borrowed money from the moneylender or grain dealer. The creditor may then limit selling of the produce.

High deductions are made for religious and charity purposes. The usual rate is from $2\frac{1}{2}$ to 3 percent. The producer lacks any means of protest against such deductions. Because the dealer may belong to a different religion than the producer, such charges are, of course, unfair.

Indian Farmer and Purchasing

With reference to the farm supply system, no published material is available. Since the village tends to be self-sufficient at this level of economic development, the farmer usually raises his own fodder and grain for livestock. Because adequate quantities of fertilizer and insecticides have not been available, purchasing has remained simple so far. Farmers in most cases buy cotton seed and oil seed cakes, and fertilizer from local stores. They have more flexibility in purchasing
because more is known of qualities through experience. These factors make them relatively good businessmen in purchasing.

Agricultural Credit:

The credit problem has been a vital one in India. Besides plantations and a few prosperous farmers, the commercial banks and insurance companies have remained relatively unimportant in supplying funds to farmers. The moneylender still is the main source of farm credit. His share is about 80 percent of total farm credit requirements. (32,p.605).

Interest rates have been very high. The usual rate has been considered about 36 percent. The reasons given for such high rates have been the small loans and low credit rating of borrowers.

It is believed that moneylenders' services cannot be dispensed with for a long time. Therefore, the state governments are trying to regulate moneylenders behavior through various Acts. The provisions of these Acts require licensing and registration of moneylenders, maintenance of accounts, and maximum interest rate. The usual maximum rate of interest allowed is 18 percent.

Most of the credit obtained by farmers has been for unproductive purposes; i.e. social occasions like births,
marriages and deaths. This is often necessary because the farmers' financial position is weak, and yet they are social beings and as such must try to meet the standards of their communities.

It may be concluded that most of the farmers' problems relate to farm finance, marketing, and social living. The undesirable business behavior of marketing and financial agents provided the justification for cooperative effort. The purpose of cooperatives has been to replace moneylenders and middlemen's functions by providing similar services in a better way.

**AGRICULTURAL COOPERATIVE MOVEMENT**

The first Act pertaining to cooperative societies was passed in 1904. This Act provided only for the organization of credit societies. To give legal recognition to central organizations, production and distribution societies, another Act was passed in 1912. Central organizations were necessary because it was difficult to raise capital locally.

A Registrar of cooperative societies is appointed by the government. His duty has been to organize and control the development of the movement. His statutory duties are the registration, audit and cancellation of
societies. To execute these functions he is equipped with the necessary staff.

**Primary Society and Its Organization**

A society that is operating at a local level is known as primary society in India. Any ten or more adult persons living in a village or group of villages and intending to promote mutual economic interest in accordance with cooperative principles can get themselves registered as a cooperative society with either limited or unlimited liability.

The business of the primary society is managed by members through a committee elected at the general meeting. Each member is allowed one vote.

**The State and District Cooperative Banks**

The membership of State and District Cooperative Banks consists of primary societies, and other individuals. They have limited liability. Individuals and primary societies may deposit funds in State and District Cooperative Banks. The Reserve Bank of India, a bankers' bank, may render through State and District Banks any financial aid to farmer members of primary societies.

The per capita income of farmers, as pointed out before, is very low. It is because of this, as will be shown later, that a very high proportion of working
capital of primary societies consists of loans from State and District Cooperative Banks.

Growth of Agricultural Cooperatives

The movement has been growing at varying rates under official initiative, direction, and control since 1904. In the early period the rate of growth was very high. An average increase of 594.1 percent was observed from 1910-11 to 1914-15. For the next 15 years the growth rate was more than 70 percent. The reasons for the rapid growth were high enthusiasm and better economic conditions. Many societies were promoted without realizing their limitations. In the late 1920's, when the limitations became evident the rate of growth started to decline.

In the 1930's, the progress slowed down greatly. The growth rate of societies declined from 66.6 to 8.9 percent. The rate of growth of membership declined from 68.0 to 9.8 percent. The decline in rates was due largely to a slump in agricultural prices that began in 1929. Many committees of inquiry were appointed to suggest ways and means for improving the situation. Because of their recommendations, consolidation and rehabilitation became the main features of the 1930's. (6, p.5).

A rise in prices during and after the World War II relieved the tension. It seems that the emphasis since
the 1940's has been to increase membership rather than the number of societies (see Table 8).

