W. R. Motherwell and Agricultural Education, 1905-1918

Throughout his term of office as Minister of Agriculture for Saskatchewan, 1905-1918, W. R. Motherwell demonstrated his belief that a major activity of agricultural agencies should be educational work to promote better farming methods. In this field he and his department took the lead both directly and indirectly. The direct impact was in the form of lectures, institutes, bulletins, and demonstrations, brought closer to the farmers through a district representative system. At the same time the farmers could help to educate themselves; this the government encouraged through establishing agricultural societies, co-operating with provincial and regional livestock and grain growing associations, and promoting the employment of agricultural secretaries by rural municipalities. Motherwell also took steps to ensure that young people had opportunities for formal training in agricultural science.

The ultimate objective of Motherwell’s educational policy was a sound and stable agriculture. As he saw it, this involved the not unrelated principles of conservation and diversification, both of which, as they applied to the area of low annual precipitation in the southern and western part of the province, he equated with dry farming. This message, he said, must be repeated over and over again:

Conservation is getting to be an old word but while old with many, it is still new in application to a good many. The Gospel of Salvation is an old story and yet we have to keep hammering away at the unbelieving. In the same way the gospel of dry farming, while getting to be an old story, is comparatively new to hundreds and thousands and so long as there are unbelievers, the work must go on.²

Perhaps he best summed up all that he associated with dry farming in his “Ten Dry Farming Commandments,” composed during a lengthy absence in Chicago where, though remote from the scene of their application, he was concerned for the welfare of the land and the people who made their living from it.

In his “commandments” he prescribed that the land be fallowed every third year and that no weeds be allowed to grow upon it. He admonished the farmer to plow early and deep, to use the harrow throughout the year, to sow early and deep enough to reach the moisture, and thinly enough to withstand the ravages of drought and hot winds. Thus the farmer would conserve and make best use of the limited moisture. He directed the farmer to diversify his operations by raising horses, cattle, sheep, pigs and poultry, and by growing pasture, fodder, and roots. Thus he would not dissipate too greatly in his lifetime the fertility of the soil and he would at the same time be protected against adversity.

¹This is the second of two articles based on an unpublished Master of Arts thesis by Allan R. Turner. The first article, entitled “W. R. Motherwell: The Emergence of a Farm Leader,” appeared in the Autumn, 1958 (Vol. XI, No. 3) issue of Saskatchewan History.

²Archives of Saskatchewan (hereafter cited as AS), Motherwell Papers, 1905-18, Agricultural Education: Motherwell to H. McKellar, Sept. 22, 1914.
Dry farming, as Motherwell enunciated it in his “commandments,” was more than conservation and diversification; it was a way of life. He called upon the farmer to devote himself exclusively to his occupation and to study its problems unceasingly. He reminded him that “intelligent and timely hard work,” as well as speeches and resolutions, were necessary to increase production. He advised the farmer not to live apart, but to join the Grain Growers’ Association, the agricultural society, and any “like minded organization that is good,” and to work through them for the welfare and upbuilding of Saskatchewan agriculture. He warned him to avoid “bigness,” big farms and big outfits, and the mortgages that stemmed from them.

Motherwell knew that “no stereotyped method or system of farming can be devised that is applicable to all the varying conditions in so vast a domain as Saskatchewan.” Some of the methods of cultivation and all of the advice on diversification in his dry farming commandments applied to the whole province. Exclusive wheat growing, owing, he said, to the large returns obtained at times, was predisposed “to encourage extravagance, imprudence, speculation, landlordism, ... indifference to home-making as against money making, the credit system, elevator difficulties, the weed nuisance, together with a general tendency to drift off the farms into the towns and villages in search of a less anxious and strenuous life; whereas, diversification of farm products brings with it a certain ease of mind, sense of security and permanency on account of lessened risk ...” Hence Motherwell advocated diversification in grains and livestock throughout the province.

The extensive educational program was directed in large part to the new settlers. When Motherwell took office the great flood of immigration to the Canadian west was at its crest. The rural population of Saskatchewan numbered 209,301 in 1906; in 1911 it was 361,037; by 1916 it had reached 471,538! Another index of this growth is seen in the number of occupied farms which increased from 55,971 in 1906 to 96,372 in 1911, and to 104,006 in 1916. Many of the newcomers were unfamiliar with the requirements of Saskatchewan soil and climate for successful farming, and often they were further handicapped by a language barrier. In the older districts too, there was need to encourage better tillage and other practices. Motherwell threw himself wholeheartedly into this work, devising policies and participating in the various activities.

