

# **Group Farming, Agricultural Production Cooperatives, and Production Cooperatives Bibliography**

**Curtis W. Stofferahn, Ph.D., Associate Professor**

## **Theoretical Perspectives**

Galeski, Boguslaw. 1987. The Models of Collective Farming. Pg. 17 – 42 in Cooperative and Commune: Group Development of Agriculture. Peter Dorner (ed.). University of Wisconsin Press.

Hedley, Max J. 1985. Mutual Aid Between Farm Households in New Zealand and Canada. 1985. *Sociologia Ruralis*, Vol. 25 (1): 26—39.

## **Common Property Resource Regimes**

Brunckhorst, David. 2000. Synergies for Social, Ecological, and Economic Recovery on Newly Created Commons; In D. Dolsak & E. Ostrom (eds.), *Constituting the Commons: Crafting Sustainable Commons in the New Millennium*. Proceedings of the 8<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, University of Indiana, Bloomington, Indiana.

Brunckhorst, David and Phil Coop 2000. Creating Contemporary Commons to Enhance Economic Productivity: A Grazing Commons in Rural Australia; In D. Dolsak & E. Ostrom (eds.), *Constituting the Commons: Crafting Sustainable Commons in the New Millennium*. Proceedings of the 8<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, University of Indiana, Bloomington, Indiana.

## **Group Farming**

Almås, Reidar. 1994. New Forms of Co-operation in Norwegian Agriculture; pg. 147—161 in *Norway's Gift to Europe: Fifteen Selected Articles on Rural Persistence and Change*; Centre for Rural Research, University of Trondheim, Trondheim, Norway.

Gertler, Michael. 1981. A Comparison of Agricultural Resource Management on Selected Group and Individual Farms in Saskatchewan; M.S. Thesis, Faculty of Graduate Studies and Research of McGill University, Department of Renewable Resources, MacDonald Campus of McGill University, Montreal, Quebec, March.

Organisation for Economic Co-operation and Development, 1971; *Group Farming*, Paris.

Infield, Henrik F. 1945. The FSA Cooperative Corporation Farms, pg. 63 to 84 in *Cooperative Communities At Work*, The Dryden Press, Publishers, New York.

Infield, Henrik F. 1945. Sociology and the Modern Cooperative Community, Pg. 24 – 45 in Utopia and Experiment: Essays in the Sociology of Cooperation. Frederick A. Praeger, New York,.

Gertler, Michael E. and Thomas Murphy. 1987. “The Social Economy of Canadian Agriculture: Family Farming and Alternative Futures” pg. 239 – 269 in Family Farming in Europe and America, ed. By Boguslaw Galeski and Eugene Wilkening, Westview Press: Boulder & London.

### **Farm Machinery Cooperatives**

Harris, Andrea and Murray Felton. 1999. Farm Machinery Cooperatives in Saskatchewan and Quebec, Centre for Cooperatives, University of Saskatchewan, Saskatoon.

Harris, Andrea and Murray Felton. 1999. The CUMA Farm Machinery Co-operatives. Centre for Cooperatives, University of Saskatchewan, Saskatoon.

Harris, Andrea and Murray Felton. 1999. Farm Machinery Co-operatives: An Idea Worth Sharing; October, 1999; University of Saskatchewan, Saskatoon.

Harris, Andrea. 1999. Machinery Co-operatives: New Models for Saskatchewan, Final Report; University of Saskatchewan, Saskatoon.

### **Agricultural Production Cooperatives**

Deininger, Klaus W. 1995. Cooperatives and the Breakup of Large Mechanized Farms: Theoretical Perspectives and Empirical Evidence. The World Bank, Washington DC.

Deininger, Klaus. 1995. Collective Agricultural Production: A Solution for Transition Economies; World Development: 23(8): 1317-1334.

Gordon, M. 1976. A Study of Production Cooperatives, M.A. Thesis in Cooperative Law University of Saskatchewan

Morris, J.B. 1972. An Economic Analysis of Selected Production Co-operatives In Saskatchewan; A Thesis Submitted to the Faculty of Graduate Studies for the Degree of Master of Science in Agricultural Economics, University of Saskatchewan, Saskatoon.

Trew, John; 1954. History of the Beech Co-Operative Farm Association, Ltd.; Excerpted from Jonesville Homemakers Club; Commencement of the Compilation of the History.

Smith, Gary W. 1977. Production Co-operatives: Their Role in the Development of Rural Saskatchewan; B.S. in Agriculture Thesis; University of Saskatchewan; Saskatoon, Sask..

Elmgren, L.N. and J.A. Brown. 1978. The Agricultural Production Co-operative Approach to Farm Business Organization in Saskatchewan. Research Report 78-01, College of Agriculture, University of Saskatchewan, Saskatoon, Saskatchewan.

McGrath, Dion Gerald. 1996. A Challenge to Tradition: Co-operative Farming in Saskatchewan, 1944-1960; Masters of Arts Thesis, Department of History, University of Saskatchewan, Saskatoon.

## **Producers Cooperatives**

Melnyk, George. 1989. Co-operative Farming: A Model for Worker Ownership in Agriculture; pg. 85—112 in *Partners in Enterprise: The Worker Ownership Phenomenon*; ed. By Jack Quarter and George Melnyk; Black Rose Books; New York, NY.

Jones, Derek. 1996. US Producer Cooperatives: The Record to Date; page 221- 235 in *Producer Cooperatives and Labor-Managed Systems, Volume II: Case Studies*. David L. Prychitko and Jaroslav Vanek (eds.) *The International Library of Critical Writings in Economics*: Al Elgar Reference Collection Cheltenham, UK. (Originally appeared in *Industrial Relations* 18(3): 342-357.)

Estrin, Saul; Derek C. Jones and Jan Svejnar. 1996. The Productivity Effects of Worker Participation: Producer Cooperatives in Western Economies; pg. 237-281 in 235 in *Producer Cooperatives and Labor-Managed Systems, Volume II: Case Studies*. David L. Prychitko and Jaroslav Vanek (eds.) *The International Library of Critical Writings in Economics*: Al Elgar Reference Collection Cheltenham, UK. (Originally appeared in *Journal of Comparative Economics*, 1987, 11: 40-61).

## **Theoretical Perspectives**

***Galeski, Boguslaw. 1987. The Models of Collective Farming. Pg. 17 – 42 in Cooperative and Commune: Group Farming in the Economic Development of Agriculture. Peter Dorner (ed.). University of Wisconsin Press.***

In the first chapter of this book, Galeski discussed some theoretical issues and certain characteristics associated with group farming. These characteristics differ depending on the type of organization established. His typology of different models of collective farming is based on the nature and origin of group farms and the underlying purposes of those who establish them. Galeski distinguishes among four types of collective farms: 1) collective farms created by believers in an ideology which puts a higher value on non-economic than on economic goals; 2) collective farms created by landless families who were able to acquire the land but not to start individual family farms; 3) collective farms organized by governments in order to reach national economic and social goals; and 4) collective farms organized by farmers in order to get the advantages of larger operations – lower costs of production, more effective use of land, manpower, and capital, etc. – and consequently higher economic returns.

He provides two qualifications to this typology. First, these types are not mutually exclusive. In some countries virtually every type of collective distinguished above can be found. And second, these are ideal types. In reality there are often several underlying reasons for organizing collective farms.

Galeski uses several criteria for comparing different forms of collective farming., the two most important being: 1) joint ownership or use of land and of other means of agricultural production; and 2) socialization of work, or, more generally, joint farming since it includes both productive labor and management and decision-making. On the basis of these criteria, he establishes a continuum from the least socialized (communal ownership of land but with individual farming and mutual labor exchange to the most socialized (communes and the Kibbutz) forms of collective farming. Other features or criteria for comparing group farming systems are also discussed: management and decision-making (real access of members to decision-making processes, the free election or appointment of managers), the organization or and degree of socialization of consumption, and the distribution of output. In dealing with the continuum, however, no automatic transition from lower to higher levels of cooperativization is to be expected. Galeski's continua merely depict different levels of integration of existing group farming systems, and not automatic stages of an evolutionary process.

Finally, Galeski relates his typology of collective farms to the socio-economic systems within which they operate. He distinguishes two broad types of socio-economic systems – an interactive (market) system and a directive (planned) system. His conclusion is that collective farms of his types one and four could emerge and survive only in an interactive system, while his type three will be found only in a directive system. Only his type two could emerge in both directive and interactive economic systems. However, he believes such farms will evolve to resemble state farms in a directive system, while they are more likely to be transformed into individual farms with some shared property or commonly organized services in an interactive system.

### **Continuum from least socialized to most socialized forms of collective farming**

Communes  
kibbutz  
Agro-industrial  
complexes

Kolkhoz  
Integral collective  
farms: GAEC  
Partly collective farms:  
TOZ, Type I and Ib in Poland

Temporary collective farms  
Contracting, processing,  
and production-services  
cooperatives: moshav ovdim

Marketing, credit, and  
consumer cooperatives

Equipment or  
irrigation cooperatives

Communal ownership-  
mutual assistance

***Hedley, Max J. 1985. Mutual Aid Between Farm Households in New Zealand and Canada, Sociologia Ruralis, Vol. 25 (1): 26—39.***

## **Abstract**

The overall concern of this essay is with the ways in which processes of capitalist development have shaped the existence and transformation of the family farm and rural life. This theme is explored comparatively through an analysis of the rise and decline of mutual aid between farm households in the Far North of New Zealand and on the Canadian prairies. The historic importance of mutual aid and its declining significance is interpreted in terms of its relevance to the reproduction of relations of production of the family farm. Consequently, it is suggested that while veiled by the idiom of neighborliness, mutual aid involved obligations to reciprocate which were conditioned by the imperatives of reproduction. Such an analysis is a necessary step towards unraveling the complexity of rural social structure and demystifying our often Arcadian imagery of the family farm and its community. It thus adds to the critique of interpretive schemes which insert a discontinuity between a peasant-like past and a progressive present.

## **Common Property Resource Regimes**

*Brunckhorst, David. 2000. Synergies for Social, Ecological, and Economic Recovery on Newly Created Commons; In D. Dolsak & E. Ostrom (eds.), Constituting the Commons: Crafting Sustainable Commons in the New Millennium. Proceedings of the 8<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, University of Indiana, Bloomington, Indiana.*

This discussion draws on a variety of parts of a puzzle and assembles a different perspective for development of future Common Property Resource regimes. From this landscape ecologist's point of view, we must urgently move on from theory and historical lessons to boldly design and adaptively or experimentally develop new Commons (common property resource management institutions) as potential long-term solutions to restoration and future sustainability of rapidly degrading environments. Without repeating theory or concepts that are well known to institutional analysts and political scientists studying Common Pool Resources, I attempt to draw together the identified characteristics of successful enduring Common Property regimes with the needs for maintaining and restoring social and ecological capital especially in rural areas. I then highlight the concepts and logistical objectives behind the 30-year old UNESCO Biosphere Reserve Program, which appears to have great potential as an operational framework within which to design and assemble new commons as experimental models. The novel arrangements, experience and lessons from one such model – the Bookmark Biosphere project in South Australia, are described as an example.

*Brunckhorst, David and Phil Coop. 2000. Creating Contemporary Commons to Enhance Economic Productivity: A Grazing Commons in Rural Australia; In D. Dolsak & E. Ostrom (eds.), Constituting the Commons: Crafting Sustainable Commons in the New Millennium. Proceedings of the 8<sup>th</sup> Biennial Conference of the International Association for the Study of Common Property, University of Indiana, Bloomington, Indiana.*

The loss of ecological function across landscapes and whole regions is clearly a global priority, not only because of the direct impacts on bio-diversity and the processes it sustains but also the social consequences arising in communities whose very existence is dependent on this

natural capital. Conventional attempts to address these issues invariably fail to capture appropriators “wholes” and are hampered through narrowly-focused programs, entrenched property rights, institutional impediments, economic incentives, and inappropriate spatial and temporal scales.

The enduring resource systems of Common Property Resources (CPR), collectively managed appear to contribute to ecological and social resilience within an external context of high risk and uncertainty. The sustaining vigor of successful common property regimes (CPR) has provided the interface through which the demands placed on the natural environment by these communities were more closely matched to the broader scale natural processes that supplied these environmental goods and services, both spatially and temporally. We need to revisit these institutional forms and determine, through application, if these social organizational arrangements are socially and ecologically robust, to deliver sustainable rural futures.

A critical step in this endeavor and one of the greatest challenges facing researchers undertaking this type of study is to strategically commence adoption of CPR concepts utilizing the experience gained by institutional and political theorists and applying them to on-ground scenarios, in a variety of contexts including those in western federated nations. Once demonstrated through application, the CPR approach, with its unique qualities of flexibility, collaboration, and scale, may evolve into a powerful tool capable of addressing critical issues that have to date evaded the institutional constraints of conventional paradigms.

This paper outlines the early development of one such model and details the efforts of a group of graziers in Australia who are developing a contemporary CPR from private parcels of land in an attempt to address the degradational spiral that continues to challenge them, and their rural counterparts world wide.

## **Group Farming**

*Almås, Reidar. 1994. New Forms of Co-operation in Norwegian Agriculture; pg. 147—161 in Norway's Gift to Europe: Fifteen Selected Articles on Rural Persistence and Change; Centre for Rural Research, University of Trondheim, Trondheim, Norway.*

### **Introduction**

Speaking of “new forms of co-operation” I certainly know that they are not new in the principal sense of the word. Most of them are merely an adaptation of co-operative principles to a life or work situation where human needs cannot be met by individual, large enterprise or state effort. It might also be that co-operation has been practiced for a long time in the field while economic and social changes demand new organizational forms. From my point of view there seems to be one crucial point that separates the “new” form from the “old”: the work (or common activity) process.

By new forms of co-operation, I therefore mean organizations where people on equal terms (one man one vote) try to reach common ends of economic and social character.

Sharing of profit if any is done according to members' work and interest on capital is limited. By using this definition, I exclude the processing, marketing, credit and trade co-operation in agriculture and forestry. Common to all these types – in this paper called the traditional forms of co-operation – is that they mostly employ hired labor. They might also use the members' labor force on certain occasions as the new forms might use hired labor, but regularly the use of hired labor distinguishes the two types from each other.

## Summary

This paper gives a short overview of most of the new forms of co-operation in Norwegian agriculture. The more well known forms, as the group farm, the joint summer pasture with cowshed and the machine circle are analyzed thoroughly. Other joint ventures in irrigation, clearing of land and plant cultivation are touched more briefly.

The analysis takes into account both the benefits from and the barriers against primary co-operation in agriculture. There are economic advantages both in group farming and in machine co-operation. The social and work advantages are most obvious in group farming and in the joint summer pasture with cowshed.

In this last form the cows are taken away from the farm to a co-operative pasture area in the mountains during the busy summer season. While hired dairy workers take care of the cattle, the farm family can have their holidays and do field-work.

One economic problem arising from private production is the lack of equality and identity of interests. But even when these conditions are fulfilled at one time, problems might arise. The member's involvement will change; member farms pass through generation shift at different times and farm production is under continuous change that varies from farm to farm. The economic and political context of farming and co-operation is also important, giving the framework within which the co-operative farm units have to exist.

***Gertler, Michael. 1981. A Comparison of Agricultural Resource Management on Selected Group and Individual Farms in Saskatchewan; M.S. Thesis, Faculty of Graduate Studies and Research of McGill University, Department of Renewable Resources, MacDonald Campus of McGill University, Montreal, Quebec, March.***

The objective of this investigation was to study impacts of agricultural resource management that result from the pooling of human, land, and capital resources in group farming arrangements. Does joint operation of farm units, as practiced in Saskatchewan, contribute to the adoption of more or less ecologically sustainable farming practices, as far as that quality can be measured?

Fifteen group farms with a minimum of three active operators (smaller groups and the religiously-motivated Hutterite colonies were not considered) were paired with neighboring individual-type farms. These latter farms were identified by local agricultural officials as being "above average" in terms of management and were roughly matched to the group farms in terms of soil type and kinds of agricultural production being undertaken. Data were collected for the 1978 crop year on the major aspects of their production systems: land base and land tenure; cropping program; livestock program; specific soil and water conservation problems and practices; machinery inventories and management; business management and planning; and human resources management and organization.