In 1949-50 the movement curve of number of agricultural societies and membership started to rise very sharply (see Figures 9 and 10). It may be largely explained by the fact that economic organizations are now gaining more importance than before.

When India was struggling for independence, its people had a common objective. Any economic program that diverted attention from the common political objective tended to be neglected. Now that independence has been achieved, the objective for India is to stand, ultimately, on its own feet economically.

Structure of Agricultural Cooperative Movement

Agricultural cooperative societies in India are found dealing with activities relating to finance, production, marketing, purchasing, and social services. The importance of non-credit societies is less than the credit societies. On June 30, 1951, the number of credit societies was 77.4 percent of the total number (see Figure 11). Therefore, it was felt appropriate to analyze credit societies in some detail. In addition, relevant information concerning other types of societies is provided in two tables.
Table 8
Growth of Agricultural Societies and Their Membership, India 1906-07 to 1950-51

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Societies</th>
<th>Percent Increase</th>
<th>Number of Members</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1906-07 to 1909-10</td>
<td>1,713</td>
<td></td>
<td>107,643</td>
<td></td>
</tr>
<tr>
<td>1910-11 to 1914-15</td>
<td>10,891</td>
<td>594.1</td>
<td>459,096</td>
<td>326.5</td>
</tr>
<tr>
<td>1915-16 to 1919-20</td>
<td>25,873</td>
<td>137.5</td>
<td>902,930</td>
<td>96.6</td>
</tr>
<tr>
<td>1920-21 to 1924-25</td>
<td>51,716</td>
<td>99.9</td>
<td>1,661,098</td>
<td>83.9</td>
</tr>
<tr>
<td>1925-26 to 1929-30</td>
<td>83,093</td>
<td>66.6</td>
<td>2,791,562</td>
<td>68.0</td>
</tr>
<tr>
<td>1930-31 to 1934-35</td>
<td>93,149</td>
<td>12.1</td>
<td>3,063,628</td>
<td>9.8</td>
</tr>
<tr>
<td>1935-36 to 1939-40</td>
<td>101,507</td>
<td>8.9</td>
<td>3,437,873</td>
<td>12.2</td>
</tr>
<tr>
<td>1940-41 to 1944-45</td>
<td>129,698</td>
<td>27.7</td>
<td>4,768,173</td>
<td>38.4</td>
</tr>
<tr>
<td>1945-46 to 1949-50</td>
<td>133,616</td>
<td>3.0</td>
<td>6,559,690</td>
<td>37.6</td>
</tr>
<tr>
<td>1950-51 to</td>
<td>149,568</td>
<td>11.9</td>
<td>8,734,213</td>
<td>33.1</td>
</tr>
</tbody>
</table>

Figure 9. Average Number of Agricultural Cooperative Societies in Specified Periods, India 1906-51.

Figure 10. Average Membership of Agricultural Cooperative Societies in Specified Periods, India 1906-51.

Figure 11. Relative Importance of Farmer Cooperative Credit Societies, India 1950-51

Credit Societies 77.4%
Non-credit Societies 22.6%
Agricultural Societies 149,277

Credit Societies 69%
Non-credit Societies 31%
Membership of Agricultural Societies 8,734,213

Cooperative Credit Societies

Credit societies are found in 23 of the 29 states of India, but, of course, the number varies among them. They are usually federated into District Cooperative Banks which in turn are federated into a State Bank.

An Average Credit Society

On an average, a credit society has about 44.6 members. Its working capital per member is about Rs 44.8. The main source of working capital is State and District Banks supplying about 45.9 percent total needs. Borrowings from Government average about 1 percent. This indicates that a cooperative credit society has to pay a large amount of interest.

It is difficult to raise funds locally from members, the amount of share capital being only about 20 percent. The reserve funds are about 21.7 percent, which makes owned capital equal to 41.7 percent. Although members do try to finance their own societies, outside capital is needed in substantial quantities. It is because the farm business also needs capital.

A credit society also accepts deposits from members and non-members. The deposits of members are about 6.4 percent. The acceptance of deposits means that members and others are encouraged to develop habits of thrift and savings.
For the year 1950-51, the loans made per member averaged Rs 44.4. The loans due at the end of the year, i.e., June 30, 1951 were Rs 56.5 per member. Of due loans, 21.9 percent constituted overdues. The overdue percentage is high which means lack of credit worthiness of some members. It is very unlikely that actual losses will be of the magnitude indicated above. Much of the overdues may be recovered through security offered by debtors.

