

# AGRICULTURE

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## Technical Agricultural Education in Poland

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IN studying economic and social conditions in reconstituted Poland, it is necessary first to examine the situation as it was in the territories once subject to Russia, Austria, and Prussia before the reconstruction of the Polish State, and then to examine it as it is now that these formerly disunited regions have become one country; lastly, to give some consideration to recent Polish legislation. This legislation has been the basis of all efforts by the Government or by others for the social reorganisation of the country; it has not yet, however, come completely into operation. Most of the new laws were only passed in the course of last year, which was a year of war and Bolshevik invasion, not at all propitious for carrying out measures which will require a very long time before they can be counted on to have their proper effect.

These considerations apply with special force to all educational problems. In the provinces which used to belong to Prussia, compulsory education had existed for years; in those attached to Russia there was no primary education at all; it is therefore natural that technical education in the agricultural industry should take quite a different course in the two parts of the country.

But before examining the question of such technical education, it is necessary to consider briefly the whole state of ordinary primary education in the various territories now reconstituted as the Republic of Poland, up to the moment of legislative union.

### THE SITUATION BEFORE THE RECONSTITUTION OF THE POLISH STATE

#### *Primary Education*

Compulsory education existed before the war in the provinces subject to Prussia and Austria. In Austria, education was compulsory for all children from 6 to 14 years, both in towns and villages. Any pupil who had not learned to read or write, or who had not sufficient notions of

arithmetic and religion, could be compelled to attend school after the age of 14 years. All non-attendance had to be excused, and the only excuses accepted were the illness of the pupil or of one of his parents; dangerous weather conditions threatening the life or health of the pupil; impracticable roads. Parents, guardians, or employers not observing the provisions of the law relating to compulsory education were liable to fines. On a second or subsequent offence, they were liable to severer penalties inflicted by the tribunals for the guardianship of infants. Education was free. Summer holidays lasted six weeks. It must be remarked, however, that these general provisions were not much observed in Galicia. Schools did not exist everywhere, and in many cases the courses only lasted for a year or two. Four years' schools, although provided for, were very rare. Supervision by the school authorities hardly existed, and parents were very often dispensed from sending their children to school.

Compulsory education existed in those parts of the country formerly belonging to Prussia for children from 6 to 14 years of age. All non-attendance had to be excused, and the excuses admitted were strictly defined; for each day of a child's non-attendance without sufficient excuse, the parents or guardians paid a minimum fine of 50 pfennig. In country districts school was suspended for three weeks in summer, during the harvest, and for three weeks in autumn. The organisation and supervision of the schools was much stricter than in Galicia.

In the old kingdom of Poland, and in the other provinces belonging to Russia, there was no compulsory education at all. Here and there in the country districts there were primary schools with classes lasting from three to four years, but attendance at them was absolutely optional. These schools were very few in number, at most two or three in a commune, which means a district including from five to ten villages. The authorities could not exercise any rights of supervision. With the exception of religion and the Polish language, everything taught in these schools was taught in Russian, and within a month or two of leaving the children had inevitably forgotten all that they had learned. The number of children attending these schools was extremely small. The Polish schools created and carried on secretly in the residences of the great landed proprietors were scarcely more important.

### *Technical Agricultural Education*

#### *In Prussian Poland*

Technical agricultural education in Prussian Poland was under the direction of the Ministry for Agriculture, Forestry, and Crown Domains; the Ministry entrusted the supervision, and in part the organisation, of elementary agricultural schools (intended for pupils who had finished

their primary education) to the chambers [of agriculture, rightly considering that institutions of trained persons, well acquainted with local needs, would discharge these functions better than a bureaucratic organisation. In the primary school agricultural science had no place worth mentioning. The pupils acquired a few elementary notions during the lessons in natural sciences, such as botany and zoology, which formed part of the school curriculum. More important were the technical courses for young villagers from 15 to 16 years of age, who had already passed through the primary school.

The statistics relating to the agricultural courses instituted in former Prussian territories are given in the following table (').