The group farms, considered as single units, ranked among the top few percent of census farms in terms of size. Their medium size was 2040 hectares, compared to 589 hectares for the individual-type farms surveyed. These latter farms were also somewhat above average in size. Wheat and summer fallow dominated land use on both sets of farms, as they do on Saskatchewan farms generally. A positive association between number of operators in a group and the number of crops grown, a relationship considerably stronger than that between area under cultivation and

number of crops grown suggests, however, that larger groups would tend to grow a greater number of different crops in a given year.

The group farms tended to have substantial livestock operations and the matched farms had similar characteristics. The groups managed on the order of one and a half times as much livestock per hectare farmed as was typically kept by farmers in their rural municipalities.

Compared to the individual-type farm operations, the surveyed groups managed with 26 percent less tractor power, 24 percent less seeding equipment, and 32 percent less combine capacity per unit of land under cultivation (measured in terms of, respectively, total kilowatts of power, width of seeding equipment, and width of combine cylinders). Their reduced machinery inventory could have been expected to result in savings of at least five percent in farm energy use. While principal field tractors were equally new on both sets of farms, the groups had the use of more powerful units and were more likely to have four-wheel drive tractors.

The groups could take advantage of opportunities for role specialization, with different operators serving as herdsmen, mechanics, record keepers, etc., but coordination and provision for continuity in decision making do not occur automatically when many persons are involved. Their accomplishments in several areas, however, indicate that the groups were able to compensate for increased complexity without sacrificing innovation and experimentation or the performance of non-essential tasks.

The two samples of farms demonstrated a similar propensity to experiment with crops not in common use and to try new products or practices for fertility maintenance or weed control. One half of the individual-type farms and two-thirds of the group farms reported recent soil tests. Where livestock were part of the farming program, the groups showed a somewhat greater tendency to try different breeds and/or management techniques. In the area of machinery use, the groups reported more experimentation with no-till seeders, with other types of new equipment, and with modification or manufacture of implements. The use of face masks and devices to protect against hearing damage was also more widespread on the group farms.

This study dealt only with grain and mixed grain/livestock farms in Saskatchewan. Even for this population, however, the sample construction procedures introduce potential bias. These limitations must be borne in mind when attempting to generalize from the data. Nevertheless, the findings tend to support the contention that group farming can facilitate a relatively high level of resource management in the context of large and relatively diversified farm operations.

### ***Organisation for Economic Co-operation and Development. 1971. Group Farming, Paris,***

The purpose of this survey is to examine the experience gained from various types of group farming, in particular in France and Spain, and to draw conclusions as to their utility. This implies assessing how far groups have improved the condition of the farmers who established them and how far group farming can contribute to the achievement of a better agrarian structure, thus meeting the objectives of government agricultural policy. On this basis it should be possible to show how far governments can usefully guide or promote the development of this mode of farming.

The number of groups set up in countries other than France and Spain is so far insignificant. This situation seems partly due to the fact that tax legislation in most countries is not conducive to the establishment of farming groups. Another reason is that the traditional individualism of farmers inevitably acts as a brake. Even in countries where co-operation has long been firmly established for marketing purposes, the idea of co-operation for production is one which

most farmers still find difficult to accept. Comparatively limited forms of co-operation, such as mutual assistance in certain operations or the joint use of expensive machinery, may perhaps have some success, but the association of two or more farms pooling their resources still remains exceptional. Co-operation at this level can therefore occur only where conditions are particularly favourable. Such conditions seem to have existed in France and Spain, although the circumstances prevailing in the two countries are scarcely similar.

In France the movement owed its origin to a certain idealism, to be found in most of the few thousand farmers who set up groups. This idealism, combined with a relatively high level of education, helped to overcome individualistic tendencies. At the same time it must be said that these group farmers are not quite the "usual run" of farmers. The form of group farming adopted in France involves the pooling of all production resources by a limited number of partners (generally two or three but not more than ten) and necessitates close co-operation and complete trust among the participants. The personal worth and skill of most of the farmers who have joined groups is the best guarantee of their success, but it may be inferred that the method as it stands is probably not applicable to the great majority of farmers.

Group farming was able to develop in France under legislation adopted in 1964 and which, amongst other points, removed a number of fiscal disadvantages. Since that date, the authorities have shown a steady interest in the development of the groups and have amended existing legislation as necessary. A special department of the Ministry of Agriculture supervises the movement, provides the necessary advice to farmers who are planning to set up a group and approves proposals for such associations on the basis of a number of established criteria. Approved groups are generally in a favourable position for obtaining the low-interest loans granted by the Credit Agricole.

In Spain, the rural exodus was responsible for the creation of farming groups. They were designed to cope with a very serious economic situation, and it was under the pressure of difficulties which seemed to leave them no alternative that farmers were forced to discard their individualism.

The resulting groups are therefore much more varied than the French GAEC's. The smaller groups are fairly similar to the GAECs, but the large co-operatives may exceed 2,000 ha.

Their creation was facilitated by the fact that farms on the Meseta plateaus where the groups are concentrated specialize in cereal monoculture.

Government aid for schemes of association at production level began about 1963 and legislation was amended several times in the course of the succeeding years, encouraging ever close integration. Groups are required to obtain the approval of the appropriate trade union organisation, and of the Ministries of Labour and Finance.

Group farming in France and Spain, therefore, takes very different forms and is designed to meet different situations. How far can the experience of these countries be of use to other countries?

The primary importance of group farming is that it creates farming units of a size consistent with the requirements of modern agriculture. This point merits consideration in view of the necessity of solving a problem which has arisen in many countries and regions, particularly in Europe and Japan, i.e. the existence of too many uneconomic small holdings. Group farming makes it possible to move immediately from a small to a large structure without going through a series of intermediate growth stages. A gradual increase in farm size will bring difficult problems, as equipment and buildings cannot be constantly changed or adjusted to the new dimensions. Moreover, certain specialized types of equipment are uneconomic if they cannot be used

on a large area. A radical change of scale is therefore often essential if new farming methods are to be introduced.

It would seem that groups are often in a better position to increase their area than individual farms of similar size. Indeed, groups are often preferred to individuals by owners who wish to lease their land. Both the Spanish groups and the French GAECs in rural areas which are not suffering from overpopulation have therefore been able to grow relatively fast.

Problems of finance, which are vital in modern agriculture, are facilitated by group farming insofar as fairly large farms have been established without purchasing land. The export of capital from the agricultural sector, which is the usual result of the flight from the land and the fragmentation of holdings on inheritance, is avoided and the available capital can be put to more productive use in improving farm equipment.

Group farming encourages rationalization of labor and generally implies a higher output per worker and per unit of area. A feature of this trend is the creation of new enterprises, which of course calls for increased borrowing. Furthermore, group farming tends to create a more highly qualified labour force, except sometimes on very large co-operative farms. This is due partly to the fact that each job becomes specialized and partly to the opportunity partners have to taking time off to attend courses.

The improvement in the living conditions of farmers and their wives is certainly one of the main benefits of group farming, even where incomes do not greatly increase. Working hours can be generally be reduced and farmers' wives are largely released from work on the farm. More free time, weekly or annual holidays are the result of shared responsibility.

However, as far as structural improvements are concerned, the contribution of group farming is limited in cases where all partners have to continue to work on their farm. The labour land ratio is not directly modified by the formation of the group, except insofar as hired labour was previously used and rationalization makes it possible to reduce the number of employees.

Unless there is a reduction in the number of persons working on a farm, it is more difficult to increase the income per partner and it must be noted that incomes in French GAECs do not seem to have appreciably increased. Of course, allowances must be made for the fact that most GAECs have not yet advanced beyond the necessary readjustment stage. Incomes have increased most in crop-farming groups, whereas on farms with a considerable livestock enterprise the main benefit lies in the emancipation of the farmer from the constraints of animal husbandry.

Moreover, a group in which all partners continue to work has no additional capital per farmer, except insofar as its combined members can obtain credit more easily. [Another type of group existing in France i.e., the "groupements fonciers agricoles" (GFA) and certain projects which are still under study are designed to facilitate external capital contributions. The use of this formula is still very limited, but it seems to offer interesting possibilities from which groups might derive more benefit.] Consequently, any subsequent increase in size confronts the members of the group with the same problems as other farms and there would be no real difference in this respect unless the groups enjoyed an appreciable advantage as regards the contribution of external capital.

The form of group farming which has developed in Spain therefore seems interesting because its members are not all obliged to work on the farm. This means that the land/labour ratio may be appreciably modified by the departure of a large number of partners who make their land available to the group and draw an appropriate share of the profits. This procedure raises the problem of the distribution of earnings in proportion to the share of capital or work contributed

and this problem can sometimes be a thorny one in the French GAECs too. However, the procedure results in obvious structural improvement.

It emerges from this survey that group farming seems worthy of attention from OECD governments and from farmers in the OECD countries. In this connection it would be advisable to examine the legal situation in each country. As stated above, one of the main obstacles to the development of group farming is the existence of a fiscal system less favourable to groups than to individual farms. The government might therefore decide to amend existing legislation if it feels that group farming can contribute to its policy objectives. In this case it will probably have to evolve special statutes for a new type of company or co-operative appropriate to agricultural production (some check on the bona fides of the groups set up may prove necessary). It will also be expedient to consider how the psychological problems linked with the traditional individualism could be solved and to see how farmers wishing to form groups can be given advice and guidance. Care would, however, have to be taken to see that group farming was not enclosed in too rigid a framework but was allowed maximum flexibility of development.

In as much as they contribute to the creation of a better agrarian structure, groups may be considered eligible for State aid under a selective investment support policy, wherever such aid seems necessary to help them to get started. Once established, however, groups should be viable and should not require any special prolonged assistance.

***Infield, Henrik F. 1945. The FSA Cooperative Corporation Farms, pg. 63 to 84 in Cooperative Communities At Work, The Dryden Press Publishers, New York.***

The modern cooperative community resembles that of the past in many ways, but there are major differences in the mode of origin and in the basic objectives. Certain characteristics of the cooperative communities of the past, however, are retained by contemporary settlements. As our purpose here is to explore the value of the cooperative community as an American technique of postwar resettlement, we should begin with a discussion of the experiments conducted in the United States.

The primary objective of the farms organized by the Farm Security Administration was that of rehabilitation. These recent experiments in cooperative living lasted only a few years, for they were still in the experimental stage when the United States Congress, in the spring of 1943, ordered their liquidation. In an economic evaluation of these short-lived experiments of the F.S.A., it is clear that our deductions will have to be concerned with potential accomplishments. But in a general social evaluation, we have actual achievements to consider.

To what extent did these farms succeed in rehabilitating the members? Eaton has formulated ten criteria of success in rural rehabilitation: (1) Material well being as related to food, housing, clothing, luxuries; (2) Assured income through continuous employment and job security; (3) satisfactory conditions of work, including reasonable hours, vacations and sick leaves, safety precautions and accident insurance; (4) Adequate wages, and insurance against unemployment, crop failures, old age, illness and death; (5) economic democracy, with the right of workers to bargain collectively and to participate in control; (6) Good health, with adequate medical care available for all; (7) Education for children, youth and adults; (8) Leisure time; (9) Social participation for all individuals in an integrated society; (10) Opportunity for self-development in economic, social and political affairs.

In our views of our findings relative to these cooperative farms, Eaton's conclusion that they would eventually satisfy all his criteria seems amply justified. Undoubtedly, as instruments

of rural habilitation, these cooperatives pioneered significantly. The aim of the F.S.A. was not merely to set up a rehabilitation program for individual farmers. It also had in mind the enrichment of American agricultural resources. Eventually the use of cooperative large-scale farming would, it was believed alleviate to eradicate the unsound agricultural conditions that had developed in the United States. The cooperative farm seemed an excellent solution: the individual, unable to compete with great “factories in the field”, could unite his resources with those of other farmers and thus obtain the most modern machinery, services and results.

Since the farms were part of a relief program, the F.S.A. at first expected merely to test the potential values of cooperative farming. In this, of course, they were restricted not only as to duration but also as to scope of the experiment. A real test would have required that the members be recruited, not from a list of people on relief, but from a cross section of capable farm workers interested in cooperation and disposed to give the new systems a fair trial. The results remain, therefore, inconclusive. Notwithstanding, advocates of cooperative farming insist that the F.S.A. achievements, under these adverse conditions, have proved the value of the system. Opponents, on the other hand, maintain that the unfavorable view was corroborated by the action of Congress in liquidating the farms.

Despite these inconclusive results, it is our opinion that the F.S.A. experience may well facilitate the proper administration of similar programs in the future. Shortcomings, caused chiefly by ill-advised government policies, should be eradicated. Yet government sponsorship should not necessarily be considered a disadvantage. In testing any new type of socio-economic organization, experiments can be conducted more effectively by a government agency, provided with adequate resources, than by private institutions whose funds and personnel are limited. But governments should take care not to nullify the value of appropriation by imposing burdensome conditions on such experiments.

Thus, as we have seen, to comply with the federal regulations, the F.S.A. had to select its clientele on the basis of need. Ability to get along with other people was disregarded. The agency was compelled to ignore the principle that cooperation should grow spontaneously among willing, congenial participants. Furthermore, the F.S.A. failed to stimulate the settlers to use their own initiative: at the very start, large sums were expended to provide each group with the ready made buildings and other facilities, with the result that the members developed a feeling of dependency. To build these facilities the F.S.A., contradicting its own philosophy of cooperation, employed relief workers, and the consequent high cost of building did not help to convince the public that cooperative effort is more economical than individual competition.

Eaton and Katz agree that the absence of a cooperative spirit was the outstanding weakness of the F.S.A. farms. From this, all other major difficulties followed, including friction between F.S.A. officials and the settlers. Many of the later deserted to take up individual farming, without having had a chance to learn the real advantages to be derived from comprehensive cooperation.

***Infield, Henrik F. 1945. Sociology and the Modern Cooperative Community, Pg. 24 – 45 in Utopia and Experiment: Essays in the Sociology of Cooperation. Frederick A. Praeger, New York.***

The science which considers human relationships as its specific area of investigation is sociology. The mode of human interrelations based on doing things together is cooperation. For although cooperation appears to attract more and more the attention of social scientists, our

knowledge of it is as yet “scattered, spotty and even chaotic.” A short survey of the development and functioning of the modern cooperative community may serve, therefore, a useful purpose. It may help direct attention to a rich store of cooperative practice particularly suited to investigation of the kind which may lead to the foundation of a sociology of cooperation.

According to their origin, we can distinguish three basically different types of cooperative communities: (1) the religious; (2) the socio-reformistic; and (3) those predominantly motivated by economic considerations. While the utopian communities were motivated by religious creeds or socio-reformistic zeal, the modern cooperative community has developed into a new socio-economic kind of organization, used by government or semi-governmental agencies as an instrument of rural rehabilitation.

Cooperative farming is no longer an altogether novel device. It has been used for a number of years in several countries. In particular, the aim may be the total reorganization of agriculture, as in the Soviet Union; the rehabilitation of the low-income farmer, as in Mexico; or the solution of certain crucial problems of resettlement, as in Palestine or what is now Israel. In all these instances, the primary motive is predominantly economic. Thus, although the modern cooperative community resembles that of the past in many ways, it differs from it essentially in origin and in basic objectives. A brief comparison of the essential features of the three main types of cooperative farms existing today, the Kolkhoz, the collective Ejido, and the Kvutza or Kibbutz should help to illustrate the point.

To sum up, then: We find that the Kolkhoz, the collective Ejido and the Kvutza have the following features in common: (1) their motive of origin, which in each case is related to the needs of agriculture, reform reclamation or resettlement; (2) adherence, at least in theory, to the Rochdale Principles; (3) large-scale cooperative agricultural production; (4) internal autonomy, again in theory though not, as in the case of the Kolkhoz and the collective Ejido, necessarily in practice; (5) an observable modification of the traditional social institutions. As to the features in which they are not alike, the differences between the Kolkhoz and the Ejido are not only slight as compared with the more basic differences between them and the Kvutza. We may sum up these differences as follows: (1) while Kolkhoz and collective Ejido were established by administrative decree, the Kvutza came into existence by spontaneous, voluntary decision of the people concerned; (2) the settlements of the Kolkhoz and the Ejido types out number by far the Kvutza; (3) Kolkhoz and Ejido are controlled by government agencies, enough to raise doubts as to their genuinely cooperative nature, while the Kvutza is virtually free of such control; (4) in the Kolkhoz and Ejido cooperation extends chiefly to large-scale agricultural production and only partly to consumption, while in the Kvutza both production and consumption are cooperative; (5) modification of social institutions may be observed in the Kolkhoz and Ejido, but only in the Kvutza has such modification reached a stage where we may speak, as in the case of the family, of remodeling.