The credit society may also sell the produce of some members. On an average, the value of goods sold per member was Rs 34.4 per year.

The cost of managing 100 rupees of working capital is about rupees 2.5 which is low because of much honorary management. The management committee is also familiar with the financial status of members which saves on appraisal and also means less red tape.

Dividend rates on shares range from 2 to 10 percent. The range of interest on borrowings is 1 to 12½ percent. Interest charged on loans to members ranges from 3 to 18 3/4 percent. The interest rates charged may still appear high but members would have to pay still higher rates if such societies were not in existence.

Loans can be made only to members. If loans are made to other societies, they must be approved by the Registrar. For each member the loan limit is set at the
general meeting. Since about 66 percent of the primary credit societies have unlimited liability, loans are secured by all members. Loans are mainly short and medium term for productive purposes. Credit, of course, is good only if it is productive, otherwise it is a curse since the interest rate works day and night.

Non-Credit Societies

The Tables 9 and 10 provide the relevant information indicating relative importance of non-credit societies, and sources of their capital.

Societies Under Liquidation

At this point liquidation is considered to mean the same thing as discontinuance. In business, cost of production and reasonable returns cannot be guaranteed. Business firms unable to cover average costs over the long run are forced to cease operations. In India liquidation may occur in any of the following ways.

1. If membership has been reduced to less than 10, the Registrar cancels the registration.

2. A society may liquidate its business voluntarily.

3. Society may fail to meet its creditors claims and be forced to cease doing business.

In the history of agricultural cooperation discontinuances
Table 9

Number, Working Capital, and Sources of Capital of Primary Agricultural Cooperative Societies, India 1950-51.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Working capital</th>
<th>Share capital percent of working capital</th>
<th>Deposits percent of working capital</th>
<th>Borrowings percent of working capital</th>
<th>Reserve and other funds percent of working capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Societies</td>
<td>115,468</td>
<td>409,577,395</td>
<td>20.5</td>
<td>11.0</td>
<td>46.9</td>
<td>21.7</td>
</tr>
<tr>
<td>Purchase &amp; Sale Societies</td>
<td>10,717</td>
<td>69,395,918</td>
<td>32.4</td>
<td>20.9</td>
<td>22.4</td>
<td>24.3</td>
</tr>
<tr>
<td>Production &amp; Sale Societies</td>
<td>5,938</td>
<td>69,282,342</td>
<td>24.1</td>
<td>17.3</td>
<td>40.5</td>
<td>18.1</td>
</tr>
<tr>
<td>Production Societies</td>
<td>11,956</td>
<td>22,388,854</td>
<td>25.8</td>
<td>11.1</td>
<td>50.0</td>
<td>13.1</td>
</tr>
<tr>
<td>Social Service Societies</td>
<td>5,142</td>
<td>3,910,877</td>
<td>12.2</td>
<td>20.2</td>
<td>17.6</td>
<td>50.0</td>
</tr>
<tr>
<td>Housing Societies</td>
<td>62</td>
<td>404,055</td>
<td>50.4</td>
<td>34.3</td>
<td>10.7</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Table 10
Per Member Analysis of Primary Agricultural Cooperative Societies, India 1950-51

<table>
<thead>
<tr>
<th>Type</th>
<th>Membership per Society</th>
<th>Owned Capital per Member Rs</th>
<th>Share Capital per Member Rs</th>
<th>Working Capital per Member Rs</th>
<th>Loans made per Member Rs</th>
<th>Loans due per Member Rs</th>
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<td>33.5</td>
<td>16.3</td>
<td>79.5</td>
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<td>25.4</td>
<td>14.5</td>
<td>44.8</td>
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<td>Production &amp; Sale Societies</td>
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<td>30.8</td>
<td>17.6</td>
<td>73.1</td>
<td>64.7</td>
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<td>12.9</td>
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<td>96.6</td>
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have been a part of the movement. On June 30, 1950, 4.7 percent of all agricultural societies were under liquidation. The percentage declined slightly to 4.5 on June 30, 1951.

There have been many factors inducing liquidations. Some of them are listed below.

