FEASIBILITY OF AGRO SERVICE RINGS IN CANADA

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Received 18 July 1983, accepted 25 January 1984.


Agro Service Rings (ASR) promote inter-farm use of machinery, labor and management to achieve better combination of these resources in agricultural production than may be possible on individual family farms. They have been operating successfully in Europe since the 1960s and more recently in Japan. ASRs are compared with other institutions promoting cooperative, or inter-farm, use of resources. Benefits to farmers and society as a whole can be substantial. ASR management is a crucial factor; managers should be agricultural engineers with leadership qualifications. Selective government assistance of ASRs may be desirable. The Canada Farm Labor Pools could be expanded into ASRs and in time become self-financing.

INTRODUCTION

The main purpose of this paper is to familiarize the Canadian agricultural engineering profession with the nature of Agro Service Rings (ASR), which are successfully operating in Europe and Japan (Documentations; Fobes 1976). The basic raison d'être for ASRs is inter-farm use of machinery; hence they ought to be managed by Agricultural Engineers. The subject of ASRs is timely in view of the problems associated with the continued existence of the family farm and the short- and long-run costs of highly specialized farming dictated by the high costs of machinery.

Topics covered are a short history of ASRs, their organization, a comparison with other institutions promoting inter-farm use of resources, benefits of ASRs, the role of agromanagement and the possible role of government.

HISTORY AND NATURE OF ASRS

History

Erich Geiersberger (1959), an agricultural journalist with the Bavarian Radio System, developed the ASR concept in the 1950s. A group of Bavarian farmers established the first ASR in 1959. Subsequently, the Bavarian state government adopted the concept as a rural development tool and subsidized the administrative costs of ASRs. In Bavaria ASRs became an integral part of a new people-oriented approach to agricultural policy known as the “Bavarian Way”.

From Bavaria the idea spread to other West German States, some European countries and, in the beginning of the 1970s, to Japan. Acceptance has varied in different regions of West Germany and most other countries where ASRs exist. Only the small country of Luxembourg is “fully covered” by four ASRs. As typical with notions in agricultural cooperation, ASRs have been subject to heavy ideological infighting. We seem to be confronted with one of those straightforward ideas that even enlightened people find difficult to grasp or that invite immediate negative responses. In Canada the concept is similarly viewed with skepticism (Davey 1977) and, no doubt, only economic necessity would bring about widespread acceptance.

Table I provides some information about ASRs in various European countries and Japan at the beginning of this decade.

ASR Objectives

The basic objective of ASRs, according to their by-laws, is to engage in any pursuit useful to their farmer-members. Actually, the emphasis has been on inter-farm utilization of machinery and labor to bring about a better combination of the factors of production on family farms. Originally the term ‘farm Machinery Bank’ was used. It aptly indicated the analogy between a financial bank and an ASR: the former holds the community’s surplus financial resources for use by those needing these resources; in an ASR the members list their machinery and labor capacities which then are potentially available to all members. Both institutions base their organization on the ‘law of large numbers’. The term “bank” was discarded in Europe because, as in Canada, it is legally reserved for financial institutions, and “Machinery Ring” was used instead. The term ASR was coined by the author in an attempt to promote the idea in this country. “Agroservices”, then, include all services which may be shared by family farms, notably machinery with operating labor, ‘straight’ labor such as labor providing various relief services which may be required on family farms; also management which, as will be seen below, necessarily features in the context of an ASR.

Structural Organization of ASRs

An ASR consists of four basic elements:

(a) A society of participating farmers which should be large enough to generate sufficient activities to finance a full-time manager and comprise a business district making economic movement of machinery and labor feasible. Membership should be as diversified as possible, including large, small and part-time farmers and a mix of enterprises. Monocultures are less suited than mixed farming enterprises. Potential seasonal users of power equipment, such as local governments for snow clearing purposes, may also be members.