Much of the educational program which Motherwell carried out was not new, but rather a continuation or elaboration of that commenced in the territorial period. One of the earliest policies, dating from 1886, was the establishment and supervision of agricultural societies. These were designed to give farming people the opportunity to meet and to discuss their problems, hear speakers, sponsor competitions, and hold exhibitions or fairs. In an address to the Yorkton Agricultur...
... the outside staff of the Department in matters pertaining to agricultural education, research, enquiry or experiment, ... the best and most accessible medium through which we can reach the multitude of scattered settlements with their diversified conditions, difficulties and requirements, with the view of co-operating with them in the solution of the many new and difficult problems that are continually cropping up in the life of new settlers.  

Motherwell sponsored a number of changes in the regulations governing these societies. He explained to the Legislative Assembly in 1906 that the tendency had been to introduce amusements and sporting events at the expense of the purely agricultural features. The object of his bill was to revive the latter as far as possible, by offering increased grants based on the number of members and of institute meetings, seed grain competitions and fairs. Motherwell's most significant change of policy in this field was to transfer supervision of these activities to the University in 1910, although the minister remained responsible for the establishment of new societies, and the government for annual grants to aid in their work.

Motherwell personally devoted a good deal of time to agricultural societies, acting as honorary president of several, speaking to meetings, and, on occasion, travelling out to organize a new society. He carried on a considerable correspondence devoted to resolving their difficulties. One of the requirements was that they must be thirty miles distant from each other. Motherwell, convinced of the efficacy of this provision in order that strong societies be established, refused numerous requests to relax it. His usual suggestion to such petitioners was that they avail themselves of the opportunity for institute work, and join in the exhibition features of the society already established nearby. The annual convention of these societies became one of the important agricultural gatherings in the province. Here directors of societies arranged their annual fair circuits, discussed provincial legislation affecting their work, and heard valuable papers read by competent authorities on various phases of farm life. Motherwell took an active part in these conventions.

Motherwell also participated in the programs of the farmers' institutes, which were, in effect, educational meetings in various parts of the province, held in conjunction with local agricultural societies where the latter existed. These periodic meetings are to be distinguished from the earlier Farmers' Institutes which existed for a time in the North-West Territories, and which were themselves agricultural societies. In 1907 the department sponsored seventy-four institute meetings, with the Minister speaking at six on the topic, "Features of Successful Grain Growing." He continued to be active in this line of work, addressing in one year (1910) no less than twenty-six institutes on the themes,
“Methods of Cultivation Suitable for Saskatchewan,” “Making Homes on the Prairie,” and “Tree Planting.” Motherwell regarded requests for foreign language speakers as a “natural desire,” and arranged to have speakers familiar with the German language sent out on a number of occasions. In addition to institute work, Motherwell made a practice of holding a series of meetings each year in his own constituency. Although these might have political implications, he chose to devote them to imparting practical information on agricultural matters. In the spring of 1915, the Manitoba Free Press noted: “The Hon. W. R. Motherwell . . . recently made a trip through his constituency, and instead of talking politics he talked seeding, and many were the shrewd questions asked by the large audiences which attended these meetings.”

As well as emphasizing the spoken word, the department issued numerous publications designed to improve farm practices, a policy which had been instituted by the territorial government. Between 1905 and 1918 not less than seventy bulletins and special publications were issued. Representative of the subject matter were these titles: Weeds of the Farm and Ranch (printed in Icelandic, German, and English), Hints for Flax Growers, The Grading of Cream, Pioneer Problems, Sheep in Saskatchewan, and Practical Pointers for Farm Hands. Motherwell was constant in his attention to this work. He called for publication of new titles as the occasion arose, edited proofs, and in some instances drafted the original himself. The preparation of “Ten Dry Farming Commandments” was a personal project which he undertook during a stay in Chicago in the winter of 1914-15 to take treatment for sciatica. These guide posts, which he framed in the pattern and language of the Decalogue, were subsequently issued by the department as a leaflet, and widely copied in the press. Motherwell often personally answered enquiries at length, rather than by sending out a bulletin or passing the letter on to a subordinate for reply.

In 1906 two innovations in agricultural instruction were the Travelling Dairy and the Special Seed Train. The former was an attempt by the Saskatchewan department to improve the quality of dairy butter by giving instruction in milking, handling and separating milk, cooling and ripening cream, churning, salting, working and preparing butter for market. This project was continued until 1916. The Special Seed Train, organized by the Dominion government in co-operation with the Canadian Pacific Railway, toured the province to demonstrate the importance of clean seed. Accompanied by competent speakers, the train reached an audience of 28,000 persons. Motherwell joined the train for a time as one of the lecturers. Much the same principle was revived in 1914 when a Better Farming Train, under the joint auspices of the department, the College of Agriculture, and the railways, was organized to tour the province. Some idea of its reception is seen in the fact that in 1915 18,000 men, 12,000 women, and 8,000 children visited the train. It was in operation during the remaining years of the period under review.