(1) Communal feeling among members of some societies.
(2) Farmers lack understanding of cooperation and business methods.
(3) Some members objected to pooling of produce.
(4) Strong opposition in some cases from middlemen.
(5) Lack of capital formation in villages.
(6) Absence of trained staff and cooperative education.
(7) Discord between members and officials.
(8) Deterioration of goods, and bad debts.
(9) Sudden and serious fluctuation in prices.
(10) Defects in capital structure and management.
(11) Low level of economic progress.

**Achievements of Agricultural Cooperation**

Cooperative societies in India have helped to build up a spirit of mutual help and thrift among more than 8½ million farm families. It is assumed that the average size of the family is about 5 and that only the head of the family belongs to a cooperative. Therefore, 16 percent
of the farm families are members of cooperative societies. Credit societies freed some members from outside debt and also reduced interest rates. The 1922-23 Punjab report indicated that about Rs 3,000,000 of outside debt was wiped out each year. Similarly the Bihar and Orissa report estimated that many mortgage holdings have been redeemed and land purchased by members. Rates charged on loans by moneylenders have been reduced. (17,p.199).

The movement also helped directly in making improvements on land. Consolidation of holdings have been stimulated in some states. For example, on July 31, 1942, 1,763 societies for the consolidation of holdings existed in Punjab. In Delhi and Madras the number of such societies was 40 and 22 respectively. (6,p.24).

Other societies such as cane growers, better farming, and irrigation have been improving the economic conditions of their members. In certain states the progress has been very good. For example, in Uttar Pradesh over 80 percent of the sugar cane is supplied by cooperative societies and unions, which also provide seed and manure and make loans to their members. (6,p.63).

The better living societies through the reform of undesirable customs contribute to social progress. For example a better living society in the state of Punjab
was able to reduce marriage expenses from Rs. 500 to Rs 70 for a boy’s family and from Rs 800 to Rs 300 for a girl’s family. (6,p.197).

**Trend in Type and Scope of Cooperative Societies**

The trend is toward multipurpose types of societies. This means that credit societies, which are numerous, are also engaging in functions of marketing such as processing, packing, grading, finance, and purchase of supplies. Since most of the villages are small, the gathering of surpluses for marketing and purchasing of supplies tends to be small. The implication of this fact is that a larger size marketing, purchasing, or credit society would have to cover a larger area. Because means of communication and transportation in rural areas are slow, it is impractical to organize business on a large scale.

So long as there is a small volume of business, it does not pay to hire a full time manager. With the widening of the scope of activities the stage is set to hire a full time general manager. It, of course, needs to be recognized that the running of cooperative societies calls for as much business and organizational ability as any other private business. Significant progress can only be made when trained and efficient management is employed and is coupled with adequate volume.

At present India lacks the services of licensed
warehouses. Unless these are made available, commercial banks and other financial institutions to finance marketing can not be utilized to the fullest extent for the benefit of farmers. To this effect the Rural Banking Enquiry Committee in 1949 recommended the establishment of a Warehouse Development Board.

The multipurpose society in most cases at the time of advancing production credit could insist members selling surplus produce through its marketing department. Members may receive a marketing loan. The products would be graded into prescribed categories. Grading is necessary in order to provide an incentive for improving the quality. It would also widen the market since purchases can be made on the basis of sample of a particular grade.

After performing proper services the marketing branch would assign the produce to its agent in the marketplace. The branch may decide to sell or hold the products in the warehouse for a better seasonal price. In the case of storage it would be possible to obtain a loan from commercial banks on the security of warehouse receipts. This would tend to meet the need for cash of most multipurpose societies. When the produce is sold, then what is over and above the loan plus interest would be paid to the farmers.

At present most of the products are sold ungraded.
For a considerable time much advancement in grading cannot be achieved. This means that societies in most cases would be selling the product ungraded. This is due to the fact that proper grades and standards have not been established with respect to most products in most of the areas of the country.

A price policy is being developed to improve the situation at the farmer level of marketing, i.e. the town wholesale market. The technique being used is that of forward pricing. With respect to important national commodities a range is set between which prices received by farmers can fluctuate. As most of the selling is of the auction type the range in price presumably accounts for the difference in the quality that different buyers may have judged subjectively.