(b) a hired agromanager whose main functions are: (i) to promote the exchange of machinery and labor services (agroservices) between members; (ii) to make sure that sufficient agroservice capacities exist in the business district to cope with all requirements in optimum time; (iii) to organize efficient ‘work bees’ engaged in capital intensive operations such as silage making; (iv) to initiate new technologies and other innovations especially those leading to improvements in factor utilization; (v) to monitor machinery performance in order to be able to guide purchasers of new machinery; (vi) to manage the payments system described below; (vii) to generally lead and look after the interests of the society.

(c) An annually published price list showing the prices charged for agroservices. Proposed price changes should be discussed by the General Meeting and should not only reflect production costs but also prevailing supply and demand conditions.

(d) A payments system ensuring prompt payment to those providing services. Suitable systems can be organized in cooperation with financial institutions.
TABLE I. VARIOUS DATA RELATED TO AGRO SERVICE RINGS IN EUROPE AND JAPAN, 1980+  

<table>
<thead>
<tr>
<th>Country*</th>
<th>ASRs (no)</th>
<th>avg per ASR (no)</th>
<th>Percent of all farmers</th>
<th>Full-time managed ASRs</th>
<th>Business Volume per ha* ($)</th>
<th>Government Subsidies of cost (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA†</td>
<td>226</td>
<td>155</td>
<td>14</td>
<td>61</td>
<td>289</td>
<td>41</td>
</tr>
<tr>
<td>WEST GERMANY‡</td>
<td>225</td>
<td>548</td>
<td>21‡</td>
<td>166</td>
<td>800</td>
<td>43</td>
</tr>
<tr>
<td>JAPAN</td>
<td>172</td>
<td>1292</td>
<td>3</td>
<td>61§</td>
<td>1955§</td>
<td>72</td>
</tr>
<tr>
<td>LUXEMBOURG</td>
<td>4</td>
<td>NA</td>
<td>50§</td>
<td>3</td>
<td>NA</td>
<td>500/member</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>119</td>
<td>NA</td>
<td>NA</td>
<td>3</td>
<td>NA</td>
<td>34</td>
</tr>
</tbody>
</table>

†Source: Dokumentation, 5. Internationale Tagung der Maschinenringe, Luxemburg, 1981, pp. 58-65; and correspondence with German Federation of Machinery Rings, Munich, West Germany.
‡No statistics available on ASRs in Switzerland and France.
§1981.
¶28% in Bavaria and Westphalia-Lippe where percentages are highest; based on farms of 1 ha and over.
¶ Estimated on the basis of 1978 proportions.
∥The largest ASR comprises 16,677 members, the smallest 102.
‡ Of all farms exceeding 2 ha; these farms cover 58% of the area farmed.
‡ Ranging from 354 to 551.
1 The state pays for 50% of the cost of relief services arising from 'social problems', i.e., illness and other family problems.
3 Four are 'straight' machinery rings; six exchange machinery and relief labor services; 110 exchange labor relief services only.
1 No government assistance to 'straight' machinery rings; those involved in labor relief services may get up to $82/member.

Some Misconceptions

(a) ASRs are not agencies owning machinery for loaning out to members. All machines are owned and operated by individual members; this should ensure proper care of the equipment.

(b) Members are not contractually compelled to provide or hire agroservices. The ASR motto is 'everyone may nobody must'. However, a well-run ASR constitutes a large market for agroservices; as low-capacity machines are replaced by fewer high-capacity machines, members obviously become more inter-dependent in the utilization of certain agroservices. Members are expected to supply and hire services only through their society.

(c) It is not a question of deciding between either ASRs or other forms of inter-farm utilization of agricultural resources. Thus machinery coops, group farming ventures and custom operators, discussed in the next section, may be members. In fact, after a running-in period, well-managed ASRs tend to consist of a minority of part- or full-time custom operators providing most services (service suppliers) and of a majority hiring services (service users).

(d) While it is true that the agromanager should view his business district as one large farm that must have available required agroservice capacities in the light of anticipated time constraints (Fobes 1976), ASRs do not have the objective of collectivizing agriculture, but rather the very opposite: namely continued existence of the family farm, including small and part-time farms.