2 Annual Report of the Department of Agriculture, Saskatchewan, 1915, p. 23. See also Saskatchewan History, Vol. XII, No. 1 (Winter, 1959), “Early Years in the College of Agriculture” for a description of the Better Farming Trains by Dr. L. E. Kirk, who served as one of the staff members.
Still another innovation of the period were Good Farming Competitions, which the government assisted although it did not initiate or sponsor them. Early in 1909 John McDonnell, of the McDonald Hills district near Cupar, wrote to Motherwell for suggestions in connection with a competition he had decided to sponsor to determine the best all round agriculturalist in his district. Motherwell replied that this might be called a “good farming contest,” along the line of contests held in Manitoba for a number of years. He suggested a score card for grading the various activities on which entrants might be judged and offered the services of the department in providing judges. The contest at McDonald Hills proved a success and was repeated in 1910. A number of ploughing matches were organized in the province in 1908. In 1909 there were ten of these; the department supplied judges, of whom Motherwell was one. After 1910 services relating to these contests were assigned to the Extension Department at the University.

Just prior to World War I Motherwell instituted two programs designed to bring educational activities and extension work closer to the people, both extensively in terms of covering the whole province, and intensively in sponsoring numerous projects in each municipality. The first, that of agricultural secretaries, was one of self-help on a municipal basis; the other, that of district representatives, was provided by the provincial government. Writing in 1913, Motherwell expressed the opinion that

... the revenues of our farmers could be increased fifty per cent if we had a good live man situated in every municipality who would co-operate with and advise the farmers on the one hundred and one things that are so necessary, particularly the new comers. Probably forty per cent of the settlers who go on our pioneer farms in Saskatchewan have no knowledge of agriculture in any country, much less prairie agriculture, and many of them make distressing and expensive mistakes largely for the want of some person to confer with and advise them.11

It was with this idea in mind that earlier in the year the department submitted to rural municipal councils two plans for local action. The first plan suggested the employment of a paid agricultural secretary to take charge of weed inspection and direct the people in better farming methods. The second plan called for the employment of a person who would undertake a less ambitious program on a part-time basis. The department promised to provide advice, and the important material help of seed for variety tests and grain growing contests to municipalities which employed secretaries. Fifty-five rural municipalities adopted the first plan, while a great many more undertook the second.12 The scheme got off to an auspicious start, but poor tax collections in the drought year of 1914 and scarcity of labour as the war progressed meant that the program did not get a fair trial. Motherwell summarized the experience gained in this plan when speaking to the rural municipal convention at Moose Jaw, March 7, 1918:

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9AS, Motherwell Papers, 1905-18, Agricultural Education: Motherwell to M. P. Tullis, Sept. 5, 1913.
I have already referred to the ready response of many municipalities to the suggestion of spending a sum of money for the support of agricultural secretaries. I overlooked saying that a dozen or so still have agricultural secretaries and one municipality I am informed has appointed a man at a salary of $2,000.00 per annum. I realise however, that many others did not continue to appoint agricultural secretaries. I also realise that it is a very difficult matter to find men who combine the high qualifications needed to carry on this kind of work successfully, and when they are found they must have the sympathy, the cooperation and the support not only of the council but primarily and essentially of the ratepayers. The ready response of our municipal councils and the large number of appointments the first year surprised us and shows us that some action is desired but I fear that the difficulty of finding the needed type of man will militate against the extension of the Agricultural Secretary system as at first proposed.13

Meanwhile the district representative service had also been inaugurated. In discussing the need for closer contact with the farmers, the Deputy Minister, A. F. Mantle, stated:

The most promising means of establishing this connection seems to be the district representative, or officer of the department, stationed in a definite area to link up the people in that area with the various branches of the department at Regina and the College of Agriculture at Saskatoon.14

Among the recommendations of the Saskatchewan Educational Commission, 1913, whose investigations included agricultural education, was that “provision be made for the appointment of expert district representatives . . . to assist the Department of Agriculture and the College of Agriculture in promoting the welfare of rural communities.”15 To some extent this policy was initiated in 1914 when the Weeds and Seed Commissioner placed five field representatives in different parts of the province. During the summer these men assisted with the Better Farming Train and held numerous institutes. Their success led Motherwell, at the end of the year, to recommend that his deputy proceed with arrangements to open district offices.16 The first district representatives were appointed in the spring of 1915 to take charge of district offices at Shaunavon, Swift Current, Rosetown, and North Battleford. These were all on the west side of the province where the Deputy Minister said “the serious loss from crop failure could have been largely averted by right tillage methods.”17

It was in connection with the district representative service that Motherwell was able to initiate the program of demonstration plots which he had had under consideration for some years. In 1911 he had stated:

I have been for some time under the impression that a larger number of these small demonstration stations would serve our province better than a smaller number of large experimental farms. These, however,

need not interfere in any way with the experimental farms under the direction of the Dominion government as we have them, as there is an excellent work for them to perform which they are performing in a very satisfactory manner; but there are hundreds of thousands of our farmers who never get within seeing or hearing distance of these farms who would doubtless find it convenient to visit a smaller farm nearby.\(^{18}\)