In accordance with the prevalent mode of human relations, sociology has, thus far, devoted its chief attention to the processes of conflict and competition. Little, if any, space in current sociology textbooks is devoted to cooperation as more than a general “social process”. This neglect may be related to the traditional academic disregard for the “small man” and his economic plight. A better explanation, however, may be found in the nature of the cooperative movement itself. So long as that movement did not extend beyond consumers’ purchasing and marketing associations, cooperative practice necessarily remained segmental. Such cooperation is too limited in itself to produce marked changes in personal attitudes and social behavior. The main motive for participation in segmental cooperatives is economic convenience. Such lack of participa-

tion is hardly possible in cooperative communities, which as we have seen, are rural settlements with cooperation as the basis of economic and social organization. As potentially, if not actually all-inclusive, cooperation of that kind affects more decisively the basic social institutions, hence all human relations within the group. Here cooperation is no longer segmental; it has produced a new, the cooperative way of life.

*Gertler, Michael E. and Thomas Murphy 1987. "The Social Economy of Canadian Agriculture: Family Farming and Alternative Futures" pg. 239 – 269 in Family Farming in Europe and America, ed. By Boguslaw Galeski and Eugene Wilkening, Westview Press: Boulder & London.*

### **Group Farming As An Alternative**

In its present form and context, family farming is an increasingly unreliable vehicle for achieving the goals of most farmers, would-be farmers, and non-farmers. Increasing farm differentiation and stratification, increasing reliance on hired labor, high failure rates, significant barriers to entry, unsound resource management, and the depressed state of farm communities, also argue for studying alternative approaches to organizing agriculture. Arrangements which preserve attractive aspects of family-based farming, even if not always the family farm as presently construed, deserve consideration.

Farmers are already experimenting with new approaches to keeping their families in farming, their farms in the family, and to assembling the resources necessary for success. These arrangements are typically between relatives and range from sharing equipment to fuller integration as a partnership, corporation, or cooperative. Where there is commitment to owner-operation and family-based production, such integration can accommodate productivity-enhancing techniques and preserve positive aspects of family farming while avoiding the less attractive characteristics of industrial agriculture. Among the formulas tried in Canada, group farms operating as production cooperatives appear to have particular potential for resolving apparent contradictions between social, economic and resource management goals.

Cooperatives are sometimes formed for a single purpose, such as managing cattle on community pasture or operating a feedlot. We focus here, however, on production cooperatives involving greater integration of farm assets and operations. Such cooperatives probably number fewer than 100, the majority being in Saskatchewan where they have been promoted on and off since the 1940s. These joint enterprises involve up to a dozen farmers or farm families – but typically only two or three – and operate under several related business formats: the machinery cooperatives, the agri-pool, and the cooperative farm. All are managed on a one-member, one-vote basis unlike conventional farming corporations where formal control depends on number of shares owned.

In machinery cooperatives, individual farmers pool their cropland and work it as a unit with jointly owned machinery. Conflicts over equipment access are avoided because each member receives a share of the harvest proportional to his/her land contribution. Members are also responsible for a proportionate share of labor and operating costs. Under the agri-pool arrangement, members lease land to the cooperative which pays them rent and wages. The cooperants equally divide any surplus machinery and sometimes livestock are owned jointly. The cooperative farm goes a step further, dispensing with individual farmland ownership. The cooperative owns or leases land along with machinery, buildings, and livestock. The member/directors pay themselves wages and share any surplus.

Group farming offers many potential advantages: reduced machinery costs and access to larger, more specialized equipment; sharing of labor, experience and skills; possibility for member specialization in particular tasks or enterprises within a larger operation that is more diversified; more possibility for experimentation with technology and techniques; improved decision-making processes; better accounting and planning functions; greater access to credit; security in case of illness or incapacity; and reduced isolation, stress, and physical risk due to sharing work and responsibilities. These advantages are not realized automatically. The complexity of managing a larger multi-member farm sometimes leads to problems in coordinating activities and personalities. Nevertheless, group operations demonstrate the capacity to achieve many of these benefits.

A comparative study of 15 Saskatchewan group farms and 15 neighboring one- or two-operator family farms (Gertler, 1981) provides interesting evidence. The groups, with from three to ten operators each, saved about one-third in machinery investment per acre despite having larger equipment than neighboring family-type operations. The groups also made slightly greater use of new technologies and personal safety equipment. Crop rotations were similar on the two sets of farms studied, but crop diversification was positively associated with number of operators. The group operations also had, on average, 50% more livestock per unit land area than was typical of farms in their rural municipalities.

In a predominantly cash grain region like Saskatchewan, livestock facilitate soil conservation as well as stabilizing and strengthening the economy. The groups under study varied, however, in their resource conservation practices, as did the matched conventional family operations. Overall, production practices on the two sets of farms were quite similar. This reflects shared culture as well as the general economic environment of these farmers.

Multi-operator farming arrangements that go beyond the conventional partnership or incorporated family enterprise are found in other provinces also. Manitoba has grain- and livestock-producing cooperatives and joint venture potato farmers. In Ontario and Quebec, dairy-men share milking facilities and work together to raise feed and manage stock (Fobes, 1972). In Quebec, as well, cooperative joint ventures – some started with seed money from community agencies – are involved in producing commodities ranging from beef to greenhouse tomatoes (Jean, 1982).

In addition to addressing cost and management problems, group farming arrangements may be useful in responding to other system deficiencies: the unmet needs of part-time farmers, farm women, and hired workers; and the need for new entry and tenure formulas. Some group farming arrangements might also facilitate adopting resource-conserving production practices and provide a socioeconomic base on which to rebuild rural economies.

A significant minority of Canadian farmers are multiple job holders by necessity or by choice. Even in prime agricultural regions, off-farm work is often a long-term solution to inadequate farm income and underemployment during winter months. Unfortunately, part-time farmers and farm families must often cope with a double work day.

Given the economic benefits of multiple job holding and the attraction of a life that includes farming, it is reasonable to seek ways to facilitate part-time farming. In a group enterprise, a person with an off-farm occupation can participate in a farm that has the full-time attention of at least one operator. The part-time person is a welcome extra hand but does not take on an inordinate responsibility. With income pooling, the part-time member gets income from the group operation but may also be an important source of capital and cash for the farm.

In the conventional family farm arrangement, women share the burdens of farm life though they may not participate fully in its rewards: the opportunity to make independent decisions, to interact as equals in a producer community, and to enjoy the security of ownership. In group farming arrangements, women may find themselves even more excluded from management but, where they have obtained full membership, they have sometimes achieved a new relationship to farming, an equal vote and full remunerated participation. For women who choose not to become involved, group operation can also mean a better living, freedom from field work, and time to do other things (Zaleski, 1982).

Large farms in Canada rely increasingly on seasonal and full-time hired labor. Even full-time farm work is generally poorly remunerated. Due to the circumstances of farm employment, it is unlikely that farm employees can successfully organize to improve income and working conditions (Buttel, 1982). In the present context, farm labor is also not likely to be a step towards farm ownership. It is important that farm labor receive the full protection of all labor laws but also that new avenues for entry into farming be found.

Under some group farming arrangements, it is conceivable that people with little initial equity could join and participate as members, contributing their labor and borrowing enough capital to buy a share in the operation. This would be particularly feasible under arrangements proposed by the Saskatchewan Federation of Production Cooperatives for starting “zero-equity” cooperatives. Program essentials would involve long-term, renewable leases on land owned by a public land bank or nonprofit trust (SFPC, 1973). This approach to land tenure would also provide a way out of the dilemma whereby land prices proscribe the accession of a new generation of farm and nonfarm youth to farmer status – a problem that remains acute even on many incorporated and cooperative farms.

Canada has yet to deal with farming’s environmental contradictions. Given the agri-food system’s present structure, there is little likelihood of a major shift in research agendas or that many farmers will voluntarily risk economic penalties to emphasize stewardship ideals. Other approaches will be necessary to create more ecologically rational farming.

Here, too, group farming arrangements have potential. Groups can operate a number of enterprises, each at a scale which captures available economies, and in so doing can reap the ecological benefits of a more diversified farming system. With more people available to share work and planning, they can adopt some of the more management-intensive aspects of resource-efficient farming, including more complex rotations, crop monitoring, soil testing, and systematic experimentation. Finally, groups can provide the interpersonal support and encouragement necessary to sustain attempts at technical innovation among lines that agribusiness does not promote (LeVeen, 1978). In this case “large” rather than “small”: may be – with qualifications – beautiful.

There is no substitute for public participation and coordinated planning of agricultural and rural development. Unfortunately, Canadian experience with integrated development (at home) is limited. Farm sector trends mirror consolidation of manufacturing and marketing activities and, in turn, contribute to dismantling local economies. Farmers have not managed to redirect investment and policy decisions that are at the root of such change, nor have they successfully promoted alternative economic development options.

These realities notwithstanding, multi-family farms may have some potential as vehicles for rural redevelopment. Group farming can increase the number of people gaining a livelihood from agriculture. With sufficient scale and joint enterprise among groups, it could also provide the context for renewed manufacturing, processing, service and other economic activities.

Perhaps the most important is the potential impact of group farming on the culture of agriculture. As organizations that require face-to-face contact and purposeful joint action by farmers, they can become the nuclei of other activities. Experience suggests that production cooperatives and similar group farming arrangements can produce commodities efficiently. They can also produce people with the skills, time, and enthusiasm to rebuild community institutions, including the more traditional cooperatives (Gertler and Buttel, 1981).

## **Farm Machinery Cooperatives**

***Harris, Andrea and Murray Felton. 1999. Farm Machinery Cooperatives in Saskatchewan and Quebec; Centre for Cooperatives, University of Saskatchewan, Saskatoon***

This is one of a series of three booklets that document the results of a study that examines the applicability of different types of farm machinery co-operatives in Saskatchewan agriculture. This booklet describes the structure and organization of farm machinery co-operatives operating in Saskatchewan and a type of farm machinery co-operative known as the CUMA which has been used by farmers in Quebec and Ontario. Some guidelines and considerations in forming successful farm machinery co-operatives are also discussed. The information presented is based on extensive interviews with members of co-operatives and others involved in the development of farm machinery co-operatives. A number of the co-operatives studied are featured as case studies within the booklet.

***Harris, Andrea and Murray Felton. 1999. The CUMA Farm Machinery Co-operatives. Centre for Cooperatives, University of Saskatchewan, Saskatoon.***

This booklet begins with a description of the CUMA administrative and organizational structure. This is followed by an overview of the CUMA development process, including the steps involved in forming a CUMA and a discussion of who's involved in this process. The booklet ends with a discussion of the evolution of the CUMA movement in Quebec and how CUMAs have sparked interested in other forms of co-operative arrangements, in particular the sharing of farm labor. Includes a sample subscription contract and sample by-laws.

***Harris, Andrea and Murray Felton. 1999. Farm Machinery Co-operatives: An Idea Worth Sharing; October, 1999; University of Saskatchewan, Saskatoon***

This booklet documents the results of a financial model that quantifies some of the benefits that Saskatchewan grain farmers can expect to achieve through farm machinery co-operatives. Specifically, the model compares the costs of owning farm machinery as individual farmers with the costs of owning machinery as members of a farm machinery co-operative. Since the optimal size of machinery varies for an individual farm as opposed to a co-operative made up of several farms, the time required to complete operations under both scenarios is also examined. The model considers cost and efficiency variables for selected machines and equipment typical to a Saskatchewan mixed grain farm. The variables examined include: time requirement (hours needed for farm operation), fixed costs, operating costs, total machine costs, rental costs, complement costs. In the first part of the booklet, the cost comparisons are presented on a machine by machine basis. In the second part, the overall costs associated with whole

machinery sets corresponding to both a direct seeding and a conventional seeding system are examined.

***Harris, Andrea. 1999. Machinery Co-operatives: New Models for Saskatchewan, Final Report; University of Saskatchewan, Saskatoon***

The mechanization of agriculture, while allowing for gains in productivity, has also contributed to a large economic drain on some farmers. In response, an increasing number of farmers have looked to farm machinery arrangements, which provide an alternative to ownership and the associated capital burden. Farm machinery co-operatives are one example of alternative farm machinery arrangements being considered by an increasing number of Canadian farmers. Quebec farmers in particular have adopted the co-operative structure as a way of reducing the costs associated with operating and financing farm machinery and equipment.

The particular type of machinery co-operative being adopted in Quebec is known as the CUMA, Cooperative d'Utilization de Matériel Agricole. Since 1991, more than 1000 farm operations have become members of more than 47 CUMAs established in Quebec. This development has meant a 70 percent reduction in the machinery costs of some farmers.

The purpose of this project, funded by the Agricultural Development Fund, was to: (a) determine the applicability of the CUMA model of farm machinery co-operative to Saskatchewan agriculture; and (b) to assess the potential impact of similar machinery co-operatives on the machinery and equipment costs of Saskatchewan farmers.

The results of the research conducted for this project is compiled in three booklets:  
\*Farm Machinery Co-Operatives: An Idea Worth Sharing – documents the results of a financial model developed to compare the costs of owning selected types of farm machinery as individual farmers and as members of a farm machinery co-operative.

\*The CUMA Farm Machinery Co-operatives – includes a detailed description of the CUMA administrative and organizational structure; an overview of the CUMA development process; a discussion of the evolution of the CUMA movement in Quebec; and a sample set of bylaws and subscription contract.

\*Farm Machinery Co-operatives in Saskatchewan and Quebec – describes the different organizational structures used by farm machinery co-operatives in Saskatchewan and Quebec and includes case studies of farm machinery co-operatives. Guidelines for the formation of a successful farm machinery co-operative are also provided.

**Farm Machinery Co-Operatives: An Idea Worth Sharing**

A financial model developed for this project compares the costs of owning farm machinery as individual farmers with the costs of owning machinery as members of a farm machinery co-operative. Key results from comparing the costs associated with the selected individual machines indicates that, on average, a mixed grain farmer with 1,500 cultivated acres can expect to save 34 percent in total machinery costs per acre by sharing a piece of machinery with at least two other farms of equal size, as opposed to owning the machine individually. The savings in total machinery costs are due to the combination of lower fixed costs per hour (an average saving of 22 percent) and reduced hours required to operate the machine (an average savings of 32 percent).

Key results from a comparison of the costs associated with whole machinery sets indicate that under a conventional seeding system annual fixed costs are 45 percent lower and operating

costs are 14 percent lower for the co-op member. As a result, total annual machinery costs are 36 percent lower for the co-op member than for the individual owner. Under a direct seeding system, the combination of lower fixed costs and lower operating costs translate into an estimated overall saving in total annual machinery costs of 33 percent for a co-op member versus an individual farmer –owner.

### **The CUMA Farm Machinery Co-operatives**

The CUMAs have, for the most part, been formed by dairy farmers interested in sharing forage equipment, such as harvesters, seeders, and hay balers. Joining a CUMA can help decrease machinery costs as well as overall production costs. Sharing machinery also allows for the most up-to-date equipment which is larger than what individual producer could purchase alone.

The mandate of the CUMAs is to share equipment among its members at the lowest possible cost. CUMAs are structured to allow the sharing of individual machines among sub-sets of members through the use of activity branches and subscription contracts. To obtain the right to use the equipment and machinery owned by CUMA, participating members must join an activity branch. Upon joining an activity branch, each member must sign a subscription contract which commits them to using the particular piece of equipment or machine for a specific amount of time or number of units per year for the duration of the contract.

The success of the CUMAs in lowering the machinery costs for the producers involved raises the questions: Can CUMAs work in Saskatchewan? And under what conditions would a CUMA structure be appropriate? In general, the features of the CUMA co-operatives appear to be well suited in situations where some or all of the following features are present:

- \*some or all of the producers involved wish to share only certain, individual machines;
- \*members cannot agree on equipment selection for the entire group;
- \*timeliness issues are minimal – large losses in income are not sustained if machinery is not used optimally;
- \*members would like to begin sharing machinery gradually, starting with less-critical or expensive machines, either because they do not know each other well or they wish to limit their initial capital investment in the co-operative;
- \*members do not share similar production methods.

### **Farm Machinery Co-operatives in Saskatchewan**

Farm machinery co-operatives in Saskatchewan operate almost exclusively in the grain sector and tend to have five or fewer members. The primary motivation behind the formation of farm machinery co-operatives in Saskatchewan is the lowering of machinery costs. Secondary reasons include the ability to share labor and to enable a younger generation of people to get involved in farming without a large debt burden.