COMPARISON OF ASRs WITH OTHER FORMS OF INTER-FARM USE OF PRODUCTIVE RESOURCES

Agricultural production may be defined as production nowadays commonly occurring in the primary, or farming, sector of the food and fiber system. With specialization and technological advances more and more productive processes have been removed from primary to higher production levels. Thus, butter used to be farm-made before it was processed in a specialized dairy plant, often organized as a farmer-owned cooperative society. Today we would not consider butter-making by a dairy cooperative as a form of cooperation in agricultural production. Hence, inter-farm use of resources employed in agricultural production, cooperatively or otherwise, means activities still thought of as primary agricultural production.

The term inter-farm use of resources is wider than cooperation in agricultural production, in that it also includes the hiring of resources from independent businesses such as custom operators (Davey 1977). The analogy pertaining to butter-making would be an independent (non-cooperative) dairy company.

Forms of Inter-Farm Resource Use Other than ASRs

Inter-farm resource use entailing cooperation

(i) Farms organized as worker-coops — these feature a group of people owning and working a farm in common and distributing the residual income in relation to labor input or perhaps need. Examples are cooperative farms set up by returning World War II veterans in Saskatchewan (perhaps the best known of which is the Matador Farm), the Hutterite Colonies in Western Canada and Israel’s Kibbutzim. Such organizations tend to have a high potential of economic success but suffer from socio-psychological problems unless the members are motivated by high ideals such as religion.

(ii) Group farming — it emerged, particularly in Western Canada, during the grain glut of the 1960s. Common examples are beef feedlots and farrow-to-finish swine operations allowing grain farmers to market their grain through livestock kept by a group enterprise. Group farming leaves the basic family farm unit intact; only certain enterprises benefiting from scale economies are operated cooperatively.

(iii) Machinery coops — more often these are organized informally, and consist of a few neighbors sharing an expensive machine. Usually these arrangements fail because of problems associated with use-timing and machinery care.

Examples of formally, i.e., legally organized machinery coops are the French Cuma (Cooperative d’Utilisation de Matériel Agricole) (Documentation 1981), the British machinery coops organized under the auspices of the British Central Council of Agricultural and Horticultural Cooperation (CAHC 1970) and the Machinery Coops, or Agri-Pools, promoted in Western Canada since the 1960s. The latter entail usually fewer than 10 farms
pooling their individually owned land and farming it with a commonly owned high capacity line of machinery. All inputs and outputs are allocated in proportion to each member’s land contribution to the pool. This does not go as far as full cooperation in a worker coop. Therefore, it suffers less from socio-psychological group problems while obtaining the economic advantages of cooperation, as long as mono-cropping requiring only one line of machinery is followed. In mixed farming areas, machinery coops of this type would be more problematic. The prevailing organization in mixed, or primarily livestock, farming areas tends to be a group of farmers owning an expensive machine, or specialized line of machinery, in common; some of these like the British silage groups, are quite successful (CCAHC 1970).

(iv) Some farmers’ supply coops, particularly in Europe and Japan, own machinery to be loaned out to their members. But such schemes usually break down due to problems of timeliness and machinery care.

**Inter-farm resource use not entailing cooperation**

(i) Probably the most common type in North America and Europe are private-profit custom operators and farm relief services. They are independent businesses working for fees. Some operate full-time, but many are farmers providing custom services part-time. In the Netherlands custom operators seem to supply machinery services rather efficiently, thus keeping ASRs from spreading. But there are some 400 ‘farm relief rings’ (Table I).

Frequently the services of custom operators are thought to be too expensive. This, if factual, may result from their machines and labor not being optimally utilized and from insufficient supply of services in the face of uncertain demand; in other words: a poorly organized market for these services.

(ii) Farm machinery dealers leasing machinery — I am not aware to what extent leasing is possible. It would seem that it is expensive and mainly serves to bridge downtime of owned machinery.

**ASRs Compared to Other Forms of Inter-farm Use of Productive Resources**

ASRs are essentially cooperative organizations, although they do not necessarily have to be organized as formal cooperatives. In Japan it is common for ASRs to be organized and managed by existing farmer cooperatives (Documentation 1981). In Germany and Austria they have developed separately from the established agricultural coops and are legally organized as non-profit societies. In Canada the form of cooperative without share-capital would probably suit best, as capital requirements are minimal — mainly a car and office equipment — and could be defrayed from annual membership fees.