To the editor of the Saskatchewan Farmer, Motherwell wrote in September, 1914:

Lectures, no matter how good they may be, are incapable of reaching some people. First, because they won't go to hear and second, even if heard, they won't follow. We must appeal to such through the eye by ocular demonstration. It is my hope to do some of this class of work in the western portion of our province during the coming summer, not on an extensive, expensive scale, but simply working in conjunction with one or more leading farmers in each municipality. This is for your own information only as I have not my plans sufficiently matured at this date to make them public.\(^{18}\)

By March, 1915, Motherwell was ready to start the program. During a tour of the province he announced that the department would undertake a series of small demonstration plots, about twenty-five acres in size, which would be scattered throughout the province, particularly in the western portion, to demonstrate “what can be done by proper soil cultivation even in a dry country.”\(^{20}\)

This scheme was carried out through the newly appointed district representatives. In one area alone, North Battleford, demonstrations in growing fodder corn, fall rye, and proper methods of summerfallow were arranged on thirty farms. The next year Motherwell indicated that it was the hope of the department, associated with the College of Agriculture, to “inaugurate to a greater extent than at present educational demonstration work throughout the province by having some leading farmers in the newer districts cooperate with us by having such work carried on on their own farms under the direction and supervision of some of the College officials or our district representatives.”\(^{21}\)

As intimated in his statement quoted above, Motherwell had no intention of encroaching on the Dominion work in experimental farms. This policy he re-emphasized from time to time.\(^{22}\) The Dominion government extended its system by establishing experimental farms at Rosthern in 1908 and Scott in 1911. Motherwell impressed upon the federal Minister of Agriculture the need for another station in the south-west, and recommended that it be located at Swift Current. In 1920 that community was selected for the site of the fourth Dominion experimental farm in Saskatchewan. The Dominion government also established a number of illustration farms in Saskatchewan along much the same lines as the provincial demonstration plots. Motherwell continued the practice, begun in

\(^{18}\)AS, Motherwell Papers, 1910-18, Experimental Stations: Motherwell to W. S. Simpson, April 21, 1911.

\(^{19}\)AS, Motherwell Papers, 1905-18, Agricultural Education: Motherwell to McKellar, Sept. 22, 1914.


\(^{21}\)AS, Motherwell Papers, Experimental Stations: Motherwell to J. M. Bruce, Mar. 2, 1916.

\(^{22}\)Ibid., Motherwell to J. Richardson, Jan. 25, 1909; Motherwell to Bruce, Mar. 2, 1916.
1904, of sponsoring an annual excursion to the original Dominion experimental farm at Indian Head. This became a popular event at which several thousand people, brought in part by special trains, arrived for a day at the farm, saw the work in progress, and listened to speakers, Motherwell usually among them.

Motherwell played a prominent part in two associations concerned with the advancement of agriculture in dry areas. These were the International Dry Farming Congress, and the Western Canada Irrigation Association. He served as President of both of them for a one-year term. His participation demonstrated his belief that their educational work was of significance to Saskatchewan farmers.

It was natural that Motherwell, the early convert to summerfallowing, should become interested in an undertaking to disseminate information on dry farming. The germ of the Congress lay in the work of an American, Hardy Webster Campbell, who in the 1890's began to circulate publications on dry farming techniques. In order to consolidate his ventures, the Campbell System Farming Association was founded at Denver, Colorado in 1906.23 The Association did not have time to get a program under way before internal differences of opinion over certain types of cultivation which it was proposed to advocate led to Campbell’s withdrawal from the Board of Directors. His associates, principally representatives of railroad and real estate interests, proceeded to re-organize as the Scientific Farming Association and, in alliance with the Denver Chamber of Commerce, called a regional meeting of dry-farming exponents at Denver early in 1907. This meeting launched the Trans-Missouri Dry Farming Congress “to encourage the use of every conservative practical method for developing the semi-arid regions of the West.”24 At the third Congress to which representatives of foreign governments were invited the name was officially changed to the International Dry Farming Congress. While the early Congresses were devoted to speeches and discussions, an exposition of “dry-farmed” products was added in 1910, and an auxiliary Congress of Farm Women organized in 1911. This expansion of the program was accompanied by an increased membership, which together with gate receipts from the exposition and grants from state governments, became the main support of the Congress, in contrast with its early dependence on land companies and railroads. Between Congresses, a small secretariat, which moved for the year to the centre selected for the next Congress, issued bulletins and a substantial periodical in which instructive articles by scientists and practical farmers were published.25

Motherwell first visited the Congress when it came to Billings, Montana, in 1909.26 For the next decade he was almost always in attendance, and through his department he encouraged Saskatchewan farmers to send exhibits to the exposition. The Canadian and Alberta farmers contributed $5000 to support the Congress and its special Saskatchewan exhibit, that this province would send. At this time, a personal visit by Motherwell, who had been in the States that year, led him to the conflict between the two groups, and to the decision to invite the cabinet to the Congress. He was elected a vice-president of the Congress. See AS, Motherwell Papers, 1905-18, Dry Farming Congress.