Farm machinery co-operatives operating in Saskatchewan can be grouped into two different categories:

- \*those in which machinery and income is pooled among all members of the co-op;
- \*those in which machinery is pooled among all members of the co-op, but income is not pooled.

In both cases the co-op members share the bulk of the equipment and machinery required to perform core farm operations.

The structure of Saskatchewan co-ops are based on a member formula developed by the group. The formula determines each member's equip contribution to the co-op and their share of the operating expenses and machinery costs. Co-ops which pool production also use the member formula to allocate net income.

Saskatchewan-style co-operatives in which production is not pooled and only machinery is shared, appear to be well suited to situations where one or more of the following features are present:

- \*The members involved wish to share entire machinery sets, as opposed to individual machines;

- \*Members wish to make production decisions independently, but share similar production methods;

- \*There may be a loss in income if machinery is not used optimally, but members feel that the benefits from sharing machinery outweigh the losses;

- \*Members wish to share labor and want to take advantage of particular areas of expertise within the group.

Saskatchewan-style co-operatives in which returns and production is pooled as well as machinery and equipment, appear to be well suited to situations where some or all of the following features are present:

- \*The members involved wish to share entire machinery sets;

- \*The potential for conflict regarding machinery use is high;

- \*Members are willing to make production decisions together as a group;

- \*Members wish to share labor and want to take advantage of particular areas of expertise within the group

There are a number of factors which are critical to the successful formation of any farm machinery co-operative, regardless of how the co-operative is organized. These factors include: compatibility of the people involved; clear economic benefits; good communication; maintenance of accurate records; written agreements; and appropriate levels of investment.

## **Agricultural Production Cooperatives**

***Deininger, Klaus W. 1995. Cooperatives and the Breakup of Large Mechanized Farms: Theoretical Perspectives and Empirical Evidence. The World Bank, Washington DC***

(Note: This monograph contrasts agricultural production cooperatives and service cooperatives. This review focuses only on the agricultural production coops. Except for the Israeli kibbutzim, the analysis is based on case studies of collective agriculture schemes in command economies where group farming was imposed from above. Furthermore, the motivations of individuals engaged in group farming were significantly different from those who voluntarily entered into group farming operations in capitalist countries. Although he mentions group farming operations in Europe, he dismisses them as being insignificant. Those group farming operations in capitalist countries (France, Spain and Canada) where the farmers themselves organize into group farms operate in an entirely different context from dictated by governments in command economies)

### **Agricultural Production Cooperatives (APCs)**

Benefits from APCs were supposed to be associated with their ability to (i) facilitate the utilization of scale economies, (ii) contribute to greater equity; (iii) to increase workers' motivation; (iv) to lead to faster adoption of technology; and (v) to bring forth a higher level of public good provision. Review of these arguments indicates that (1) there are no significant economies of scale which could be utilized exclusively by production cooperatives; (ii) equitable distribution of the fruits of communal production introduces severe disincentive effects which in many cases undermine the viability of cooperative production, especially since production cooperatives do not have an advantage in providing implicit insurance in an environment characterized by high risk and incomplete insurance markets; (iii) arguments concerning higher motivation, more rapid adoption of innovations, or provision of public goods through production cooperatives lack theoretical foundations and the evidence concerning these issues is ambiguous.

The potential disadvantages of APCs in the areas of incentives, employment generation, and investment have received considerable attention in the literature. These issues can be summarized in the following theses:

Incentives:

- (i) An APC with a totally need-based reward system is in general not Pareto-efficient. Exceptions may be encountered in situations of high social cohesion but are inherently unstable.
- (ii) If the remuneration of workers is based on effort supply and monitoring is not costless, APCs are likely to be even less efficient than large scale mechanized commercial farms.
- (iii) If the land available to a production cooperative can be freely allocated between private and collective cultivation, there are no economies of scale in production, and access to services is not contingent on the maintenance of cooperative production, all of the community's land will be used in private plots.

Employment:

- (i) The typical APC will generate less employment and produce less output than its capitalist twin, leading to a Pareto inefficient allocation of resources if, in the short run, profits are positive.
- (ii) If members of a successful APC have the opportunity of employing hired workers at the market wage, they will successively reduce membership until only one member is left.
- (iii) APCs will attain Pareto efficiency in the long run only if there is entry of new firms.

Investment:

- (i) APCs will be characterized by under-investment and a preference for short-term over longer term investments. Such under-investment will be particularly severe as far as intangible assets are concerned. If there are no legal restrictions explicitly preventing them from doing so, APCs are likely to consume whatever capital is available to them.
- (ii) APCs will be more reliant on external funding than comparable profit maximizing firms. Internal savings generated by APCs will be lower than the internal savings generated by comparable IOFs. Debt will be used to finance consumption whenever possible.
- (iii) Given equal endowments of capital, APCs intensity of capital per worker will be at least as high, but is likely to be higher than that of identical profit-maximizing firms.
- (iv) Due to members' low ability to diversify risk, cooperatives will normally not undertake investments with high variance of returns even if such investments are socially profitable.

These predictions are reinforced by empirical evidence showing that cooperative forms of agricultural production exceeding the size of a family farm are virtually absent in industrialized

countries and that the experience with formation of production cooperatives in seven developing countries was dismal.

Collectivization of small farms was always associated with productivity losses and formation of a cooperative agricultural sector was never justified on economic grounds alone. In Ethiopia in 1974-76, China in 1959-61, and North Vietnam during the period 1958-1971, collectivization of small farms significantly decreased productivity. The decollectivization experience in China and Vietnam furthermore suggests that there are more effective methods to increase rural (i.e. agricultural and non-agricultural) investment or to tax the agricultural sector than collectivization. Even the kibbutzim in Israel are not a valid example to demonstrate the economic efficiency of cooperative production in agriculture as their establishment was heavily subsidized and they now derive the majority of their income from industry rather than agriculture.

Cooperative forms of production which were established as a consequence of the breakup of large farms were not efficient. In Nicaragua, the transformation of large estates into state farms, as well as continued support of the private large farm sector, could not prevent serious declines of production in both of them. This policy was recently replaced by a more smallholder-oriented strategy. In Peru, cooperatives which had been formed out of the large estates either broke up into family farms once they were allowed to do so, or in sugar where economies of scale exist, degenerated into state farms. Experience from Cuba indicates that even considerable support in the form of differential subsidies to cooperatively organized state farms did nothing to make them competitive in relation to private farmers or voluntary producer associations.

Reversal of collectivization facilitated gains in production and efficiency in a number of instances. Maximum productivity gains from such decollectivization would be expected if (i) competitive markets for inputs, outputs, and credit exist; (ii) the macroeconomic environment does not discriminate against agriculture; (iii) technology for the new units is readily available; (iv) farms are small enough to be able to rely predominantly on family labor; and (v) property rights are sufficiently secure to provide an incentive for investment. The experience of China and Vietnam illustrates that even if not all of these conditions were met initially and land endowments were very low, decollectivization, led to considerable one-time productivity gains. In both cases, a mix of cooperative and private sector arrangements to facilitate marketing, the utilization of existing farm machinery, and the establishment of infrastructure, made significant contributions to this success.

***Deininger, Klaus. 1995. Collective Agricultural Production: A Solution for Transition Economies; World Development: 23(8): 1317-1334.***

*In this paper, the author essentially repeats the same advantages and disadvantages for APCs that he did in the prior paper.*

This paper examines theoretical reasons and provides examples for productivity differences between agricultural service cooperatives and collectives. Service cooperatives can utilize economies of scale, enhance competitiveness, and provide technical information, advantages that often outweighed problems of free-riding, low investment, and excessive political intervention. Agricultural collectives, while not adding substantial advantages, are in addition associated with problems of supervision and effort supply, tendencies to substitute casual workers or mechanization for regular members, and low investment incentives. While collective forms of organization in transition economies respond to high risk and market imperfections, they do so inefficiently.

Policies that create conditions for service cooperatives to compete may lead to large productivity gains.

***Gordon, M., 1976. A Study of Production Cooperatives, M.A. Thesis in Cooperative Law University of Saskatchewan***

### **Abstract**

This paper discusses the cooperative method of organization by considering its historical, political and economic nature and then focuses on production cooperatives and the way Saskatchewan provincial legislation has dealt with them. Specifically, Matador Cooperative Farm of Kyle, Sask. Is discussed as an example of an early production cooperative which has had successes and failures and was recently sold to the Saskatchewan Land Bank Commission. From this the new Matador Farming Poll was organized. In conclusion, some criticism and suggestions are made concerning cooperative farming. It represents a reasonable opportunity for those who want to start farming or those already farming, to improve their economic and social level of living, through collective action. Cooperative farming tends to offer the possibility of the advantages of centralized administration while still retaining democratic control and flexibility in operations. Cooperative farming groups will require to be well informed with respect to cooperative and farm management principles in order that an economically and socially sound basis of operations may be carried out. There are certain political developments that influence this development as well. It is clear that some new principles will have to be developed as well as adaptation of the present cooperative principles.

### **Suggested Changes**

After studying the experience of some of the cooperative farms in Saskatchewan and talking with various members, there are some suggestions that cooperative farms might consider adopting or pressing the government to make the necessary legislative changes.

(1) The practice of unlimited retention of members dividends should not be followed but rather a basic equity could be agreed on and after a member has built up (contributed) an equity, he should be paid every year. Then whatever capital the cooperative needs would come from normal outside lending sources rather than a member's accumulated dividend. This was probably not possible when the Matador originally started because the members were poor, there were no buildings, equipment, etc. And outside sources of credit were closed. Thus capital had to be accumulated and ploughed into the operation.

(2) There should be no right of option-to-purchase in Land Bank legislation. The future of cooperatives will never be secure until this happens. The speculative aspect will always be there and also problems faced when a member wishes to withdraw, retire or dies. As Dietrich has said many times, it is the cooperative that is important, its continued existence must be assured.

(3) Members of cooperative farms should be able to average their incomes over a five year period to even off good and bad years and market conditions.

(4) It would be an advantage to establish a pension scheme within the cooperative farm financial structure. For example, have \$2,500 in a non-taxable position to develop farm assets. At the present the cooperative puts its money in an outside pension scheme and thus, if the cooperative needs to borrow from an outside credit source, it must pay interest on that money. Now

their pension money is handled by the Cooperative Credit Society which charges a small administrative charge but which the farm feels has made good investments on behalf of the employee-members. Also cooperative members should be allowed to contribute more than the \$2,500 per year because, with inflation, the retiring members have to withdraw more money out. Also the pension scheme should be portable.

(5) At present, under the Land Bank Act, a member cannot lease the land once he is sixty-five years old. If there are many young people who want to farm, e.g., three or four people from one member's family, then the retirement age could even be lowered to allow more young people to start up. The older members should be allowed to leave some of their capital in the farm and share in some of the work, etc. but not have the heavy financial or physical burden. This is how many farmers would like to retire.

(6) Government policies should be made that promote a intensified type of agricultural production. The old Matador Farm Cooperative supported as many as sixty people on the same land base but could not support any more members. This is partly accomplished in the new Matador Farming Pool in that they cannot expand their land base without admitting more members.

(7) The government could do more to alert women of the need to examine their rights. They should be eligible for membership and have the option to join if they want. It should be up to the cooperative to develop ways to meet this situation. In the meantime, the women should be paid for what they contribute to the farm such as running errands, food distribution and the services rendered in the care of the children, home, etc. These are essential to the efficient operating of the farm and employees would have to be hired to do this work if the wives were not available.

(8) Government acts and programs, such as the Land Bank Act and FarmStart, should treat women as individuals. For example, under FarmStart only full time farmers qualify and, if the husband is a full-time farmer, then "automatically" the wife becomes one too even if she is engaged in a full time job off the farm.

(9) Legislation that is designed to promote agriculture and prevent any further decline in rural Saskatchewan should be framed with cooperative farms in mind. Thus, instead of stressing "individual" or "family farms" the legislation should make specific provisions for cooperatives in recognition that they have the potential of providing a better farm life to its members, both economically and socially, and would benefit people in rural Saskatchewan.

(10) A more extensive education program should be undertaken to acquaint people with the principles of cooperation, how cooperatives function, possibilities, advantages, etc. At present most of the school materials do not look at cooperatives as an alternative form of conducting business or a way of life. There should be more group discussion and member education before the cooperative is incorporated. It is best to have clearly established provisions for as many eventualities as one can imagine. For example, there should be provisions for member withdrawal because this has been a burden on the cooperative farm – to repay the equities and adjust to changed economic resource complement. This must include the recognition of the importance of human relations and difficulties encountered and further research to offer practical ways to overcome these and to accommodate individual member's social differences. Also ways to improve group management decisions. Included in this category is the hope that a more concerted effort will be made by the elders to educate the children about the cooperative farm and cooperative principles. In this the retired Matador generation could play an important role.

(11) A critical analysis of cooperatives in general should be undertaken by the government to determine why cooperatives are failing, why they are being attacked as

big business, etc. and a program outlined for possible changes in all fields that would let cooperatives operate more effectively and serve the needs of the people who are the member shareholders.

(12) The Department of Cooperation and Cooperative Development should continue to support and encourage the Women's Group of the Federation of Production Cooperatives in their discussions. At the first meeting in the Fall of 1975, the group took as their reference point the premise that women should be members of cooperative farms and studies are to be done on how to deal with the question of wages and equity. One possibility is to have a provision in the standard bylaws that all members of a family unit over sixteen could be members of the cooperative and the equity to the family could be credited in equal amounts to the adult members. This would also encourage younger members to stay because during their teens if they worked on the farm, they would be building up some equity in it too. Thus, they would not need to sacrifice their standard of living completely to stay on the farm.

(13) A possibility – total community concept. This section would not be complete without mentioning this idea originated by studies done by Lorne Dietrich, a retired member of the Matador Cooperative Farm. He would like to see the Provincial Government fund a pilot project for those who would like to farm cooperatively and to assist them in establishing it in a dying rural community. He sees the biggest failure of Matador as the inability to maintain a vibrant community. He would like to have seen a creamery, Laundromat and other facilities but realizes if a community is going to be a social, as well as an economic unit, people need to be involved and committed from birth until death. This requires more of an ideological agreement among people and “. . . (T)hey must be convinced that their cooperative ways offer real advantages, not only economically but in assuring them of amore complete and satisfying living”. Dietrich readily admits that some people just joined because it looked like a good business deal. However, the things the Matador farm required to be a complete community would destroy nearby Kyle. That town of 700 people has difficulty in supporting some of its services and community activities.

Dietrich sees the possibilities of a group of people who are committed for the basic principles of cooperatives and that agree politically, establishing a cooperative community. The headquarters would be built near the town and could grow into the town and develop services. For example, if a local business was selling, the cooperative could purchase and run it cooperatively for their benefit and for those who wished to remain in the area and there they would not be forced into larger towns or cities. This is not a farm or an agricultural problem but a political problem and decisions would be based on how people want the future of rural Saskatchewan and of Canada to develop. This concept could fill a gap right now in rural Saskatchewan and help people to earn a decent wage in a more meaningful way.

### **Summary and Conclusions**

“Either cooperative farming is going to increase or corporate farming is going to increase”, according to Larry Frey, a member of a production cooperative. However, not that many cooperative farms have been developed in Saskatchewan to date and the single proprietor family farm where the functions of ownership, labor, management and capital are in the same person or family unit, remains the most predominant form of organization. There has been some alarm regarding corporate farms and the exodus of farmers leaving or not being able to start farming, but no group or government has met this problem in any effective way. There is the need for recognition of cooperative farms in both the national and provincial areas as a coopera-

tive and as a group of small farmers rather than as a corporate structure. Thus existing legislation should be adapted and used to assist cooperative farms.

The only assistance (other than setting aside some large tracts of land after WWII for cooperative farms) is given to all new cooperatives in the form of incorporation, technical, human relations and accounting advice by the Department of Cooperation and Cooperative Development. The Department, when required, also continues to assist in this manner after the cooperative is in operation. This is significantly more than is offered in most other Canadian provinces and should be continued and expanded.

The adoption of production cooperatives to agriculture has been modest for many reasons. Cooperative theory has mainly been directed towards consumer and marketing cooperatives and has limited application to agricultural production cooperatives beyond a mere statement of principles, which rely heavily on dogma. The other difficulty is the problems faced by cooperatives in operating and coping with a largely individualist environment based on private ownership.