It seems that ASRs have the edge over machinery coops; where the former are successfully promoted the latter are receding or are being incorporated into ASRs (Documentation 1981). The advantage of the large full-time managed ASR is that it makes a market for agroservices involving many players and, in a comparatively large business district, many different farm enterprises, soils and even climates. In the spring, for example, machinery can move from early to late land thus extending its utilization. Also, actuarial allowances can be made for down- and moving-time of machinery; 300 farmers having available to them 110 grain combines (assuming a 10% factor for down- and moving-time) are better off than three neighborhood farmers sharing one combine which is broken down; or everybody wants it concurrently.

The original ASR model envisaged farmer-members working for each other. Instead of each farmer owning perhaps several lines of low capacity, under-utilized and often antiquated machinery, he would now operate only one or two high-capacity up-to-date machines and utilize them to capacity. As already mentioned, in many actual ASRs a minority of part-time custom operators emerges to serve the majority of members (author’s impression from visits to European ASRs). In comparison with independent custom operators, those within ASRs benefit from agromanagement coordination. Lower risks and greater supply of services should lead to lower costs and prices. During promotional work in Prince Edward Island actual and aspiring custom operators were particularly interested in the concept (Fobes 1982). In some countries independent custom operators may be subject to a turnover or sales tax which may, or may not, apply to the ‘pooling’ of services within an ASR.

And, of course, both custom operators and machinery coops may become ASR members. Thus, certain very expensive machines, such as spraying aircraft, may be owned by a machinery-coop using the equipment within the ASR organization.

As noted, an ASR may be particularly suitable in a mixed farming area where farmers tend to be overmechanized because of machinery needs for a variety of enterprises. Attempts of solving that problem through enterprise specialization may lead to high long-run costs due to fertility losses. ASR-members can diversify their enterprises while specializing in machinery ownership or dispensing with it altogether.

Finally, since an ASR’s primary concern is optimizing human and material resource use in its business district, ASRs can become rural development tools with implications for public policy, as further discussed below.

**POTENTIAL BENEFITS AND COSTS OF ASRs**

Promoters of ASRs stress the importance to the members of benefits not measurable in dollars, also of benefits accruing to society as a whole. Hence we shall discuss quantitative and qualitative as well as private and social benefits. Costs could be similarly analyzed, but we shall limit ourselves to the private costs of membership which would seem to be most relevant.

**Private Benefits**

These occur solely to the members; benefits from ASR activity ‘spilling over’ to society as a whole are disregarded.

(a) **Quantitative private benefits** command market values expressible in money. Basically they result from two effects: (i) lower per hour, or per hectare, costs; and (ii) higher returns from investments transferred from machinery investments. While intuitively one suspects many farms to be over-mechanized and, therefore, scope for cost cutting to exist, the complex nature of agricultural production makes it difficult to produce definite figures, except from before and after business analyses of individual farms.

Some German and Austrian studies have attempted to make comparative estimates of total benefits (lower machinery operating costs and additional investment returns) accruing to farmers after having joined an ASR. An analysis of 49 member-farms in Southern Germany, during the 1970s, indicated a saving of $60/ha, or 24% of total costs (Documentation 1981). An Austrian study, based on a comparison of two groups of 10 comparable farms each, during the period 1970–1977, indicates that the group who were ASR members saved $36/ha in machinery investment. In West Germany cost reductions exceeding $150/ha have been reported (Documentation 1981, p. 22).

A German hypotetical study attempted to estimate savings in machinery investment on the assumption that all West Ger-
man farms would have the same machinery investment per hectare as farms with over 50 ha of improved land (the average farm size in West Germany is 16 hectares, excluding woodland). On this basis a saving of 5.5 billion dollars in machinery investment was estimated. Of interest to North Americans, it was pointed out that 50-ha farms are not necessarily optimally mechanized and, therefore, potential savings could be appreciably greater. On the same basis, operating cost reductions of between $50–60 per hectare were calculated from which ASR organizational costs would have to be subtracted (Documentation 1981, p. 21).