24 Ibid., p. 97.
25 Dry Farming Congress Bulletin, 1908-10; Dry Farming, 1911; Dry Farming and Rural Homes, 1912-15; The Agricultural Review, 1916ff.
26 Motherwell spoke on “What Good Soi! Culture Has Done for Saskatchewan”; was elected a vice-president of the Congress. See AS, Motherwell Papers, 1905-18, Dry Farming Congress.
concerned with the International Dry Farming Association. He served on the executive committee of the Association, which demonstrated to Saskatchewan farmers that fallowing, should be practiced on dry farming.

Webster Campbell of the Alberta Farming Association had not have time to attend to certain matters until early in 1907. He helped to encourage the semi-arid possibilities of foreign nations to the International Congress, and to speeches and debates in 1910, and an expansion of the international flavor. Each together with governments, became more dependent on land utilization, which moved the department to publish bulletins and a special bulletin called “The Saskatchewan Farmer.”

The Congress moved to Tulsa that year, while enthusiasts in Regina prepared to invite the gathering to the “Queen City” in 1914. For a time it appeared that Regina might have to substitute for Tulsa, where political rivalry threatened to disrupt the Congress. Motherwell insisted that the Congress should go back to the States that year in order to preserve the international flavor, but it required a personal visit on his part to Tulsa, some months before the Congress, to resolve the conflict between the Oklahoma state and U.S. federal departments of agriculture, and other state politicians, as to who should participate in the local
Board of Control which was set up for each Congress. The Tulsa Congress, with Motherwell presiding, was a moderate success, but Regina’s ardor had waned somewhat, and, with the advent of the war, the Congress was never secured for the city. Saskatchewan exhibitors at the Congress repeated their success in a number of products for several years. Among the consistent winners was Seager Wheeler of Rosthern who, after winning the Shaughnessy prize of $1000 for the best milling wheat at the Land Exhibition in New York in 1911, added to his laurels by winning the “sweepstakes” at the Congress on several occasions.

Motherwell’s early enthusiasm for the Congress was clearly indicated in his participation and in statements such as this in 1910:

... in my estimation this Dry Farming Congress is one of the best educational movements of the day, in respect to better and more scientific methods of farming as applied to semi-arid districts or districts with less than twenty inches annual precipitation.  

By 1914 he was becoming a bit alarmed at the tendency of the Congress to go into problems of farming generally. Just prior to the Wichita Congress of that year, he wrote:

The dry farming enthusiasts are finding some difficulty in rallying the old timers and I feel it is my duty to go and tell them the wonderful tale of what has been accomplished in Saskatchewan with dry farming methods under exceptionally trying circumstances. I think it is high time to cut all these fancy frills ... and all kinds of questions incidental to farming and get right down to the root of the matter, taking care of our annual precipitation so that every drop does the work allotted to it.  

The war tended to diminish Canadian participation in the Congress, although the influenza epidemic had adversely affected attendance at the 1918 Congress the Saskatchewan government granted $1500 to help make up the financial deficit. With the removal of the Congress, after 1917, to cities such as Peoria, Illinois and Kansas City in areas quite remote from Saskatchewan and her climatic conditions, the provincial department and exhibitors lost interest in the Congress. For several years, however, the Congress had been a useful vehicle for grouping together a body of principles and practices aimed at the conservation and best utilization of moisture in semi-arid regions. It had presented them in a graphic way, and provided the enthusiasm of numbers which undoubtedly reinforced the teachings of provincial authorities.

Motherwell was for a shorter time involved in the Western Canada Irrigation Association. That organization stemmed from a convention of persons interested in irrigation which met at Calgary in 1907. While the constitution of this Association was framed to cover the three western provinces, its main support was derived from the irrigation districts in British Columbia and Alberta. By 1913 it was co-operating actively with a Water Users’ Association at Maple Creek. The latter secured the annual convention of the Western Canada association for 1917. Motherwell was principally to address the gathering, although he had been invited to do so.

Indeed, in opening the meeting, he emphasized the need for a co-operative association to produce, purchase and market agricultural products. This was an argument emphasized the importance of the co-operative association to produce, purchase and market agricultural products. This was an argument Motherwell had been making in his speeches and writings since 1906, and he was one of the proponents of the formation of the Prairie Co-operative Association, of which there were three branches in the prairie provinces: the South Saskatchewan Co-operative Association, the Saskatchewan Co-operative Association, and the Saskatchewan Co-operative Association. The latter secured the annual convention of the Western Canada association for 1917. Motherwell was principally to address the gathering, although he had been invited to do so.