TABLE I

	No. of courses 1911-1912	No. of students 1911-1912	Average per course	Total no. of students from the foundation of the course to end of March 1912
Posen	13	427	33	3,629
West Prussia	9	377	42	3,595
Total	22	804	36.5	7,224

TABLE II

	Total expenses of maintenance	Receipts			
		receipts from fees	government grants	communal association grants	chamber of agric. grants
	francs	francs	francs	francs	francs
Posen	149,504	18,857	95,432	34,130	2,836
West Prussia	118,993	13,181	82,839	25,304	617
Total	268,497	32,038	178,271	59,434	3,453

The curricula of these courses were not uniform.

(1) *Residential Training Centres.* These were built for twenty or more pupils and gave both theoretical and practical instruction in two to three year courses. The pupils were trained in all practical agricultural operations on model farms attached to the schools. Minimum annual maintenance fees were charged, but grants were provided, either by the Government or by the chambers of agriculture, which received large grants from the Government for that purpose.

(2) *Winter Training Courses.* These were either established at a fixed centre, or were arranged on a kind of travelling

(1) RUMKER: *L'état actuel de l'enseignement agricole en Allemagne. Bulletin mensuel de renseignement agricole.* Rome, 1914, No. 5.

system. The travelling instructor lived in the villages during the winter, and had a suitable building placed at his disposal for his instructions. Both types of schools aimed at training men to be farmers, but the second type gave theoretical instruction only.

In addition to these general training centres, special training centres existed, chiefly for gardening and dairy farming. The courses in gardening as a rule lasted a few weeks; the principal training centre for dairy farming was at Wrzesnia (Wreschen), Posen, and was attached to the Experimental Institute of Dairy Farming, a station run on the most scientific and up-to-date principles; the course of training lasted a year. There were nine training centres for women in Posen and West Prussia, six residential and three on the travelling system.

The general expenses of maintaining these centres amounted to 184,866 francs in 1912. The expenditure was largely covered by the receipts from the centres themselves, amounting to about 150,000 francs. Government grants totalled 28,000 francs, the balance being advanced by communal associations and agricultural societies. Where model farms were attached to the centres, they were mostly devoted to the raising of stock.

These training centres were for the use of the rural population, and were intended to educate a class of farmers. The secondary schools admitted those wishing to enter agriculture as a paid career. Attendance at these schools conferred the right of reducing military service to one year. Each centre had six classes, and admittance to the first class could begin from 10 years of age. The curriculum was that of the Prussian *Realschulen*, but much shorter, and covered German, one modern language, mathematics, history and geography; it also included subjects directly connected with agriculture, to which ten hours per week were devoted in the first class. From the first to the fourth classes natural sciences, botany, zoology, mineralogy, geology, elementary chemistry and physics were taught, and in the fifth and sixth classes purely agricultural subjects, the raising of cattle, crop cultivation, agricultural management, agricultural chemistry, and allied subjects. Instruction was purely theoretical; the fees charged were on a level with those of the ordinary secondary schools. The pupils were expected to acquire their practical knowledge later. The leaving certificate or diploma entitled the pupil, after two years of agricultural practice on an estate, to enter any of the German higher schools of agriculture. These schools were very popular, but many criticised them strongly, maintaining that the large number of relatively advanced subjects taught to pupils who possessed no practical agricultural knowledge not only failed to attain the end proposed, but must interfere with their general education; the popularity of these schools, it was argued, was due to the easily obtained

diploma, which secured the reduction of military service to one year.

There were no advanced schools of agriculture in the province of Posen. The experimental farms and even the immense Institute of Agriculture of Bydgoszcz (Bromberg), equipped with all the discoveries of agricultural science, were not used for purposes of agricultural education.