In a 1976 study covering Queens County of P.E.I. (Fobes 1982), a relatively mixed farming area, I have estimated potential savings in tractor investment alone exceeding $200/ha. These estimates are based on tractor requirements during Spring planting, known to be one of the tightest seasons in the agricultural year. Tractor investment savings relative to estimated census tractor investment varied between 70 and 93%, depending on different tractor sizes and usage levels assumed. Absolute savings in tractor investment per census farm varied between approximately $12,000 and $16,000. Obviously, these 1976 figures should be adjusted for inflation. If, for argument’s sake, we presently assume total machinery (not just tractors) investment savings of merely $10,000 per census farm, ASRs would bring about a drop in Canadian machinery investment exceeding three billion dollars.

According to the same study, potential savings in total machinery costs (fixed and variable) as opposed to machinery investment, varied from 46 to 69% if compared with tillage and planting machinery used only 25/yr and tractors running only 300 h/yr, to cost savings of between 7 and 18% if compared to equipment used 100 h/yr and tractors running 700 h/yr. Although these potential savings would probably be on the high side under actual field conditions, they indicate the possibility of substantial economies.

(b) Qualitative private benefits (Fobes 1982, p. 172)

These cannot easily be measured in dollars. They affect the members’ quality of life: as the ability to take holidays, the certainty of relief when ill, the feeling of not standing alone, so important on the modern one-man high-technology farm. Often these benefits are considered to be worth a multiple of the quantitative benefits (Fobes 1976) and the most important reason for setting up ASRs. Thus one German farmer stated during the 1981 Luxembourg international ASR symposium:

... none of the speakers has contemplated calculating the human value of this institution. After all, as a farmer at long last I feel certain that I will be able to go on a trip, knowing that the farm work will be taken care of. When I am ill or there are family problems, I can be sure that somebody reliable will take my place. All this cannot be put down in figures. But in judging ASRs this aspect should not be overlooked. I am convinced that if the question were put, what is more important, the $100/ha or the security for the family, then the majority would surely say: the security which the ASR provides is worth just as much as the calculated savings.

(Documentation, 1981, pp. 50–51)

Farmers still coping with back-breaking labor, long working hours, the need to rely on worn out machinery, lack of help, and other frustrations, would obviously raise the quality of their working lives through ASR membership. And their children seeing working conditions and income potential comparable to those in non-farm occupations may choose to stay on the farm. The fact that in Europe the larger full-time farmers show by far the greatest interest in ASRs also indicates qualitative benefits particularly important on commercial one-man high-technology farms.

Social Benefits

These are so-called spillover, or multiplier, effects accruing to society as a whole due to ASR activities. We limit ourselves by and large to quantitative effects; an analysis of qualitative benefits and costs, as for example the general feeling in a community resulting from economic progress would be rather speculative.

Generally, quantifiable social benefits accrue from economic development engendered by ASRs; for example, when ASR members invest capital saved on machinery investment in new local enterprises. These could be on their own farms; they could be cooperative enterprises, such as processing plants, marketing and group farming ventures; or others. Working together in ASRs should raise a community’s cooperative spirit which would be helpful in setting up cooperative enterprises. Also — a qualitative aspect — widely dispersed local resource ownership in a given community may be considered socially preferable to absentee ownership by multinationals in highly concentrated industries.

Lower farm costs thus need not lead to over-production and low raw commodity prices. Rather, farmers might use the extra investment dollars to obtain more control of the food and fiber system through exercising financial power; or to make earnings from outside the food and fiber sector altogether.

More specifically, social benefits may come from farmers, unwilling to adjust to larger units, carrying on as part-timers, while finding non-farm employment locally. Some may work as ASR relief workers. Since an ASR should raise productivity, and thus free labor, some farmers may be able to switch fixed agricultural resources from relatively declining food and fiber production to expanding tertiary activities in the tourism and leisure industries. Examples are farm holidays, and golf, tennis, bowling and horse riding facilities (Documentation 1981). Farm families may thus move from a contracting primary industry to an expanding tertiary industry without actually having to leave their accustomed surroundings. This is already happening, but the ‘partnership’ between ASR members should ease adjustments leading to higher family incomes, particularly through inter-farm use of labor resources. Essentially, what used to be done more or less spontaneously in small neighborhoods would be accomplished in a formally organized fashion, given the existing farm structure.