A variety of business structures can be incorporated within the Cooperative Productions Act and the ability of the potential incorporated cooperative to achieve the objectives they desire depends on their ability to understand, utilize and modify the established legal structures and design suitable bylaws for their needs. Also additional flexibility of cooperative legal structures may be needed to permit the recognition of the limited capital resources younger members can contribute. This would allow them to benefit from the additional labor, which they would contribute, and to prevent older members from subsidizing their entry except by choice.

Since cooperative principles have come about largely in response to non-agricultural needs, members of cooperative farms should not be over influenced by them to the extent that they create an unworkable design that does not achieve the desired goals of the group. The formation of a production cooperative requires the complex area of human relations to be fitted into a multiple ownership situation. Equitable and equal treatment of members should be the guiding principle. Flexibility would be improved by measures permitting different contribution and recognition of resources and labor.

The history and operation of Matador Cooperative Farm primarily points out the overall land resource question as organized under our present system. This caused many of the problems of the original Matador Cooperative Farm and led them to sell to the Land Bank commission. As Lorne Dietrich says "We lived and experienced crises for twenty-eight years based on the land tenure program".

Land values are inflating, less land is being used for agricultural production, and we are dealing with a non-renewable resource. The increased capital costs in farming have ruined many young farmers, especially in times of a less buoyant economy. There are many obstacles preventing younger people from starting farming, such as land transfer between generations and a system of land tenure based on private ownership of the land.

Potentially cooperative farms offer a high level of economic performance and higher level of efficiency than typical individual farms. However, mere use of the cooperative farm structure does not automatically increase an individual member's well being – this will depend on his/her preference for economic and non-monetary benefits. The Matador Farm has been an example of how an alternate form of farming is possible and it has a definite potential even within our present economic system. It's size is smaller per operator than most single proprietor farms to maintain the same standard of living; it has a higher per member income and lower investments in depreciable fixed assets. Most important, it allowed eighteen veterans, with very little

capital, to start farming after WWII and work and live in the environment that they wanted to and have some control over their work.

Although the Matador Cooperative went through many crises periods, it has emerged relatively successful in that although the original cooperative had to be dissolved, the new cooperative is carrying on through the Land Bank and enabled ten young farmers to engage in farming. These younger farmers are trying to work out, in a more detailed way, their objectives and goals in this endeavor as evidenced partly to achieve benefits associated with private company farms but there are the non-monetary benefits, too, which all members should agree are important. These can contribute significantly to the well being of members.

Thus, cooperative farming may prove to be a partial but basic solution within the scope of the average prairie farm family and community to problems of a decaying and dying rural Saskatchewan. However, the Provincial Government is going to have to make some changes in legislation and policy to help support the development and viability of these types of endeavors. Hon. E.D. Shillington, the Minister of Cooperatives, says that he is committed to policies that get back to the true spirit of cooperation – “people helping people” and says his department will be taking a critical look at the present situation regarding all types of cooperatives and recommending changes. If not, J.F.C. Wright’s words in *Prairie Progress* will always hold true:

“But the exacting combination of idealism and practicability evidently for the success of complete democratically controlled type cooperative farms has so far proven to be a rare, rather than a usual, occurrence.”

## Appendices

Comparison of cooperative and corporate organizational forms

Supplementary bylaws of the Matador Cooperative Farm Association Limited

By-Laws of the Matador Cooperative Farm Association, Limited

By-Laws of the Matador Farming Pool Limited

*Morris, J.B. 1972. An Economic Analysis of Selected Production Co-operatives In Saskatchewan; A Thesis Submitted to the Faculty of Graduate Studies for the Degree of Master of Science in Agricultural Economics, University of Saskatchewan, Saskatoon*

## Abstract

This thesis contains an examination of the co-operative approach to agricultural production to determine the extent of economic benefits and disadvantages associated with its use in Saskatchewan. More specifically, the operations of selected machinery co-operatives and co-operative farms incorporated in Saskatchewan under The Co-operative Production Associations Act, 1967, were analyzed to determine if during selected periods of their operations, their members had achieved a level of well-being superior to that realized by operators of comparable individual proprietorships.

Co-operative theory and selected economic theory were reviewed. Both suggest that production co-operatives should attain benefits from the realization of cost economies, and the ad-

vantages of diversification, specialization of labor and resource pooling. Indifference curve analysis was used to examine the effect of various levels of economic and non-monetary returns upon a member's well being relative to his preferences for each.

Operations of similar co-operatives in Britain and continental Europe were reviewed, as were the recorded experiences of the production co-operative movement in Saskatchewan.

Eleven co-operative farms operating in Saskatchewan between 1964 and 1968 and seven machinery co-operatives operating in 1968 were analyzed. Sources of data and information included two sets of questionnaires, annual co-operative financial statements, interviews with the secretaries of all the co-operatives studied, publications by the Saskatchewan Department of Agriculture, and other published material. A major effort was required to make the available data pertaining to co-operatives and individual proprietorships comparable. However, it was not possible to establish the extent to which data pertaining to individual Saskatchewan farms represented the performance that members of the co-operatives would have achieved if they had farmed individually.

The economic analysis in general consisted of comparing production co-operative data with comparable "yardstick" data from individual proprietorships. Co-operative farm economic performance was measured in terms of ratios of costs to returns, net farm income to value of production as a ratio of value of production. Absolute, per-member, net farm income and operator labor and management returns were also calculated. Economic performance of machinery co-operatives was largely evaluated in terms of production costs, although an income measure was also used.

Certain sociological concerns such as decision-making, group management, member relationships, and other similar aspects arising from the operation of the subject production co-operatives were examined in a non-monetary analysis.

The economic analysis indicated that in terms of only economic measures, farms had achieved performance inferior to that of "yardstick groups" selected; only four had achieved generally superior economic performance. Most machinery co-operatives had achieved cost economies, although the extent of such achievements varied.

The analysis of non-monetary features revealed that many production co-operatives had experienced some degree of member relationship difficulties. Group management and decision-making required often difficult adjustments in such matters. However, members reported the achievement of greater leisure time, enhanced security, and other non-monetary benefits from their co-operatives.

The combined economic-sociologic nature of production co-operatives was evident throughout this study. As production co-operatives can not be adequately evaluated unless both economic and sociologic considerations are taken into account, and as each co-operative was somewhat unique, the case study method was used in place of more formal and precise analytical procedures.

The study demonstrated that production co-operatives, in general, offer potential economic performance superior to that achieved by many individual proprietorships. However, achievement of that potential is not ensured by the mere existence of a production co-operative as the achievement of economic success is not automatic.

Achievement of economic or social benefits from a production co-operative, consistent with members' preferences, requires the availability of sufficient productive resources, an adequate legal and operational framework, and sufficient managerial capability to ensure that the co-operative functions in an economically and sociologically superior satisfactory manner.

Interpretation and use of the specific conclusions arising from this study requires recognition of the limited number of production co-operatives upon which the study was forced to rely, the data limitations which were experienced, and that a full examination of all the sociological aspects of such organizations was beyond the scope of this study. However, these limitations do not detract from the general conclusion that production co-operatives offer potential advantages to agricultural producers under certain circumstances.

### Summary

The major objective of this study was to examine the co-operative approach to multiple ownership to evaluate the economic and social benefits or disadvantages associated with its use in Saskatchewan. Although production co-operatives are not new to Saskatchewan, adoption of such an approach by the agricultural sector has generally been modest.

Co-operative theory has been primarily concerned with consumerism and marketing, and has limited applicability to agricultural production co-operatives beyond a discussion of general principles and practices. Statements of co-operative principles appear to rest heavily on dogma. The movement itself appears to be questioning the rationale behind retaining certain principles and to be contemplating modifications to make co-operatives more effective for overcoming current problems.

Economic theory suggests that cost economies can be attained by large agricultural production units. These, plus benefits associated with resource pooling, diversification and specialization should theoretically be attainable by production co-operatives of sufficient size and resources. Indifference curve analysis illustrates that a co-operative which achieved an economic improvement with reduced non-monetary benefits, or vice versa, would not necessarily improve a member's well-being. Whether a member's well-being was increased would depend on that member's preference for economic and non-monetary benefits.

Many descriptions of production co-operatives experiences in Saskatchewan contain optimism as to the potential of co-operative farms to provide economic and social benefits. Group management, human relations and unsatisfactory economic performance have been recognized as areas of major difficulty. Machinery co-operatives were first used in a few instances to facilitate mechanization. Later they provided a means of reducing production costs on established and already mechanized farms. It has been generally assumed that machinery co-operatives and co-operative farms can achieve cost economies and production advantages. However, there is little detailed documentation of such achievements in Saskatchewan.

The British government encourages smaller farmers to utilize production co-operatives as a means of amalgamating at least a portion of their farming operations to improve their economic performance. A loss of member independence, difficult group relations, and few ready alternatives for resulting surplus manpower are observed problems. Establishment follows intensive preparation.

Analogues to Saskatchewan co-operative farms and machinery co-operatives exist in many European countries. The objectives of such co-operatives vary from land development in Italy to reducing production costs and labor requirements in France. More economical use of equipment on small-scale farms is usually achieved. Difficulties associated with member relationships and group functioning are evident, particularly in the French experience.

The sources of data and information for this study were the annual returns prepared by each co-operative, questionnaires, a personal follow-up interview with the secretary of each co-operative, discussions with individuals within the co-operative movement and available litera-

ture. Co-operatives were compared with single proprietorships represented by yardsticks constructed from data contained in Saskatchewan Farm business Summaries. The data were adjusted to make them comparable with those available from the subject co-operatives.

Co-operative farms and machinery co-operatives were analyzed separately. The analysis of each type consisted of a monetary analysis, which examined the performance of each business and its effect upon income received by members, and a non-monetary examination, which included an investigation of certain non-monetary or social benefits and disadvantages.

The economic analysis of 11 selected co-operative farms in Saskatchewan revealed that although their resource base was generally large, it was smaller per operator than the resource base of the single proprietorship yardstick farms. Co-operative farm efficiency, measured by a ratio of total cost to value of production, and other cost ratios, ranged from much superior to the yardstick groups to much inferior. The more efficient co-operatives generally tended to be so by all measures, and inefficient ones appeared so in all such categories. The efficient co-operatives, from a total business point of view, were also efficient from the members' point of view, judged on the basis of a net farm income to value of production ratio, and an operator labor and management return to value of production ratio. Generally, 4 of the co-operative farms achieved efficiency superior to their pertinent yardstick groups.

Selected absolute income measures revealed that four co-operative farms (those exhibiting greater efficiency) achieved a net farm income per member superior to the smaller yardsticks; one exceeded the larger. The four more efficient co-operatives also achieved a larger, more stable operator labor and management return per member than did the yardstick groups; the other co-operators exhibited smaller and less stable returns.

No co-operative farm had an average per-member equity investment greater than the larger pertinent yardstick, although two of the more efficient co-operatives exceeded the smaller yardstick in such terms. Seven co-operative farms achieved equity growth rates superior to the yardstick groups; three of the four more efficient ones did not.

The non-monetary analysis revealed that the co-operative farms had consisted of two general types, those incorporated to gain benefits in generating income, and those seeking to accomplish business planning objectives.

Co-operative farms were composed of family, unrelated or mixed memberships. Member withdrawal had been experienced by a number of the co-operatives and was generally found difficult. Differing personal opinions and changing membership goals sometimes made member relations difficult.

Members sometimes experienced difficulty in adjusting to group, or joint, management and decision making. The managerial process had, in most cases, become less formal and time consuming with experience. A family group's decision-making was often little changed by incorporation.

In general, members encountered few operating restrictions under the Co-operative Production Associations Act. Bylaw changes were infrequent. Formal business administrative requirements were not unusually irksome. Some disadvantages resulted from operating in an individualistic environment.

Respondents attributed benefits of reduced operating and capital costs, reduced labor requirements, better farming methods and equipment, better management, and a variety of social benefits to their co-operative farms. Areas of difficulty were member withdrawal, member entry, inter-personal incompatibility, and a failure to achieve social benefits as widespread as had been anticipated.

The seven machinery co-operatives analyzed consisted of a substantial land base and a considerable amount of available labor, but were not exceptionally large on a per member basis.

Production costs per cultivated acre were compared with comparable costs of from the Farm Business Summaries. All the co-operatives achieved lower costs than did the yardstick farms. However, the effect of these lower costs upon the members' net income positions could not be clearly determined. Comparisons of labor costs were impossible because of data deficiencies. All the machinery co-operatives achieved lower machinery operating costs (which were a component of the total cost category) than did the yardstick groups, although some did not achieve lower machinery investment and depreciation costs.

The non-monetary analysis of ten machinery co-operatives revealed that four consisted exclusively of related individuals; some of all of the members of the other co-operatives were unrelated. Two co-operatives were in the process of dissolution to allow their members to quit farming. Four had experienced member withdrawal, which in most cases had been difficult. In two cases, friction between members had been encountered during periods of economic difficulty.

Relationships among members were at times difficult, although a spirit of compromise helped to resolve such difficulties. Most members experienced an initial loss of independence upon incorporation.

Important operational features were grain pooling, sharing of expenses, and in some cases, a depreciation reserve fund. The machinery co-operative itself rented land in six cases. Machinery co-operative formation had often been catalyzed by a lack of sufficient capital for individual machine replacement and by labor shortages.

Benefits cited included substantial labor savings, lower production costs, risk reductions, the ensuring of business continuity through incorporation, the keeping of improved records, and the development of enhanced managerial ability.

***Trew, John. 1954. History of the Beech Co-Operative Farm Association, Ltd.; Excerpted from Jonesville Homemakers Club; Commencement of the Compilation of the History.***

As in any group or type of organization there are many problems with social and economic aspects and by no means are co-operative farmers unique in this aspect. I have tried to show you what took place economically, in the foregoing, naturally one ties in with the other and in ordinary farm society your social status more or less follows your economic success or failure. In this new field of co-operative farming the members of the Beechy farm hovered almost on disaster. It was felt that complete independence was possible. As a result in the early years it was very difficult for good community effort and co-operation between the old established and the new residents. The natural "intermingling" and erasure of prejudices both within and without the farm are gradually bringing about the acceptance of the Beechy Co-operative Farm as part of the Beechy Community.

Turning now from the broader social aspect to the social development of the members of the Beechy Co-operative Farm we must remember that there were twelve conflicting personalities trying to adjust themselves to one another. Students of group development all over America readily admit that co-operative farmers have many more difficulties than do groups in ordinary society due to the face of the "oneness" of their activities. On a co-operative farm, they must adjust or continue to conflict. After four years of adjusting and experimenting, the Beechy Co-op farm because split into two groups. Seven of the families remained in the present co-op farm

and five of the families are now farming a portion of the land to the southwest of the block on an individual basis. Both groups appear to be happier under this arrangement.

The women played a far greater part in the development of the farm than is generally realized. They are the members who organize our social gatherings, smooth over a spat between the children. When the members become discouraged and lose sight of the over all goal it is often times the woman who encourages, sees the brighter side and gives the needed strength to progress.

***Smith, Gary W. 1977. Production Co-operatives: Their Role in the Development of Rural Saskatchewan; B.S. in Agriculture Thesis; University of Saskatchewan; Saskatoon, Sask.***

I believe that this paper has shown that production co-operatives accompanied with a reformed system of land tenure, could go a long way towards developing rural Saskatchewan.

It must be realized and remembered these coops are not a be all and end all in terms of rural development. There are many problems associated with production co-ops, many of them serious. But the point is that these possibilities as a tool for rural development are great enough to warrant the work and research that will be needed to overcome their problems and advance them to the position they should occupy in rural Saskatchewan.

As well the above paper only discussed the cost side of the cost-price squeeze which has been fatal to many Saskatchewan farms. The price side has to be worked on to if a stable, comfortable, population is to be kept in rural Saskatchewan.

I believe that co-ops could play apart here as well. One of the reasons farmers are constantly getting the short end of the stick is because they aren't organized. The "rugged individual" syndrome has been, and will continue to be a problem for farmers in their bid for some sort of bargaining power in today's society. Co-ops can only help to change the thinking of western farmers away from an individualistic outlook toward a co-operatively organized way of thinking which leads to the power necessary to have some say an some control over that which affects them.

Also many large agribusiness firms are growing larger and gaining power by vertically integrating into production units thereby lowering costs and increasing profits through precise market organization. There is no reason why farmers couldn't vertically integrate from a co-operative retail store to the farm and in this way offer competition to the large corporations and keep some of the profits they would otherwise have for their own. This type of organization would need a co-operative philosophy and co-operative way of thinking, which would be greatly encouraged by the establishment of co-operative farming enterprises throughout the province.