Efforts to Increase Agricultural Production

Much attention is given to increasing agricultural production and improving the economic and social environment of rural India. A potentially extensive and intensive program, i.e. community development and rural extension was launched during 1952. Community development is a method and rural extension is an agency for improving the social and economic life of the village. The principal behind such a program is that improvement of village life should be approached as a whole. It is believed
that an uncoordinated approach has a confusing effect on the minds of villagers.

Fifty five such Community Projects are functioning in India. They comprise nearly 300 villages with a cultivated area of about 150,000 acres and a population of about 200,000. (19,p.102) The estimated expenditure over a period of three years on a basic type of rural community project is Rs 6,500,000. Of this amount Rs 653,000 is a dollar expenditure. (19,p.104).

Considerable self-help is assumed on the part of participating villages. Some self-help may be in the form of funds while others may help through voluntary free labor. In some cases the amount of self-help may be as high as 80 percent. No attempts are made to try and force improvements. The purpose is to create a desire for better living among rural people.

_Grow More Food Campaigns_

The Grow More Food Campaigns are carried by the Federal and State Governments in the form of loans and grants to cultivators. The amount spent has increased significantly in the past few years. With respect to grants the amount spent by the Federal Government increased from 55.3 million rupees in 1948-49 to 109.6 million rupees in 1950-51. Loans increased from 23.2

**Crop Competition Schemes**

The crop competition scheme was initiated by the Indian Council of Agricultural Research. The participants try to get maximum yields from a prescribed piece of land. The winners receive village, district, state, and national awards. They may also get titles like the "Man of the Month" and the "Man of the Year". The whole idea is to build prestige and respect among farmers.

The number of participants and acres entered is increasing rapidly. In 1950-51, 83,833 participants entered 47,327 acres. In 1951-52, the participants and acres entered increased to 190,930 and 102,283 respectively. (11, p. 12) It may be of interest to note that the area per participant has been less than 1 acre.

**Cooperative Farming Experiments**

Experiments in cooperative farming have also been initiated particularly in the area that is being reclaimed. Their management is in the hands of members. It is appropriate for a member to resign if he wishes and after due notice receive a refund of any capital he may have subscribed. (32, p. 358).

**Farmers Organization**

Plans are being made to organize a Farmers Union.
Its purpose would be to identify the interest of farmers and aid in farm legislation.

Reserve Bank's Interest in Agricultural Cooperation

Prior to 1947, the policy of the agricultural credit department of the Reserve Bank of India was to do research in agricultural credit and cooperative finance. Recently the policy has been changed and the Reserve Bank is now giving financial assistance to cooperatives and their members. As a result of this change in policy it advanced Rs 27 million to State Cooperative Banks in 1949-50. This amount was increased to Rs 54 million in 1950-51 and Rs 120 million in 1951-52. (32,p.607) Each year this money is channelled from State Cooperative Banks to District Cooperative Banks and from them to primary credit societies and ultimately to their members.

It was previously shown that an average credit society in 1950-51, borrowed 45.9 percent of its working capital from State and District Cooperative Banks. This was largely made possible with the assistance of the Reserve Bank. These funds, of course, are mainly for short term productive purposes and as such help to solve the Nation's food problem.

The Reserve Bank also is showing increasing interest with respect to long term credit. "More recently, the
proportion of debentures of the central (district) land mortgage banks taken up by the Reserve Bank in the case of new issues has been as high as 20 percent."

(32, p. 608).

Cooperative Education

One of the major obstacles to the progress of cooperatives has been the lack of trained personnel. The progress in education has been very slow. To improve on this situation the report of the Cooperative Planning Committee issued in 1946 proposed to establish 11 State Cooperative Colleges in different regions of India. The Committee also suggested the establishment of one Cooperative Institute of Advanced Studies and Research.

Steps are being taken to set up these institutions as the proper personnel becomes available. There now exists a Standing Committee for Cooperative Training constituted jointly by the Reserve Bank and the Government of India. The Hindu Weekly Review on February 15, 1954, reported that Professor D. G. Karve, chairman of the Standing Committee, said that it had plans to establish four regional cooperative training colleges for the whole of India. One of the colleges was already functioning at Poona, Bombay. The Reserve Bank of India is partly subsidizing some of these colleges.