Clearly the part ASRs could play as rural economic development tools is far reaching.

Costs of ASR Membership

(a) Organizational costs consisting of office, car and salary expenses — these expenses tend to be relatively fixed and therefore decrease per unit of output as business volume increases. The agronomist’s earnings and expenses, usually the biggest item, are discussed in the next section. Organizational costs must be kept low enough so that agroservices are competitive (Fobes 1982).

(b) Costs resulting from cooperative organization per se — for example, losses due to untimeliness of field operations can be kept to a minimum by good agromanagement, but may not be entirely unavoidable (Fobes 1982).

(c) The very process of giving up part of one’s independence must be considered a qualitative cost which might be more than offset by the psychological benefits of belonging to a group.

(d) Continued existence of an ASR requires that long-run benefits exceed long-run costs. In the short run, confidence,
hope, enthusiasm, and perseverance may be needed, particularly for an ASR to get off the ground.

AGROMANAGEMENT AND THE AGRICULTURAL ENGINEERING PROFESSION

The Key Role of Agromanager

ASR proponents have always stressed the importance of agromanagement and advocated its acceptance as a profession; hence the designation agromanager (Fobes 1976). The following is a list of an agromanager’s activities proposed at the 1981 Luxembourg International Meeting on ASRs:

— He must continually put before the members possibilities in inter-farm use of resources and get them to utilize such possibilities.
— He must ensure that machinery purchases are no longer made with only the individual farm in mind but with the needs of the total membership in view.
— He must cooperate with the farm machinery industry and dealers so that machinery and systems suitable for inter-farm use will become available.
— He must organize educational activities through which ASR members can benefit from the advice of specialists in various fields.
— He must foresee and investigate new developments and prepare the membership accordingly before such innovations become generally accepted in practice.
— Above all, he must ensure that as many members as possible will gain economic advantages from the ASR.

(Documentation 1981 p. 147)

Hence the agromanager’s qualifications must lie in two broad areas: farm machinery expertise and leadership. 

The agromanager as farm machinery expert. The desire to achieve more economical farm machinery use on family farms led to the ASR concept in the first place. The agromanager should, therefore, be well-versed in farm machinery; in Europe an agricultural engineering degree is thought to be the desirable basic qualification for those aspiring to this new profession.

The agromanager as leader. In addition to his basic qualification as machinery expert, the agromanager must be an agricultural advisor, innovator and educator. This is a tall order. Consequently, finding first class agromanagers is difficult and the turnover great; the latter partly because some people cannot cope and partly because good incumbents are often hired away. Education of agromanagers in various aspects of leadership is considered indispensable.

Here are some specific problems associated with agromanagement:

(a) Full-time versus part-time management. As already mentioned, it is thought essential that ASRs are managed by a full-time agromanager. Considering the high demands made on this profession, this is not astonishing, but, in practice (Table 1) it may be difficult to raise the financial means of supporting full-time agromanagement in an ASR’s initial stages. Subsidization may be necessary, as further outlined below.

(b) Full-time agromanagers working in isolation. Expanding on the foregoing, most full-time managed ASRs cannot afford more than one appointment. This means unsatisfactory working conditions such as lack of holidays, very long hours, difficulties in case of illness, family neglect, and others, thus raising the already high stress level associated with this occupation. To overcome these problems the following remedies have been suggested: increasing membership and business volume thus making the hiring of one or two assistants possible; combining the offices of neighboring ASRs thus enabling managers to stand in for each other as well as to specialize on certain tasks; making available relief managers thus applying the ASR principle to inter-ASR relations. (Documentation 1981, pp. 147–152). All of these suggestions have important advantages and disadvantages which cannot be discussed here.