The establishment of production co-operatives and the widespread public ownership of land would certainly meet with difficulties. Generations now have been influenced by the thinking of the European founders of this country who stressed individuality, free enterprise, along with the private ownership and competition which are associated with these concepts. The issue of public ownership of land wold indeed be politically hot as can be observed by the current debate on the land bank and potash issues.

But I believe that the free enterprise, competitive system will continue to fail the small farmer. As costs rise and prices fluctuate uncontrolled by them, many small farmers will look elsewhere for solutions to their problems. If there are operations like the Matador to serve as models; if enough work is done to alleviate some of the social and managerial problems associated with co-ops; if an effort is made to educate people about co-operatives; and if legislation is

enacted to encourage co-ops and the public ownership of land, then I have every confidence that production co-operatives will rise to the position they merit and thus become a strong force in the future development of rural Saskatchewan.

*Elmgren, L.N. and J.A. Brown. 1978. The Agricultural Production Co-operative Approach to Farm Business Organization in Saskatchewan. Research Report 78-01, College of Agriculture, University of Saskatchewan, Saskatoon, Saskatchewan.*

### **Conclusions**

The adoption of the agricultural production co-operative approach to farming in Saskatchewan has been quite limited to date. The predominant approach continues to be single proprietorships, which the majority of operators in the province appear to prefer. Another important factor is the general lack of knowledge and uncertainty by farmers regarding the application of co-operative principles, practices and group decision making in agricultural production. In addition, the complexity of operating a large multiple operator farm business and the considerable uncertainty surround the income tax status of agricultural production co-operatives has likely tended to limit the establishment of co-operative agricultural ventures.

Co-operative farms and machinery co-operatives may be able to capitalize on the potential economic and social advantages of multiple operatorship units. However, as with all multiple operatorship units, asset organization, bylaw construction and operating arrangements must be very carefully set up and followed in order to avoid problems related to group management, taxation, member withdrawal, and dissolution.

Being classified as an agricultural “co-operative corporation” for tax purposes can be a considerable disadvantage if the following situations and practices exist:

- (a) no provisions are made in the bylaws for the retention of earnings (beyond the six month statutory limit) or for the distribution of taxable dividends to shareholders on established share capital,
- (b) a portion of annual earnings are retained and taxed at the corporate level,
- (c) investment income is earned on retained earnings,
- (d) capital gains are realized on co-operatively owned property,
- (e) undistributed tax-paid corporate income and capital surpluses exist in the corporate structure.

Many of the unfavorable tax treatments which could result under the above conditions can be avoided or minimized if agricultural production co-operatives are set up to qualify as “small private Canadian-Controlled Corporations” or if all earnings are allocated to members annually.

Individuals contemplating a multiple operation should be careful to ensure that the type of business organization selected is suited to the economic objectives, and social and personal attributes of the potential participants. In this regard, various multiple operatorship approaches should be evaluated. In addition, the advice of specialists in farm management, accounting, and law are important to the development and operation of a successful multiple operator farm business.

### **Pros and Cons of the Co-operative Approach**

In this chapter, the major potential advantages and disadvantages of operating a farm or enterprise as an agricultural production cooperative are outlined briefly. These potential benefits and drawbacks are not necessarily unique to co-operatives. In fact many are shared with other

forms of multiple operatorships such as partnerships and private corporations. The realization of most of the following potential advantages is largely determined by the adequacy and efficiency of the farm business developed as well as the effectiveness of the group management approach. In addition, many of the potential disadvantages listed below can be avoided or minimized by competent farm establishment, operation and management.

Potential Advantages:

- (1) Due to multiple operatorship or co-operative effort
  - (a) Resource pooling and development of more adequate units,
  - (b) More effective capital accumulation, and enhanced credit repayment capacity,
  - (c) Less capital rationing
  - (d) Reduction of risks
  - (e) Improved labor availability, specialization and efficiency,
  - (f) Diversification of enterprises
  - (g) Improved labor availability, specialization and efficiency,
  - (h) Benefits in purchasing inputs and marketing due to greater volume,
  - (i) Help cope with rural isolation,
  - (j) Provision of vacation time and protection in case of sickness or accident, and
  - (k) More time for participation in community affairs and activities.
- (2) Limited liability on share capital, where members do not personally co-sign business loans.
- (3) Ownership transfers facilitated through the allocation of corporate memberships and shares rather than specific items of property.
- (4) Continuous life of a corporate entity facilitates firm growth, ownership transfer, and control.
- (5) Estate planning and asset transfers are facilitated through an appropriate share of membership structure.
- (6) Employee-shareholder benefits –
  - (a) Low-cost loans to members for certain purposes,
  - (b) Spousal eligibility to earn own taxable income,
  - (c) Employment expense deduction for income tax purposes,
  - (d) Patronage dividends, and
  - (e) Participation in employee protection and security plans (Canada Pension Plan, Unemployment Insurance, registered Retirement savings Plans, Registered Pension Plans, Deferred Profit Sharing Plans, Insurance Plans, etc.).
- (7) Income tax deferrals on retained earnings, where eligible for the small business deduction.
- (8) Better production and financial records.
- (9) Formal group decision making and planning facilitated.
- (10) Dividends from other taxable Canadian corporations may be received tax-free by a “co-Co-operative corporation”.
- (10) Representative Control (one-member –one vote).
- (11) Assistance in setting up and operating a co-operative is available from the Department of Co-operation personnel.
- (12) Assistance in setting up and operating a co-operative is available from Dept. of Co-operation personnel.

Potential Disadvantages

- (1) Loss of individual freedom of choice and independence by joining a multiple-owner unit.
- (2) Lack of community acceptance.
- (3) High legal and accounting costs.

- (4) Legal and accounting problems upon incorporation or dissolution.
- (5) Income tax restrictions –
  - (a) Principal residence exemptions are not available on corporate owned residences
  - (b) Valuation day elections to determine capital gains or losses on capital property held on December 31, 1971, are not available to a corporate taxpayer (this means that allowable capital losses may not be maximized),
  - (c) Capital loss absorption provisions (\$1,000 per year against other sources of income) are not available to a corporate taxpayer,
  - (d) Five year block income averaging, general income averaging and forward income averaging are not available to a corporate taxpayer,
  - (e) Tax-free rollovers of capital gains and recaptured capital cost by a farmer to a child, grandchild or great-grandchild on farm land and depreciable capital property acquired after 1972 are not available if farm property is held in the form of shares or membership interests. (This restriction is currently under review by the Canadian Government).
  - (f) A pre-1972 basic herd cannot be rolled over tax-free into a corporation,
  - (g) Where a “co-operative corporation” retains a portion of annual earnings and has no authorized share structure upon which to pay out taxable dividends, tax will be payable at the corporate rate initially and no dividend tax credit will be available to individuals when the net earnings are paid out. (This will result in a heavy tax load on earned income,
  - (h) Capital gains and other investment income realized or retained by “co-operative corporations” are not fully taxable when paid out to shareholders (double taxation),
  - (i) Benefits received from the use of company owned houses and cares are taxable to members,
  - (j) Investment tax credits equal to 7 percent of the capital cost of depreciable new farm property can not be effectively claimed if all surplus corporate earnings are paid out annually as wages, bonuses, patronage dividends, etc. This tax credit takes the form of a deduction against corporate taxable income and to the extent to that there is no taxable income left at the corporate level the tax credit can be effectively utilized.
- (6) Limited return on share capital (5 percent per year) in some cases could be considered a disadvantage.
- (7) Where an individual rents or transfers all his farming assets to a private corporation or a production co-operative he may no longer be considered to be actively farming. This could bring into question his eligibility for:
  - (a) Taxation as a farmer
  - (b) A Canadian Wheat Board delivery permit
  - (c) Certain government grants to farmers
  - (d) Participation in certain subsidized government programs.

***McGrath, Dion Gerald. 1996 A Challenge to Tradition: Co-operative Farming in Saskatchewan, 1944-1960; Masters of Arts Thesis, Department of History, University of Saskatchewan, Saskatoon***

Co-operative farming in Saskatchewan during the 1940s and 1950s must, like any other program that suggested or provided an alternative to the traditional family farm, be examined in the context of the agricultural climate of the time. Saskatchewan agriculture was undergoing

tremendous changes in the early 1940's. Rapid mechanization, technological advances, and the labor shortage that occurred in the farming community, as a result of the war, were three reasons for the changes. Young men and women left rural Saskatchewan by the thousands to sign up in the armed forces, leaving many farms with the need to replace labor. Many of those farms, out of necessity and in the name of progress, turned to larger, more technical equipment to fill their needs. In addition to mechanical improvements, farming methods were also refined. Crop rotation, soil conservation, enhanced seed varieties, and new chemicals were replacing outdated techniques and offering greater returns for producers. Changes affecting agriculture produced changes throughout rural Saskatchewan that encouraged the experiment of the co-operative farm. New technology allowed many farmers to expand their operations, which enabled them to increase production. For those who could not afford the costs of increasing their land base and the equipment necessary to work the land, there were few options. Many attempted to remain on the land, operating their farms as efficiently as possible others simply sold their farms. The increased capital costs of farming that occurred in the 1940's resulted in a decline in the number of farms and farmers in Saskatchewan. The depopulation of rural Saskatchewan increased the sense of isolation and loneliness felt by many on family farms. The costs of attaining new conveniences, such as electricity and telephones, was immense. Many farmers could not afford the new luxuries. The co-op farm offered a solution. It allowed farm operations to be carried out with a complete line of modern equipment; the loneliness and isolation were reduced or eliminated; and the costs of accessing modern conveniences were greatly reduced. The changes within the farming community produced and allowed for the experiment of co-operative farming in Saskatchewan.

The twenty years between 1941 and 1961 witnessed a steady decline in the farming community in Saskatchewan. In 1941, the farm population was just over 500,000; by 1951 that number had declined by approximately 100,000; by 1961 the farm population rested at 305,740 persons. Correlating with the decline in population was a decrease in the number of farms. In 1941 the number of farms in the province was 138,713; in 1951 that number had fallen by 26,695; by 1961 there were 93,924 farms in Saskatchewan. One of the things increasing, however, was the average farm size. On average the total average of a farm in the province had increased by more than 250 acres. Coupled with that trend was the fact that the average age of the farm operator was over 45 years. In 1954, the Royal Commission on Agriculture and Rural Life placed the state of the industry into perspective:

...opportunities for establishment in farming have not only reached practical limits but are, in fact, in the process of contraction. The needs of the people now engaged in agriculture far exceed the possibilities of expansion.

Individuals wanting to establish themselves on an economic unit sufficient to provide an adequate standard of living faced mounting difficulties.

Furthermore, the younger generation's opportunities to become involved in farming were becoming limited. As a result many young people began to seek alternative occupations. In addition to the exodus of young people from the farms, there was also the increased isolation of the farms themselves due to the fact that many had disappeared. The face of farming in Saskatchewan was changing. No longer would the small homestead of 320 acres suffice to provide for a family. The trend was towards the larger, mechanized farm.

Mechanization and new technologies led to a need for expansion of the family farm. In order to obtain a reasonable cost per acre for machinery, additional land would be required. Yet, the majority of suitable agricultural land had already been occupied by the 1940's. However, the pressures for larger farms, which were driving people off the land, helped to provide additional opportunities for farm expansion. Farmers who were able to sustain the growing pressure of accumulating debt were able to survive in the new era of Saskatchewan agriculture. For many, however, the pressure was too great. Alternatives were sought to decrease some of the additional costs thrust upon them.

One of the more popular initiatives was the use of the co-operative method to reduce costs. Saskatchewan had a strong history of employing the co-operative method to meet specific needs throughout the first half of the twentieth century. For the most part, co-operative effort had been focused on consumer and marketing co-operatives. By the 1930s, the co-operative method had evolved into other industries as well. One of the areas was in the production of various agricultural commodities. Grazing, dairy, and machinery co-operatives were but a few that began to organize. By the mid 1940s, the prospect of complete co-operative farms was becoming a reality.

The election of the Co-operative Commonwealth Federation in June 1944 greatly increased the possibility of establishing co-op farms. Although much of the legislation regarding such enterprises was already in place due to the previous Liberal administration, the CCF worked to strengthen and encourage the use of the co-operative approach in agricultural production, including co-operative farms. In 1944, in co-operation with other agencies, such as the University of Saskatchewan, Co-operative Union of Canada (Saskatchewan Section), and the United Farmers of Canada (Saskatchewan Section), the CCF began preparations for the experiment in co-operative farming. The government did not act alone. There were continuous consultations with the other groups interested in co-operative farming. The government acted as the consolidating force that had the resources to implement the plan.

The circumstances for attempting the experiment were favorable. The Second World War had been going on for over four years and the end was believed to be near. Preparations needed to be in place for the eventual return of thousands of members of the armed forces who would be seeking employment and a return to normal living. Saskatchewan was an agrarian-based society at the time. Many veterans came from rural areas and farm backgrounds. Therefore, the agricultural sector was looked upon as being an industry that could provide a satisfactory rehabilitation for many of the returning veterans. However many people were concerned that it would be difficult for a returning veteran to become established on a farm because of the high costs involved. Advocates of co-operative farming had an opportunity to introduce an alternative method of farming that could help resolve some of the problems affecting the industry and at the same time demonstrate their desire to see returned veterans rehabilitated into society.

The government was viewed as the architect of the co-operative farming plan for two main reasons. The first had to do with finance and research. A program of the necessary magnitude would require funding in order to get the preliminary work completed. The government had the resources to conduct the required research. Studies and research had to be conducted on the other co-operative and collective schemes that had taken place worldwide. Four areas, the USSR, Palestine, Mexico, and the USA were selected for study and review. The kolkhoz in the USSR seemed to have accomplished large-scale mechanization through co-operative effort and the kibbutz of Palestine demonstrated how community living could be successfully accomplished. In Mexico large-scale land reform provided land for landless people, and through the

co-operative they were able to achieve a better living for themselves. The experiment in the United States offered the most immediately relevant information for the Saskatchewan experiment. The conditions of farming in the US were much like those in Saskatchewan and the co-operative approach to farming was, in both cases, foreign. Individual ownership was the pattern that had developed in both countries and co-operative farming went against that tradition. The failed attempt at co-operative farming under the direction of the FSA provided information as to some of the possible problems that could be avoided. All of the areas provided valuable information regarding the proposed venture into co-operative farming in Saskatchewan. Joseph Eaton, in his book *Exploring Tomorrow's Agriculture*, examined the various types of co-operative farms worldwide, and maintained that:

The fact that co-operative group farms play such an important role in the agricultural economy of three countries and seem to find recognition in a fourth (England) indicates that this pattern can no longer be considered experimental.

The research aided in identifying some of the many benefits that could be achieved as well as the many downfalls that needed to be avoided if the project was developed.

The second reason for the government's importance was the need for suitable agricultural land. By 1944, the accessible land base for agriculture was almost entirely occupied. However, the government had in its possession hundreds of thousands of acres of Crown land that was deemed suitable for agricultural production. Much of that land was located in heavy bush in the northeastern part of the province known as the Carrot River District. For that land to be made suitable for production, the government had to undertake a program in which the land was cleared and broken to allow settlers to make a living from the outset. Through what was known as the Carrot River Program, the government placed responsibility upon itself to insure settlers in the area had land that could offer a return immediately. The guarantee to the settlers was that 100 acres of 320 acre lease would be cleared and broken, the cost being absorbed by the government indicating the necessity of required capital.

It was clear that the government assumed an immense role in the development and implementation of the co-operative farm program. The numerous conferences and meetings that were held to plan and prepare for such a program were government-sponsored. In addition, the government accepted the responsibility of publishing materials relevant to co-operative farming in order to educate the public in the alternative method. But the one thing that must be remembered was that at no time did the government act alone on the development and implementation of policies that were created. Numerous other groups were involved in the program from the beginning. The government realized from the outset that, for such a co-operative enterprise to be successful, there needed to be initiative and leadership from outside the government as well. For its part, the government acknowledged that it had to provide an infrastructure in which initiative and leadership could grow and mature. That infrastructure was established and refined through the many conferences that were held to outline the scope and intentions of the program.

Supporters of co-operative farming were enthusiastic and optimistic at the prospects of such farms. However, at no time was there any intention of "socializing" the land base in the province. Many opponents of the scheme called co-operative farming the first step towards communism. Such claims were ill-informed. Of the approximate 2,000 units of land the government leased to veterans by 1952, fewer than 200 units were delegated to co-operative farm members. The government did hold out confidence that, if co-operative farming were proven to

be a good alternative to individual ownership, many farmers would voluntarily adopt the new method. That confidence was soon eroded when problems and difficulties began to merge regarding the operation of coop farms.