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for 1917. Motherwell, presumably by virtue of his position as Minister of Agriculture in the host province, had been elected to the presidency for that year, although he had not been able to attend any of the meetings prior to that time. Indeed, in opening his presidential remarks at Maple Creek, he said, “I am sure it was not because of my practical knowledge of irrigation that I was appointed to this position, but I accepted it to show my sympathy with any movement tending to advance agriculture.”98 That sympathy he further demonstrated the following year when he travelled to Nelson, B.C., to address the annual convention there. On both these occasions he was concerned to point out the relationship between dry farming and irrigation. They were, he said, “twin sisters”: both were solutions to the problem of insufficient rainfall during the growing season; both might be practiced on the same farm.

Motherwell’s department also recognized the role of various provincial agricultural associations in carrying on work of an educational nature. Thus annual grants were made to the Saskatchewan Grain Growers’ Associations, the Winter Fair Board, and the Regina and Saskatoon Exhibition Associations, as well as to agricultural societies for exhibition work.

In September, 1913, Motherwell established a Co-operative Organization Branch in his Department and assigned to it the task of gathering information in regard to all lines of agricultural co-operation and communicating it to the farmers. At the ensuing session of the legislature he introduced the Agricultural Co-operative Associations bill which provided for the incorporation of associations to produce, purchase or sell live stock, farm products and supplies. Motherwell emphasized the significance of this type of co-operation for promoting the live stock industry. The administration of the legislation was placed under the Co-operative Organization Branch of his department, which therefore became engaged in drawing up by-laws and articles of association for the regulation of co-operative associations and supplying advice in regard to the best methods of conducting their business. The first co-operative association was established under the Act on February 2, 1914, and by the end of the year 113 had registered. As a result of the promotional work of the department, and the entry of many locals of the Saskatchewan Grain Growers’ Association into co-operative trading, there were, by the end of 1918, 329 of these associations reporting to the department, representing 15,132 shareholders.99

The varied educational program reviewed to this point was, of course, directed principally to adults already engaged in farming. Motherwell was also concerned with the problem of instructing rural young people to become good farmers. In 1906 he instituted a program of providing scholarships to encourage Saskatchewan boys to attend agricultural college at Winnipeg or in eastern Canada. To these were added scholarships for girls to take home economics. The University Act of 1907, under which the provincial university was established, did not specify areas in which instruction would be given. In the debate during passage of the

98 AS, Motherwell Papers, Addresses and Articles, 1914-18; Presidential Address to Western Canada Irrigation Association, Maple Creek, 1917.
bill through the Legislative Assembly, Calder, the Minister of Education, remarked that the government “looked forward to the time when the university would include instruction in all the sciences and industrial and commercial education as well.” Haultain, the leader of the opposition, stressed that “among the subjects embraced should be... that most important of the professions, agriculture.” Newspaper reports of the discussion on this bill fail to indicate that Motherwell expressed an opinion in this regard. However, at the same session the government put through a Supplementary Revenue Act, providing for the levying of a direct tax on occupied lands in the province, five per cent of the revenue from which would go to the establishment and maintenance of an agricultural college and five per cent to the establishment and maintenance of the University of Saskatchewan. This Act seemed to envisage the establishment of separate institutions in the tradition of the Ontario Agricultural College at Guelph, with which Motherwell was so familiar and which he apparently wished to see adopted in Saskatchewan. In addressing the Provincial Educational Convention at Regina, May 22, 1908, Motherwell said:

I hope that the time is not far distant when we shall have an agricultural college in this province; and when that time comes I shall do all in my power to see that the College is housed and equipped in a manner consistent with the dignity of the profession that it is designed to serve and that it is not less liberally endowed and provided for than the university itself.

A separate institution would seem to be implied also in a statement in “An Address to the Electors” issued by Premier Scott prior to the provincial Election of August 14, 1908, that, “The organization of an agricultural college will be an important feature in the work of the next Legislative term.”

The Board of Governors of the University, after considering the matter in a meeting on August 20, 1908, decided to interview “the provincial government with a view to constituting an agricultural college as a department of the University.” A University committee which later was appointed to visit and inspect universities in the United States came also to the conclusion that the college of agriculture and the university should not be separated. Motherwell decided to investigate the problem further, and sent his new deputy minister, W. J. Rutherford, to go over much the same ground covered by the University committee. When Rutherford came to similar conclusions, Motherwell approved not only of the establishment of an agricultural college as an integral part of the University but decided to transfer to it much of the educational and extension work then associated with his department. Thus the University was embarked on an agricultural program which was to include, in addition to the instruction of intramural students and valuable scientific work, the holding of short courses...
at the University and throughout the province and the promotion and supervision of the varied activities of agricultural societies and Homemakers' clubs.