(c) Loosely and tightly managed ASRs. A loosely managed ASR refers to a situation where the agromanager more or less initiates ‘partnerships’ between farmers which subsequently function on their own. Members get used to working with each other but still conduct payments through the ASR, although this may only be done periodically, say once or twice yearly, rather than after each agroservice provided. The agromanager may still concentrate on innovations such as growing silage corn or switching from conventional hay making to labor saving and less weather-dependent grass silage systems. Also, he will intervene if misunderstandings or other problems occur between members. This style of management often prevails in very large ASRs.

Disadvantages of this type of management are inability to monitor required machinery capacities, machinery performance and related parameters. Also, the group feeling among members may suffer; members may feel the ASR is not really needed. Such an ASR would be difficult to finance and probably would have to depend on public subsidies.

The tightly managed ASR, on the other hand, would adhere more closely to the original ASR model. It entails ongoing control and supervision of all activities followed by prompt payment through the ASR payments system. The advantages of this more ‘business-like’ management style have been listed as follows:

— clear supervision and control of all activities; flexibility in case of machinery breakdowns and slowdowns; intensive contact with members; more member discipline; employment of latest management devices (computer; radio); easier ASR financing through commission charges on agroservices.

(Documentation 1981, p. 165)

Obviously this kind of management is more costly and requires a highly qualified agromanager. And there is always the very real danger that it will be confused with a ‘farm collectivization drive’, despite its declared objective of ‘saving the family farm’ (Documentation 1981, pp. 165–5).

(d) Agromanager as advisor. The question arises to what extent the agromanager’s services should entail advisory functions. Advising on machinery purchases obviously falls under the agromanager’s domain in order to equilibrate the supply of and demand for machinery purchases in the ASR’s business district. However, advice of a more general agronomic nature may necessarily also have to be forthcoming, so that ASR members do not only share machinery and labor but also management services. Examples are advice on planting crops with different maturities to extend the use level of machinery, and on row spacing to save time in adjusting machinery.

It can be argued that the agromanager, due to his crucial interaction with the members, is more suited to provide on-farm advice than is government advisory personnel; especially if the agromanager’s remuneration is performance oriented, as discussed in the following sub-section.

Where ASRs are common, a division of labor between agromanagers and government Ag. Reps. could lead to the former providing general advice while the latter would provide specialist backing. The overall outcome could be a more efficient advisory service and possibly a saving of public funds.
Remuneration of the Agromanager

Basically, the agromanager's remuneration may be directly performance oriented or in the form of fixed wages; or a combination of these two.

Performance-oriented remuneration. Emphasis is usually placed on the ASR's agroservice volume; and the remuneration, indeed total ASR financing, is based on commissions related to the agroservice volume. These commissions may be remitted by those providing services or those hiring services, or both, but most expeditiously by service suppliers whose cheques (earnings) will be reduced by the commissions. The rationale is that presumably the members benefit from the exchange of agroservices, and the greater the volume the greater the benefits and the greater, therefore, the agromanager's earnings. Some well-functioning ASRs remunerate their agromanagers solely on this basis, and incomes are very attractive. The problem is to build up an ASR to the appropriate size. In certain ASRs' formative stages agromanagers had to do with extremely low wages or supplement their income from other sources. Often such agromanagers build their ASR almost as if it were their own business.

Fixed-wage remuneration. This may be based mainly on fixed membership fees and/or public subsidies. Membership fees levied annually in advance are usually related to acreage farmed thus providing the members with an incentive to maximize ASR use. Fixed public subsidies are least incentive oriented and put the agromanager more or less on the same basis as a public official.

A combination of the above methods would probably be the most desirable. It would give the agromanager a basic wage without losing any of the incentives noted above.

ASRs as Testing Grounds for Agricultural Machinery

A 'tightly run' ASR is well suited for testing agricultural machinery under actual farm conditions by way of a monitoring scheme. Certain ASRs monitor the performance of every machine used in ASR exchanges. In Canada, government testing of agricultural machinery was only introduced in the 1970s. Obviously, both farmers and machinery manufacturers could derive important benefits from such information, also social benefits could be derived from better machinery performance in the form of lower farm production costs and food prices.