The agricultural system was established on the principle of individual family ownership. Therefore, virtually all legislation, especially agricultural, was created for an individual family unit, not a group. Indications that co-operative farms would have difficulty being accommodated into the legal system surfaced in 1946 when the Matador farm was established and the veteran members were refused their rehabilitation grants by the Veteran's Land Administration (VLA). The federal government regarded an individual's security as the most important aspect in rehabilitation and believed that coop farm could not offer long-term security. That major impediment was overcome when the Saskatchewan government amended the lease agreement it had with veterans to include a clause that guaranteed a veteran land of equal quality and location in the event that the member discontinued participation in the farm. The amendment satisfied the VLA, but caused additional problems between the provincial government and farm members when the government could not live up to its guarantee.

Difficulties with the VLA were only the beginning of many legal uncertainties that plagued coop farms. The farms did not fit into the established infrastructure and as a result many of the benefits of coop farms were lost. There were numerous pieces of legislation that did not recognize co-operative farms as legitimate farming operations. The most notable was the income tax law. The law hampered the farms in two basic ways. First of all, the law did not view the farms as being true co-operatives. Instead the farms were classified as corporations and taxed as such. They were not allowed the privilege of tax exemptions in their first three years of operation given to other co-operative enterprises. For the farms that were able to demonstrate the economic gain of working together, having that tax break in the formative years of the farm could have been a tremendous help for further success. Secondly, farm members were not recognized as farmers. They were unable to average their incomes over the standard five-year period as individual farmers. Unfair income tax legislation hindered all of the farms that were able to enjoy the profits of their operations. Many of the farms, however, especially the farms in the north-eastern part of the province, did not worry about income tax problems because they had little or no income.

There were additional external problems that affected the success of the farms. Grain quotas, relief payments, various provincial legislation, and accessibility to the farms themselves all added to the difficulty of establishing a working unit. The definite and noticeable benefits of a coop farm were displaced by the legal and economic systems and the topography of the land that surrounded the farms. Legally, the farms were incorporated businesses. However, they were not suited to meet the many rules and regulations that had been established. Including coop farms in the system was a complicated and slow process, especially at the federal level. The provincial government was more congenial to making changes in legislation in order to include the farms, primarily because it was one of the original planners of the program.

The Saskatchewan government wanted co-operative farms to succeed. It continuously lobbied and negotiated with the federal government for legislative changes that would include co-operative farms. When human relation's problems began surfacing on many of the farms, the government, through the Department of Education, sponsored workshops that were designed to deal with those difficulties. By 1950, the government had begun to limit its direct monetary assistance to the farms, but was willing to back requests made by the farms, through the Co-operative guarantee Act, for assistance. Excessive government involvement would have under-

mined the co-operative philosophy. The government felt that responsibility for the success of the operation must rest with the members. It was clear that, on many of the farms, that responsibility was taken lightly.

The apprehension that co-operative farms were “collectivist” in nature, and that the individual would be subordinate to the wishes of the group, was widespread among opponents of the program. Walter Tucker, chairman of the special committee of Veterans Affairs in 1946 and later leader of the Saskatchewan Liberal party, publicly stated that he favored individual ownership over the co-operative method. Tucker was, in both instances, in a position of influence. As chairman of the special committee his views predominated. He was able to maintain his stance against coop farms and gain the support of other committee members. Tucker’s position on the committee was a contributing factor to the delay in changing the VLA. The fear that co-operative farms made the individual subservient to the group was unfounded. Withdrawal from a farm did not mean loss of property or investment. The bylaws of each farm guaranteed personal freedom and possessions and the provincial government assured all veteran leaseholders similar land if they decided to withdraw. Yet, suspicion and ignorance prevailed in many minds and resulted in a painfully slow process of legislative change.

The pace at which modifications were made to the legal systems had an affect on the disposition of many farm members. Those who joined the farms were aware of the potential advantages that could be attained through co-operative effort. Yet, they encountered many legal disadvantages that seemed to negate some of the benefits. The personal differences that arose as a result of community living caused further disillusionment. Few if any, of the farm members had experienced intimate group living outside the armed services. For many, the encounter was too much. Individual goals had to be supplanted by the needs of the group. However, there was also a need for individuals to be able to pursue and excel in their personal interests. While economic success of the farm was the primary concern, the development of a content and unified community also required individual happiness and expression. It was essential for members to specialize in the farming operations that appealed to them and for everyone living on the farm to participate in activities in the surrounding communities. A co-operative farm needed to provide both economic security and a satisfying social environment in order to become successful.

Attaining economic stability on the farms was often very difficult and, in many instances, failure contributed to members’ unwillingness to remain with the farm. The farms in the Carrot River area demonstrated that economic success was essential to survival. Severe and abnormal weather conditions prevented many of the farms from planting or harvesting a crop. As a result, many farm members were forced to abandon their farms in search of employment. By contrast, the Matador, Beechy, Laurel and Sturgis farms, along with others, experienced near-normal conditions that allowed them to get through the formative years and establish a routine of successful farm operations. Proving to members the economic vitality of co-operative farming greatly improved the chances of the organization’s success.

In addition to the obvious economic implications of co-operative farming, were the social benefits. Like the economic, the social advantages were easy to recognize in the initial stages of development. However, the social benefits were hard to maintain due to the different personalities, goals, and farming methods of farm members. Employing democratic principles as the basis on which all farm decisions were made often led to differences of opinion and pen conflict between individuals. Members were accustomed to farming techniques they or their parents had practiced prior to joining a coop farm and those techniques varied. Brining different farming

philosophies together on a co-operative farm forced members to either abide by the majority decision or, if all else failed, leave the farm.

Farm meetings were the most important and necessary function for the successful running of the farm. The meetings were not only the time when plans were made regarding farm operations, but were also the time when differences were brought into the open and discussed. In essence, the meetings determined the degree to which the members would co-operate. If a consensus could not be reached, ill feelings were allowed to grow among the members, the dissolution of the farm usually resulted. The Beechy farm attempted to solve the problem by requiring decisions to be unanimous. Debating ideas and convincing all the members of the merits of a proposed plan was at the core of developing consensus. The success of their method was seen over their 25 year history.

Experience demonstrated that a co-operative type of organization could improve and solve some of the social aspects of rural farm life. No longer did settlers have to be physically isolated from their neighbors. Traditionally, family farms were dispersed over large areas making communication and social life difficult, especially among the women. On a co-operative farm, it was easier for everyone to develop close relationships and there was no difficulty in getting together with neighbors for a visit. The isolation that prevailed for the family farm was overcome on the co-operative farm. Furthermore, the community that was developed was much easier to equip with some of the amenities of urban living. Electricity, telephone, schools, roads, social and recreational facilities were efficiently provided to the members. Many of the coop farms did not receive those services immediately, but over time and with the maturity of the farm, they were provided.

Both men and women experienced change in their traditional roles on the farms through the co-operative structure of organizations. Women were relieved of one of their traditional responsibilities on family farms: farming. Co-operative farms reduced or eliminated the need for women to perform farm production work. Women were no longer required to care for the livestock or other farm animals, nor were they required to help with the fieldwork. On the co-operative farm, women were, for the most part, restricted to work that was based in the home. Housework, childcare, and tending to the garden were common duties women performed. The reduced work load for women did not increase their status within the agricultural community. They did not attain equal status with the men on a co-operative farm. Men made the decisions that affected all farm production and marketing functions. In the instances where women were official members, they exerted little or no influence in the decision-making process. Even on the farms where women were recognized for their contribution in caring for the home and raising children, and were paid a monthly wage, they were not looked upon as having any legitimate input into production-related decisions. The patriarchy of prairie agriculture survived on the co-operative farms although progress was made in reducing the burden placed on women.

The advantages of living on a co-operative farm were experienced by many people. The farms attempted to solve some of the problems that afflicted agriculture during an era of rapid mechanization, expansion of farm sizes, and a decrease in the farm population. The farms challenged a system that was operated in the interests of the individual; a system that was forcing many farmers off their land. The CCF and other organizations recognized the negative trend that beset the industry and looked for a reasonable program that could offer rehabilitation for rural Saskatchewan. Co-operative farming was acceptable to the CCF in its desire to build a co-operative commonwealth; it was also economically feasible for those just entering farming, and it seemed to offer a solution to some of the basic problems affecting agriculture. Co-operative

farming was looked upon as an experiment that could reverse the trend of decreased rural population and farms.

Whether or not each farm was successful is not the main issue. There were, as noted, numerous difficulties, both internal and external, that worked against the farms and contributed to their demise. The importance of the co-operative farms that originated in Saskatchewan between 1945 and 1960 was that they demonstrated that an alternative method of agricultural production was viable, at least economically, if an effort was made to modify the established rules of the industry. They successfully illustrated that the economic and social problems associated with farming could be overcome by working and living co-operatively.

Co-operative farming challenged the tradition of the family farm, a tradition that was manifest in federal and provincial legislation. Co-operative farm members were often discriminated against in government programs because they were viewed as being one corporate farmer, not a group of farmers. Advocates were forced to lobby the governments for changes in order for coop farms to be included and accepted in the agricultural realm.

Forcing changes in legislation was only one of the challenges the farms faced; another dealt with each member's desire to farm individually. Farming was seen as an occupation for the individual. Farmers made their own decisions, accepted their own losses and gains, and were perceived as being independent. Co-operative farming displaced some of the qualities farmers possessed. Farm members had to overcome the aspiration of attaining the implied and accepted image of the farmer. Challenging their own self-image of what a farmer should have been was more difficult than most farm members expected.

The impact of co-operative farms on Saskatchewan agriculture was minimal. The farms never gained popularity or recognition among the general farming community. The total membership did not exceed 200 and the number of individuals living on such farms did not surpass one thousand: insignificant numbers compared to the total farm population of 305,740 in 1960. However, co-operative farms did provide an alternative to the traditional method of farming and they demonstrated that the alternative could work. The efforts by co-operative farms to change an agricultural system tailored to the individual were laded with difficulties. Conditions were not always conducive for their development. Perseverance and hard work were required from everyone involved. Those that survived established a workable and rewarding method of living off the land.

The CCF chose to support and encourage co-operative farming in 1943 because it believed many of the problems facing family farms could be overcome through the co-operative method. Subsequently, many of the farms demonstrated that those problems could be solved. However, the family farm remained the basis of Saskatchewan's agricultural economy. The experiment into co-operative farming illustrated that the alternative method required an extensive revamping of the agricultural system in order to become established. In addition, farm members were required to adopt and conform to a farming system that relied on all the members for its success. Once established, co-op farms showed that voluntary production co-operatives could work. They also demonstrated that, under the prevailing conditions, these types of farms were not meant for everyone; that they would be embraced and accepted by few people. Ian MacPherson elucidated, "Developing co-operative farming among people from a highly individualistic background proved difficult, regardless of their idealistic intentions." Challenging traditional agricultural methods and perceptions required individuals committed to the co-operative method. John Trew's conviction, that coop farming required "a special type of person", represents that commitment.

*Dietrick, Lorne, 1988; Matador: The Memoirs of a Co-operative Farmer. Center for Study of Co-operatives, Diefenbaker Centre, University of Saskatchewan, Saskatoon, Sask,*

This is an engaging, first-hand account of the experiences of Lorne Dietrick, one of the founders of Matador Farming Co-operative. Part One discusses his early years through WWII; Part II features the founding and maturation of Matador Farming Co-operative; and Part III reviews the transfer of the coop from the founders to the next generation. Lorne was a true believer in the social and economic benefits of cooperatives and participated in the many phases and components of the cooperative movement in Saskatchewan, including the CCF, and in Canada as well as being a NDP Member of Parliament in Saskatchewan.

### **Chapter 12: Reflections on the Future**

The philosophy required for development of co-operative farming must emphasize the building of a co-operative society rather than a competitive one. This type of farming attempts to bring about basic change by creating the new society in a functional form so that confrontation is not the only way left for people to create change. Co-operative farming has six basic advantages: 1. Membership is on a voluntary basis; 2. It provides for a long-term leasing of land with an adequate pension plan; 3. Land is for use and not for speculation; 4. Income comes from the ability to use science and technology in the best use of land and labor resources; 5. Good management comes from defining goals, objectives and programs; 6. It can provide for the training of children to work together so that they may live more creatively.

Legislation should allow members of a co-operative farm to enjoy all the rights and privileges given to all other forms of productive organizations.

Because of our competitive society and the use of science and technology the people in rural society are forced into changing their relationships with themselves and the community they live in. It has in fact already destroyed many smaller communities and unless redirected will continue the process of destroying larger communities. What is really at stake in rural society is people and one of the greatest natural resources we have in this country – the land. If we are to make use of science and technology and have a rural society with people in it, it must be based on cooperation, not competition.

Agricultural efficiency will have to be determined by: 1. A land policy based on long term use leases that will stress care and management of our soil for future generations rather than pressuring our soils for greater production for profit and ownership. 2. Programs that will accomplish a more equitable distribution of income, labor and leisure to all people living and working in rural society; 3. With a rural society based on co-operation it will make possible the use of democracy to produce the leadership and the participation of all people in planning and managing, production, manufacturing, servicing and transportation of all the needs of rural society; 4. Research in crop science should be developing varieties of crops that will be used in crop rotations to allow the process of nature to build and revitalize our soils.

The corporate ownership of land and machines is the road rural society is on. The only alternative the people have is to band together, pool their resources, and develop a total community development of rural society.

When we were forced to have a lease in each member's name, land tenure problems arose. Three members decided to withdraw their land from the co-operative. The balance of our membership opted for purchasing in the name of the co-op. This gave the coop great difficulty

in transferring the land as membership changed. From our experience we recommend no land ownership for a co-op.

The Land Bank is voluntary and should be used to promote programs that will use land as a resource rather than as a commodity. The Land Bank could be used to encourage fertility without chemicals and promote farms size that would repopulate the countryside over a 15-year period.

I believe that there are a good many people both in rural and urban society who are concerned about the depopulation of small towns and farms and would like to take part in programs that would stop this trend.

With manual labor decreasing in farming, some think it is inevitable that people will have to be looking for opportunity outside of rural life. We produce food to make money and we use science and technology to displace people forcing them into cities where the rich and poor exist side by side. The Third World countries, who have the most hungry, are saying that they are victims of an economic development that has exploited their resources and denied them the opportunity to develop. If the New Economic Policy they are asking the United Nations to develop takes place, we will have to develop our agriculture for trade rather than marketing. The NEP means developing self-sufficiency in agriculture and other kinds of production. Our huge surpluses will have to be replaced by productivity controls because there may no longer be a market for our grain. This new relationship will allow our producers to rebuild prairie soils rather than continue mining it.

When farmers were forced to take what buyers offered and to pay for goods at the prices they demanded, they formed coops to help each other. This brought hostility from the private sector and doomsday was predicted for small towns. Time has shown that it is not coops that caused the demise of small towns, but the competitive ethic of each man struggling against the other.

There is no use developing an idealistic approach to our problems. Instead we must recognize the position we are now in and develop programs that will unite as many people as possible in rebuilding rural society. Land tenure programs must have an appeal to a variety of approaches so that people can experience and see by example what will best serve this purpose. We need programs that will use mechanization and yet develop social conditions that provide for a large population.

The farming industry has five methods of production: the independent family farm, corporate farm, co-op farms, Hutterite colonies and Indian reservations.

The independent family farm was the historical base for the pioneer development of our province. These pioneers wanted to gain ownership of a piece of land, raise a family and pass it on. These pioneers often lived in isolation because of poor roads and primitive communication and so their occupation was considered the least attractive. Business people developed industry and services for individual farmers. They felt that agriculture depended on them. Very little co-operation developed between town and country. But mechanization has changed this so that farm people are envied by many other occupations.

If independent family farmers want to remain on the land they will have to decide on farm transfer payments, farm size limits, diversification and specialization. Co-operative programs could assist family farmers.

The corporate farm and the co-op have some things in common. They must develop group decision-making skills, income distribution, labor and leisure issues as well as the matter

of passing on to the next generation. Both can have monopolistic tendencies that will not help build a rural society unless they are restrained by social policies.

The corporate farm is encouraged by some government programs that view agri-business as the best way to profits and efficiency. In order to stop this kind of development we need the following; 1. No amalgamation of corporate farms; 2. Shareholders of corporate farms be required to work and live on the farms or in small towns nearby; 3. Minimum and maximum acreage per shareholder; 4. Land tenure system by lease, rental or ownership.