An amendment to the University Act was passed at the session of 1911 to provide an Advisory Council for the College of Agriculture. It was to be comprised of eleven members, including the Minister of Agriculture and other representatives of the provincial government, the university, and various provincial societies. Its duties were to inspect the facilities and work of the College, to consider the regulations of the university concerning the work to be carried on by the College and its extension department, to discuss plans for the advancement of the program of the College, and to report annually thereon to the Senate and Board of Governors, and to the Lieutenant-Governor-in-Council.

The experiment, unique in Canada, of integrating agricultural training with the general program of the University, worked well from the start. In 1914 the Advisory Council reported as follows:

Your Advisory Council, having heard the report of the work of the College of Agriculture, including the Extension Department, and having inspected the buildings, residences and dining hall, classrooms and laboratories, barns, stables, poultry houses and shops, and also the equipment of the various departments; and having taken notice of the instruction being given to the 400 or more farmers assembled at the various short courses and conventions now in session, beg to express our approval and appreciation of the very excellent provision that has been made by the Board of Governors in these respects . . .

We note with great satisfaction the harmony and good fellowship that exists between the students and staff of all the faculties of the University. It appears to your Council that this condition of affairs is bound to result in great good to the future development and prosperity of Saskatchewan.

Motherwell not only transferred some of the most popular activities of his department to the University; he also provided almost all of the original faculty in Agriculture from his staff. His Deputy Minister, W. J. Rutherford, became its first Dean; with him went departmental branch heads, John Bracken, as Professor of Field Husbandry, T. N. Willing, as Professor of Natural History, and F. H. Auld, as Director of Agricultural Extension. Later, President Murray wrote: "Be it said to their everlasting credit that the Minister and the Deputy Minister, as Dean of Agriculture, made the College of Agriculture and with it the University of Saskatchewan a great institution in the service of the highest things for the public."

Agricultural training for the important population of elementary and high school students, since it would involve the school curriculum, was essentially a problem for the Department of Education, but Motherwell had some interesting ideas on the matter. Speaking to the Provincial Educational Convention at Regina in 1908, Motherwell noted that attempts to introduce the study of agri-
culture in public and high schools in Canada had met with little success. This he believed was due to the indifference of the people, many of whom believed agriculture to be a menial occupation. Teachers themselves, he suggested, were not interested in the subject; many of them were not competent to teach it, and, as a result, their pupils were not stirred with any great enthusiasm. He believed the remedy lay in impressing upon the minds of the teachers, and through them, upon the children, “a proper sense of the dignity of agriculture,” but, beyond encouraging nature study, Motherwell did not envisage the introduction of agriculture in the public schools. He said:

Most of our country boys and girls do not get a sufficient drilling in the rudiments of general education, which, of course, should always precede any attempt at special education. I take it that the time of the average boy or girl under 14 or 15 years of age will be sufficiently occupied in securing a good working knowledge of English, mathematics, history, and other kindred subjects without attempting the intricacies of the natural sciences involved in agriculture.\(^{38}\)

He did suggest, however, that some agricultural work might be introduced in the high schools, but was more prepared to advocate special classes for farmers’ sons and daughters in a number of convenient centres where, in addition to a certain amount of English and practical arithmetic, emphasis would be placed on the natural sciences involved in the practice of agriculture.

The Saskatchewan government in 1912 appointed a commission under the chairmanship of D. P. McCol, Superintendent of Education, with Dean Rutherford as one of its members, to investigate several phases of education, including agricultural education. The recommendations of this commission, which reported in 1913, were, as they related to school agriculture: (1) Introduction in the public schools of nature study and school gardening; (2) Provision of short courses in agriculture in the high schools during the winter months; (3) Acceptance by the University of agriculture or household science in lieu of physics or chemistry in junior matriculation examinations, and similarly by the Department of Education in granting second and third class teaching diplomas. These recommendations were very much in line with the views Motherwell had expressed five years before. The Department of Education took steps to implement some of them through the appointment in 1915 of two Directors of School Agriculture to supervise a program which included the training of teachers, teaching practical farm knowledge, encouraging school gardens and fairs, and improving school grounds.

In the latter half of Motherwell’s ministry, the provincial program in agricultural education was aided considerably by federal funds. In 1912 the Borden government passed an Agricultural Aid Act which made $500,000 available to the provinces on a population basis to be used unconditionally. Motherwell announced that Saskatchewan would use its share, approximately $34,000, for agricultural instruction through existing agencies.\(^{39}\) The ready use made of these funds across Canada to make available Agricultural Instruction. In 1916 the ministry Saskatchewan was to expand its educational work, with the amount in cash assigned to the provinces a matter for discussion.

The educational program was viewed as a gift of federal funds to the provinces, for the purpose of examining its impact on the country’s farming community. If the education program were to demonstrate the efficiencies of the college system and the presiding chief, then it would be argued in several places. The call for patriotic work was first made by the government in 1912, when the cropling of crops was a significant issue in the country. Saskatchewan’s economy was heavily dependent on agriculture, and the period. Motherwell’s government was to be credited with the development of a stable economy in the province. The emphasis on agricultural education was suited for one that was based on the stock in the drier, less fertile lands. The increased steady years, although the program, combined with high grade stock, contributed to the development of the economy, wheat rema...