Machinery Manufacturers and ASRs

Apart from machinery performance data, machinery manufacturers and dealers would derive long-run benefits from an economically healthy farming sector not struggling under heavy over-mechanization. Machinery sales to farmers unable to pay for it may not be a good policy. Forward-looking machinery manufacturers and dealers might assist farmers in promoting ASRs.

THE ROLE OF GOVERNMENT IN PROMOTING ASRs

Rationale for Government Involvement and Possible Pitfalls

A case for government involvement in the promotion and especially subsidization of ASRs can be made because of important social ASR benefits; notably their role in economic development. Typically, governments subsidize a major part of ASR costs; as for example, in Bavaria (Table I). This helps during an ASR's formation, say the first 5–7 years, when existing machinery is being replaced by a lower investment in new larger scale machinery so that members may then fully enjoy ASR benefits. Hence, ample initial government subsidies should perhaps be gradually withdrawn.

However, too much government subsidization could easily lead to bureaucratization and inefficiencies due to farmer-members regarding ASRs as just another government organization in which they do not have a direct stake and which they may or may not use. Thus, some of the best ASRs can be found in the German State of Lower Saxony where subsidies are not available.

However, only far-sighted farmers will want to support an organization whose benefits will only appear after a few years of adjustment have passed. Particularly, many farmers will shy away from bearing the costs of a full-time agromanager whose main job, in the early years, will be concerned with establishing the organization within a large business district. Conservative attitudes, as embodied in the saying that one must crawl before walking, may lead to the establishment of small-scale, part-time managed neighborhood machinery associations. Once they have failed, which they often do, the whole ASR idea will be thoroughly discredited for years. In my observations, the larger, well-educated and younger farmers as well as certain custom operators most likely will be willing to take the longer term view required to establish ASRs without subsidies.

The Potential Role of the Canada Farm Labor Pools

The regional Canada Farm Labor Pools are federally financed organizations charged with supplying suitable labor to farmers in as flexible a manner as possible; for example, seasonal labor.

As the author has already suggested elsewhere (Fobes 1982), these Pools could be turned into ASRs, possibly without additional costs to the federal treasury. The five and one-half million dollars Farm Labor Pool budget ($5 562 000 in 1983–1984, according to Canada Employment and Immigration) would thus serve as the temporary subsidy needed to promote ASRs in this country. By government gradually withdrawing its financial involvement, the system would eventually become self-financing and the Labor Pools more productive and socially efficient. Local CFLP employees have shown considerable interest in the ASR concept.

CONCLUSIONS AND RECOMMENDATIONS

Agro Service Rings are organizations promoting inter-farm use of machinery, labor and management resources.

They seem to be better suited to family farm agricultural organization than other means of inter-farm resource use. They are particularly fitting in areas of mixed farming.

Both field and hypothetical studies indicate that substantial net private and social benefits may be derived from ASRs. Savings in machinery investment in Canada could run into billions of dollars. Qualitative benefits such as making farming a more attractive occupation, in terms of mainstream societal expectations, tend to be underestimated.

The management of ASRs is critical and requires that so-called agromanagers are agricultural engineers with qualifications in leadership. Their remuneration should entail incentives for agromanagers to promote agroservice exchanges and for farmers to utilize them.

Agromanagers could become important links in agricultural advisory systems because of their necessarily close relationship with farmers.

ASRs could make an important contribution to farm machinery testing and thus to improving the performance of the farm machinery industry. Far-sighted machinery manufacturers and dealers might be expected to actively promote ASRs.

Government subsidization of ASRs, in their initial stages, can be supported on the grounds that it takes considerable time for ASRs to develop maximum potential,
while initial costs are high and because ASRs bestow important social benefits to the community.

The Canada Farm Labor Pools would seem to be well suited as nuclei for the establishment of ASRs in this country. As an added attraction conversion to ASRs could make the Farm Labor Pools eventually self-financing.


DOCUMENTATION 1972. First international meeting on machinery rings, Berlin, Frankfurt am Main, Kuratorium für Technik und Bauwesen in der Landwirtschaft e.V.


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