Co-operative farming can develop at various points but its goal should be the total co-operative community. There are presently three kinds of co-op farms: Machinery co-ops where farmers remain on their own farms or in towns and pool their operations; agri-pool farms where members develop other enterprises along with a machinery co-op; and the full co-op farm whose goal is the total co-operative community.

The total community co-operative can be developed so that small towns and farming can be integrated into one operation. The land tenure program that is best for co-op farming as a community is a lease in perpetuity with a minimum membership. The rental fee should be based on administrative and service costs for the co-op and not as a revenue for the state.

Pension programs for members and provisions for retirement, training, and development plans need to be set up. The Land Bank could have a section for the purpose of co-op farming.

The main difference between large corporate farms and co-op farming communities is philosophical. The agri-business goal is integration with national corporations. Their major decision-making process is at the Board level made of shareholders. The management is hired to carry out their decisions and to make the operations as profitable as possible. Under these conditions labor organizes to protect itself and a divisive situation arises.

The co-operative community approach is one where the members through democratic means develop their programs and elect leaders to see that decisions are carried out. To have harmony it is necessary to distribute income, work and leisure equitably. The group must use creativity and social pressure to get work accomplished. A greedy person can harm a group more than a lazy one. Since our school system teaches competition, we will need programs to teach the merit of co-operation.

The Hutterite colonies are forced to expand because of their natural population increase. Some business interests and farmers are hostile to this expansion. If we develop co-operative programs to populate rural society, Hutterite colonies will find it more difficult to get land. They will be encouraged to develop small industry, which may break down some of the isolation and fear that they have of us and we of them.

Indian reservations have been very unproductive for a variety of reasons. While much of the land was valued for grazing, hunting and fishing, I believe that Indians could develop their resources based on the Indian lifestyle of helping each other and building a co-operative community in which language, culture and tradition could develop a way of life that could add much to our rural society.

Co-operative farms are both an economic and a social development. Co-op farms can be the most positive force among these different forms of land tenure and production. The Department of Agriculture could develop an inventory of people wishing to farm co-operatively and courses could be set up at the University level which would assist co-op farmers improve their community.

The number of people who want to farm co-operatively will determine how many farms of this kind there will be. The size of these co-op farms will be determined by how well health,

education, and other needs are integrated into the community structure. But if the privatization schemes of current government continue, there will be no co-op farms left by the year 2000.

## **Producers Cooperatives**

*Melnyk, George. 1989. Co-operative Farming: A Model for Worker Ownership in Agriculture; pg. 85—112 in Partners in Enterprise: The Worker Ownership Phenomenon; ed by Jack Quarter and George Melnyk; Black Rose Books; New York, NY.*

### **Lessons for Worker Coops**

The lessons that the coop farm movement has to offer worker coops are both positive and negative. On the positive side there is the powerful democratic tradition found in the organizational structure of coop farming. The economic provisions for equal pay, pension plans, health insurance, and paid vacations, which were so novel for the private farmer of the day, are important hallmarks of mutual responsibility and worker ownership. Coop farms showed that cooperative principles were well adapted to production in agriculture. It was not the coop principles that caused the movement to flounder but factors in the general climate over which the coop had no control.

On the negative side, the history of coop farming points out that state—co-operative relations are, in Ian MacPherson's words, "an uneasy alliance". To paraphrase a well-known religious saying, "What the state has given, the state taketh away." Although government support can be crucial to launching and sustaining a social movement, that support can create a dependency syndrome, both psychological and material, which inhibits a movement from becoming self-supporting and self-expanding.

Although some coop farmers may have come to feel that they were betrayed by the CCG government, it is unfair for any volunteer-based co-operative movement to blame the state for its unpopularity unless the state deliberately sets out to destroy the movement. This was not the case in Saskatchewan. Every successful model of co-operation in existence in Canada has been member-developed and member driven.

The second negative lesson to be learned from the coop farm experience is the danger of moving beyond the limits of the liberal-democratic Rochdale tradition in a country like Canada. Because coop farms were an excursion beyond this tradition, they required extra internal resources. Sustaining a venture in co-operative community required charismatic leadership, powerful management, and business skills to succeed in the marketplace, and a high degree of ideological commitment. The movement lacked all three elements. There is no record of any significant personalities acknowledged as visionary leaders in the movement; the Federation of Production Co-operatives often spoke of the need for its members to receive training in business skills such as accounting; and the limited ideological commitment was evident when one of the leading coop farmers was denounced publicly by fellow coop farmers for his involvement in the Peace Movement.

### **Future Models for Worker Ownership in Agriculture**

Any model of worker ownership, especially a co-operative one that would arise in the agricultural sector, must take into account the historic trends that have marked agricultural development since the Second World War, that is ever-larger units of production and less labor. Coop farming cannot be given a mandate of repopulating a depleted rural society or rebuilding

communities that have been destroyed by the marketplace, technological change, and urbanization. Its mandate must reflect these developments rather than struggle against them.

In Western Canada, where coop farms came into being, the factor-like operations of California agri-business do not exist. Instead the norm is the family-operated large-scale production unit with occasional seasonal help. With an ever-diminishing part of the gross domestic product and a workforce that is approaching five percent, farming does not hold the promise of employment for many. It is an industry for the few. Worker ownership using the co-operative model would have to be different in today's economy. The concept of farming co-operatives or of production coops in agriculture does, nevertheless, fit the trend toward larger and larger units of production. Large-scale farming would fit a worker coop model. A worker coop with a dozen members could farm 20,000 acres and it would still have the membership size of the earlier coop farms.

Secondly, the continued bankruptcy of farmers provides a pool of recruits for cooperative farming ventures. Currently, government agencies for co-operative farming are willing to lease to lease the land back to them. This could be done for a coop operation as well.

Thirdly, the small business model of enterprise that is the norm for worker coops in Canada is already established in agriculture, where the producer is viewed as a small businessperson with an incorporated company.

For these factors to come into play, there must be deviations from the historical model created by coop farms in Saskatchewan. First, the community-life aspects of the early coop farms must be considered an option rather than an essential feature. Should the coop farmer wish to reside in a town and commute to work, this possibility should be accepted. Second, the vagaries of agricultural production and commodity prices are such that farm production on its own is insufficient to guarantee economic viability for a worker coop in agriculture. The new coop farmer must give up the rigid division between worker and farmer that has existed traditionally and be prepared to create an agro-industrial business.

Finally, the issue of land ownership and land cost should be removed from coop farming. The upfront capitalization presently required to start up in farming is prohibitive. Only with the existence of special programs that provide land on a long-term lease basis will co-operative farming be economically viable. The free land made available to veterans and the Saskatchewan Land Bank are examples of the importance of special programs in this sector of the economy.

Even with these reforms, a future worker coop movement in agriculture will require a process of legitimization through some recognized and respected second party such as government, church or labor. It will also require financial, legislative, and regulatory support both in the start up phase and during periods of crisis. But the main factor in the building of a new model of coop farming is how economically attractive it is to its potential membership. Involvement in coops has always resulted from an economic carrot. Only a model that offers real and substantive benefits can hope to survive.

At present the factors that would support coop farming do not exist. With the exception of the forestry sector, the worker coop model is currently on the edge of agriculture but has not yet penetrated it. The experience of cop farming in Saskatchewan cannot help but spark interest in the past and reflections on future possibilities. Should the worker coop sector become a significant reality in Canada, then there is no doubt that it would welcome an expansion into agricultural production. When that occurs, the coop farms of Saskatchewan will not be forgotten.

***Jones, Derek. 1996. US Producer Cooperatives: The Record to Date; page 221- 235 in Producer Cooperatives and Labor-Managed Systems, Volume II: Case Studies. David L.***

*Prychitko and Jaroslav Vanek (eds.) The International Library of Critical Writings in Economics: Al Elgar Reference Collection Cheltenham, UK. (Originally appeared in Industrial Relations 18(3): 342-357.)*

In general, and by various measures of socioeconomic performance, it is production cooperatives (PCs) in the most cooperative grouping – plywood, shingle, and cooperage clusters – that performed the best. Moreover, the available evidence on socioeconomic performance is broadly consistent with key features and predictions of Bernstein’s and Vanek’s models. However, we are not persuaded by the American experience that either of these models constitutes a necessary and sufficient set of conditions either for the maintenance of workplace democratization or for efficient labor managed firms. The experience of American PCs suggest that in seeking optimal forms, theorists begin by integrating the findings of Vanek and Bernstein. The new model could then be expanded to include factors necessary for the subsequent maintenance of workplace democratization or efficiency in labor managed firms, such as smallness, institutional assistance, and leadership. Some contextual/environmental factors might also be included. In this regard the American experience, wherein even the seemingly most successful PCs have eventually succumbed, suggests that institutional assistance and support from an agency or (an) individual(s) outside the immediate PC may be of prime importance in sustaining workplace democratization. The development of a satisfactory model in the future clearly requires additional research on past and present PCs within and without the United States.

**In reference to the Bernstein and Vanek models, the analysis from the article follows:**

There are two influential discussions of relevance to American PCs, those of Bernstein (1976) and Vanek (1975). The difference in the two models essentially reflect intellectual preferences endemic to the author’s respective disciplines. So far as approach is concerned, Bernstein’s is primarily inductive and focuses on isolating factors necessary for sustained workplace democratization. Vanek’s perspective is deductive and concerned with the determination of necessary conditions for sustained economic viability.

Bernstein examines a variety of workplace democratization, including American Plywood PCs and PCs elsewhere. He then presents a model comprising six factors, or key components, which he argues, are necessary for the maintenance of democratization. The basic requirements are: (i) participation by workers in decision making; (ii) frequent feedback of economic results to all workers (in the form of money, not just information); (iii) full sharing with workers of management-level information; (iv) guaranteed individual rights (v) an independent appeals system; and (vi) a particular set of attitudes and values (participatory consciousness). These were determined by examining how well various cases of workplace democratization satisfied three criteria – economic viability, democracy, and adherence to a humanistic standard.

Although Bernstein fails to define many of his key terms precisely (e.g., what constitutes “meaningful participation” in decision making?), it is still possible to test the PCs’ experiences against his model. For each cluster we checked for the presence of the key components at the time a PC commenced business and again after some (where possible, ten or more) years of operation. Incomplete PC data compound the problems posed by Bernstein’s imprecise definitions; for any category of PC we seldom have data relating to more than two of the three criteria and five of the six key components. However, as the table demonstrates, the available evidence does support Bernstein’s model. For cooperage, shingle, and plywood clusters – all PCs where Bernstein’s criteria for workplace democracy are generally met – the data also indicate the presence

of the key components. In the remaining cases – foundry, the two general categories, and KIL – Bernstein’s criteria do not seem to be satisfied, nor are his key components continually present.

In explaining variation in success among and between PCs and the comparative performance of PCs and capitalist firms, Vanek (1975) enumerates a list of fundamental rules for efficient labor managed firms. By implication, PCs which come closest to satisfying these conditions will be most efficient, both in economic as well as in social terms. For American PCs the most important of these rules are those which provide that: (1) “All control, management, and income . . . should remain in the hands of those who work in a given enterprise . . .”; (ii) “the underlying operational principle being a fully democratic rule on the basis of equality of vote;”; (iii) capital . . . is entitled to adequate remuneration at a rate reflecting the relative scarcity of that factor in the economy”; and (iv) “it is imperative to establish a shelter organization . . . whose express function would be to fund and promote the self-managed sector.”

The requirement that scarcity rents be paid for the use of capital (Vanek’s 3<sup>rd</sup> condition) is seen as a critical factor contribution to the disintegration of many PCs. Vanek compares the long-run equilibria for a labor managed PC which pays owners of capital a scarcity-reflecting remuneration and a worker managed PC which pays no capital rents. Whereas labor managed firms are assumed to maximize average net income (after capital – as well as material – costs), worker managed firms maximize average gross income, because no charge is made for the use of capital. Vanek’s model predicts that the firm which does not extract capital rents will under-invest; produce at a small-scale of output; and, with a “U” shaped technology, produce in the inefficient zone of the production function (i.e., the zone of increasing returns to scale). Four self-extinction forces are identified: i) the tendency to reduce the number of members; (ii) to disinvest and consume capital; (iii) to under-invest; and (iv) not to admit new members.

Earlier we provided evidence on the tendencies for the number of worker-members and the proportion of the labor force that are workers to decrease in PCs over time. Indeed, except in the cases of cooperage, plywood, and perhaps shingle PCs, usually the reduction in the number of worker-members quickly proceeded to the point at which control of the PC lay outside the domain of worker-members. These phenomena are consistent with Vanek’s 1<sup>st</sup> and 4<sup>th</sup> self-extinction forces. Not much available data bear on the predictions of dis-investment and under-investment. However, the fact that long-lasting cooperage PCs were reducing their output between 1900 and 1910 (and presumably reducing their capital stock by not replacing worn out capital), while the average cooperage firm in Minnesota increased its capacity, suggests some support for these predictions. Note also the fact that unlike capitalist firms, no plywood PCs have invested recently in new mills.

The tendency toward dis-investment, where members experience an increasing desire to extract their equity, also receives some confirmation in the available data. Three plywood PCs were sold to capitalist concerns within 30 years of their commencing operations, for sums that realized worker-members substantial capital gains. Similarly, when the North Star Barrel Company was sold by aged worker-members, large capital gains were recorded.

The experiences of the three long-lasting cooperage PCs tend to support Vanek’s prediction that payment of scarcity rents for the use of capital is needed for efficient PCs. Each firm showed a tremendous capacity for growth during its first 20 to 30 years such that, in 1900, for the two cases for which we have information, the average output of each firm exceeded the state average by more than 150 percent. But within 20 years one of the two surviving firms was producing at an output level half that of the state average, and the other firm’s output was even smaller. In general PCs which came closest to satisfying the fundamental rules for efficient labor

managed firms have performed best. Particularly noteworthy is the positive relationship between degree of participation and economic performance.

Finally, since no group of American PCs has operated under the protection of what Vanek designates as a shelter organization, it is problematic whether or not the need for such an institution can be tested well using US evidence. Tentative support for the proposition may be drawn from the fact that plywood PCs, which have been served by an institution that has undertaken some of the functions envisaged of a shelter organization, performed better than any other cluster. Also, one of the clusters that performed next best – shingle PCs – was served for a time by a federation. Moreover, it could be argued that the existence of a shelter organization would have prevented successful plywood and cooperage PCs from allowing members to recoup their accumulated equity by selling to outside interests.

*Estrin, Saul; Derek C. Jones and Jan Svejnar. 1996. The Productivity Effects of Worker Participation: Producer Cooperatives in Western Economies; pg. 237-281 in Producer Cooperatives and Labor-Managed Systems, Volume II: Case Studies. David L. Prychitko and Jaroslav Vanek (eds.) The International Library of Critical Writings in Economics: Al Elgar Reference Collection Cheltenham, UK. (Originally appeared in Journal of Comparative Economics, 1987, 11: 40-61).*

Our results indicate that the productivity effects of various forms of worker participation differ markedly from one institutional setting to another. However, in general they support the prediction that the overall effect of the various participatory schemes observed in Western producer cooperatives is positive. In the OLS regressions, the positive effect is found most uniformly with respect to profit sharing and, to a slightly lesser extent, to individual capital (share) ownership by workers and participation in decision-making as measured by the proportion of workers who are members. Individual worker loans to the coop are not related to performance while collective capital ownership exhibits an insignificant or negative productivity effect. In Italy and in the United Kingdom, where suitable instruments are available, the IV estimates strongly resemble their OLS counterparts. In France, where the predictive power of the available instruments is low, the IV results differ from the OLS ones and the IV results highlight the positive productivity effects of worker participation in decision-making and of individual capital ownership by workers.

Our general findings thus support the proponents of participatory schemes rather than their critics. The results suggest that, if higher productivity is the goal, PCs should provide for substantial sharing of profits and capital ownership by individual workers together with worker participation in decision-making. Collective ownership of assets ought to be avoided unless considerations other than productivity strongly justify its existence.

These broad policy conclusions must be tempered by the acute need for additional empirical research in this area. The comparative nature of our study highlights the diversity of findings across countries and economic sectors. The fact that the estimated effects are very significant in Italy and France and relatively insignificant in the United Kingdom points to the desirability of performing future analyses of the relevant institutional factors that differ considerably across the individual settings. We hope that our attempt to identify some of these factors in section 2 of this paper are helpful in this future effort.