The personnel trained particularly in business
administration and membership relations administration would not only strengthen the movement by increasing efficiency, but will tend to keep it in its proper sphere, i.e. economic interest.
Chapter V

SUMMARY AND CONCLUSIONS

Most of the discontinuances consist of failures and mergers. About 95.4 percent are failures and 2.6 percent mergers. On an average discontinued associations had about 5 years of business life.

There is a difference between economic and business failure. If the average cost is not covered in the short-run economic failure results, a business failure occurs when a cooperative fails to meet the claims of its creditors.

The important factors causing discontinuances are promotion activity, business volume, inadequate capital, cyclical fluctuations, technological changes, inefficient management, and membership relations difficulties.

Before 1867, cooperatives grew informally and the number organized and discontinued remained low. Due to intensive and extensive promotion activity by farm organizations and other leaders, after 1867, the number organized, and discontinued increased together up to 1922. Since the early 1920's mergers and consolidations received much attention, the result being a decrease in the number of associations.

Statistical analysis indicated for practical purposes
a tendency for a large number of associations organized in 
a given period to have a high mortality rate five years 
later.

On an average 80 percent of discontinuances come from 
cooperatives having less than an average business volume. 
This means an inverse relationship exists between volume 
of business and unit costs.

Cyclical movements affect directly the assets of co-
operatives. When prices decline, cash receipts decrease 
while liabilities remain about the same. This results in 
a relatively intense effect on poorly financed cooper-
atives. Therefore, discontinuances tended to increase 
during declining price periods.

Substitutes, transportation, shifts in production, 
and pattern of scale develop trends. Some types of co-
operatives benefit from changes that occur through time 
while others suffer. For example, cooperative creameries 
have suffered because of the downward trend in per capita 
butter consumption. Similarly consumers want relatively 
less cotton goods now than 20 years ago.

On an average trucks hauled 48.5 percent of all agri-
cultural commodities in 1939-45. This average increased 
to 62 percent in 1950. Some states that used to emphasize 
the production of wheat and cotton are no longer producing 
sizeable amounts of these commodities. Speedier
transportation, better communication, and mass production techniques have made possible larger businesses. The increase in scale of business was often accomplished by mergers. Cooperative businesses often found it difficult to adjust to trends, the result being the suspension of many of these organizations.

Inefficient management is often manifested in unfavorable financial ratios. However, efficient managers find it impossible to make cooperatives succeed when financial policy is illconceived. Unfavorable financial ratios may partly be due to factors other than inefficient management. Cooperatives having lower than average financial ratios often must discontinue when declining prices interact with inefficient management.

Difficulties in membership relations have been largely due to the way cooperatives were first organized, rural isolation, and lack of business experience. Members lacking understanding and favorable attitudes dropped out. Cooperatives, of course, cannot survive without member customers.

In 1951, the population of India was 360 million with 70 percent dependent upon agriculture. The 70 percent in agriculture get about 50 percent of the national income.

Agricultural production has remained relatively
fixed for many years because of much dependency on rainfall, inadequate supplies, and the land tenure system. There is considerable evidence that much attention is being given to correct this situation.

The total area of India is 811 million acres. The net sown area is 266 million acres. On an average the size of the holding is less than 5 acres.

The operating statements of 149,277 agricultural societies for the 12 month period ending June 30, 1951 in India were obtained from the Reserve Bank of India's statistical publication. The societies had a membership of 8.7 million. Their total working capital was 575 million rupees.

Marketing and credit problems in India are more complex than purchasing. Much of the produce is sold ungraded and moneylenders still supply about 80 percent of farmers' credit needs.

Agricultural cooperatives are attempting to provide marketing and credit services in better and efficient ways. Credit societies constitute 77.4 percent of all societies, and their membership is 69 percent of the total membership. The farmer members provide about 41.7 percent of the total working capital while the remainder is borrowed or deposits.
On June 30, 1950, 4.7 percent of all cooperatives were under liquidation. On June 30, 1951, the rate declined slightly to 4.5 percent.

Cooperative societies in India have achieved significant results in particular areas. In Uttar Pradesh they sell more than 80 percent of the sugar cane produced.

The trend in cooperative society is toward the multi-purpose type. This means many credit societies are also performing marketing and purchasing functions. It may also make it economical to hire a full time manager thus increasing the general efficiency of Indian cooperative societies.


36. Prochnow, Herbert V. Will Asia be saved or lost. Vital speeches of the day 20:527-535. 1943.