Motherwell’s government, in 1916, announced that Saskatchewan would use $34,000 of the federal funds for agricultural instruction through existing agencies. The "plunging"
funds across Canada for similar purposes encouraged the federal government to make available the sum of $10,000,000 over a period of ten years under the Agricultural Instruction Act of 1913. During the remaining years of Motherwell's ministry Saskatchewan apportioned the major part of its share to the university to expand its experimental and extension work. The department used a lesser amount in carrying out its direct educational efforts, while funds were also assigned to the Department of Education to finance the agricultural training mentioned above.

The educational program carried out under Motherwell's direction must be viewed as a gigantic attempt to instruct new settlers and old alike in the best possible farming methods. There would seem to be no statistical means of determining its impact in view of all the factors to be taken into account. Generally speaking, the dry-farming methods were widely adopted in the area most affected. If the educational program was not enough to persuade the farmer, nature soon demonstrated the necessity for him to attune himself with the methods which were advocated. During World War I increased prices for wheat coupled with the call for patriotic production threatened to destroy at least temporarily the good work. Motherwell opposed the federal campaign for increased acreage, including the cropping of stubble, on the grounds that good farming methods would result in greater production in the long run. The province experienced a partial crop failure in 1917, followed by severe losses in the western part of the province in 1918 and 1919. To what extent may abandonment of summerfallowing by careless or profit-seeking farmers have contributed to this? It may of course have had little significance since, no matter what type of cultivation is instituted, severe drought in even one year, and certainly drought in successive years, inevitably results in crop failures. The successive failures occurred only at the end of Motherwell's period. Motherwell does not appear to have suggested that a halt be called to settlement in the area; he can scarcely be criticized for failing to protest what so few, if any, foresaw in the wheat boom period before the war, or even during it.

The emphasis on diversification in grains and livestock to ensure a more stable economy was wise. Motherwell recognized that certain areas were more suited for one type of agriculture than another, and that diversification in livestock in the drier areas was dependent on water supply. The numbers of livestock increased steadily over the period, a trend which was accelerated during the war years, although hog production dropped off slightly in 1918. While the educational program, combined with such other policies as the governmental distribution of high grade stock under the Live Stock Distribution and Sale Act undoubtedly stimulated the increase to some extent, and certainly improved the general quality, wheat remained the staple commodity of the agricultural economy.

Motherwell's concept of the farmer on a convenient unit, the half-section of land, using horse-powered machinery and raising a diversity of crops and livestock was a reasonable objective for the period. In this way use of the cumbersome and costly steam engines and equipment which they powered could be avoided. The “plunging” in real estate and the “bigness” which quite properly alarmed
Motherwell could be terminated. Motherwell’s voice, however, seemed hardly
to be heard in the tendency of farmers to enlarge their farms and to concentrate
on wheat. In any event the rapid mechanization of agriculture after Motherwell’s
period and the perfecting of efficient gas-powered machines, both small and large,
did away with the need for horses almost entirely, made it possible for one man
to farm a large acreage, and initiated the trend to a larger unit as the more
economic in prairie agriculture. New machines and new techniques were evolved
which were more suitable than the harrow and the plow in the semi-arid areas.
These developments did not, however, nullify the validity of Motherwell’s prin-
ciple of diversification, and great credit is due him that he continually warned
against the dangers inherent in the semi-arid region, and took extensive steps to
disseminate information on the best means then advocated to cope with them.

The significance of the educational program in the growth of agricultural
co-operatives can not be assessed apart from other assistance rendered to these
enterprises by the provincial government. The co-operatives promoted by Mother-
well were successful in stimulating the production of butter, eggs, poultry and
wool. The institution of co-operative marketing associations removed many of
the complaints farmers had had about the handling and shipment of grain and
livestock. Their subsequent history was one of mixed success, but there can be
no doubt that they produced results which had not been forthcoming through
private agency and that they would not likely have succeeded as quickly and on
so large a scale had not the advice, management, and financial assistance of the
government been extended to them. They must be viewed as projects of important
benefit to the development of agriculture in the period, and basic to the subsequent
growth of the co-operative movement in the province.

In review, it has been demonstrated that much of the program of agricultural
education in this period was due to Motherwell’s initiative, and where his ideas
and methods were inherited from the territorial government or stemmed from his
contemporaries he displayed strong leadership in pursuing them. The policies
were particularly helpful in assimilating the countless new settlers. He did much
to direct the agricultural development of the province along sound lines; certain
of his specific policies are still being pursued today; and the general principles
which he espoused so strongly—conservation, diversification, co-operation—are
of significance for all time.

ALLAN R. TURNER