German nationals only were admitted to the agricultural training centres provided for the rural population. The Polish community, recognising that it was essential to secure for their members a share in the latest acquisitions of agricultural science, established its own system of agricultural training centres for adults under the name of "agricultural clubs". These organisations could not replace a regular agricultural education, but, as they were both permanent and regular, their success was considerable. The arrangement was that in each parish of from three to five villages, an agricultural club was organised; the larger and smaller landed proprietors joined as members, and a large landowner, who, of course, was a man of superior education, was usually elected as chairman. The club met once a month after Mass near the church; a lecture was given on a question taken from a programme which had been drawn up in advance, and was followed by discussion; members also reported on experiments which they had been making on their farms and estates. The central committee of the Agricultural Clubs of Posen was authorised to see that a sufficient number of lectures were arranged and that the programme was consecutively carried out. During the years preceding the war the school authorities, in co-operation with the chambers of agriculture, organised courses in agriculture for conscripts in the villages.

### *In the Austrian Provinces*

Detailed information as to technical training in agriculture in the Austrian Provinces is lacking. As a rule, the Austrian Government entrusted the supervision of elementary agricultural training centres to the Agricultural Societies of Cracow and Lwow (Lemberg). These elementary centres were organised on the model of the Prussian centres. There was only one secondary training centre, but there were two advanced schools, one at Cracow and the other at Dublany. At Cracow there was a University Faculty of Agricultural Studies. This Faculty provided instruction in natural science up to a very high standard, but only on the theoretical side. Only students who had completed their secondary school courses were admitted; they were required to study for four years, at the end of which time they sat for an examination and received a diploma. Students wishing to proceed to the doctor's degree were required to submit a thesis and to offer themselves for four other

examinations on various subjects, one of which was philosophy; they could then take the degree of doctor of philosophy in conformity with the compulsory provisions for Austrian universities.

At Dublany there was a three years' course. The institution was situated in the country, and there was an experimental farm and a well-endowed experimental station attached. Students were bound to have obtained their bachelor's degree before admittance. The instruction was much more practical than at Cracow, and the situation, the residential system, and other factors were great advantages.

### *In the Russian Provinces*

Whereas the Prussian and Austrian Governments subsidised agricultural training centres, the Russian Government was opposed to all attempts at agricultural education in their Polish provinces. This was only part of the general policy to obstruct all organisations aiming at public education or instruction, as incompatible with the government point of view. Under these circumstances technical training in agriculture could make no progress in this part of Poland. A very few schools existed, organised and supported solely by private initiative. They were, however, numerous enough to show the type of elementary agricultural training centre which would have been specially suitable.

As there was no compulsory education and as the private organisation of schools was prohibited, agriculture could not be taught in any form in the primary schools in this part of the country. The efforts of the community could only be directed to the organisation of agricultural continuation centres or to technical courses for adults. The oldest training centre in elementary agricultural studies was that of Sobieszyn, founded by private initiative in 1896. A three years' course was given; there was a farm attached and residence was provided.

In course of time it became plain that this type of training centre was only suitable for those wishing to enter agriculture as a paid profession. Farmers' sons hardly availed themselves of it, as the course was too long. A special type of centre had to be established for them, ensuring certain points, as follows :—

(1) The length of the course was fixed at eleven months only, so as to attract this class of pupil.

(2) As so short a course was insufficient for a serious training in agriculture, only older pupils were admitted, who were able to read and write and had already had some practical experience in farming their own land, and who wished to attend the courses with a view to extending and completing the knowledge acquired in practice.

(3) Instruction could not be limited to purely technical

subjects. With a view to training up men who should be useful members of the community, it was essential to make good the gaps in education, due to the absence of any regular and compulsory educational system. With this end in view, boarding establishments and experimental farms were attached to these centres.

These eleven month courses were very popular, but lack of funds made it impossible to extend them ; only five were in existence before the war. There were also certain centres of a different type, giving a five months' course. Several attempts were also made to organise travelling courses of ten weeks, but these were not successful. Six of the domestic economy schools for women organised eleven month courses which were very popular. These courses were identical with the parallel courses for youths, excepting only that the model farms attached specialised in stock-raising and gardening. Students at all schools paid a small fee to cover the expenses of their maintenance ; the instruction itself was subsidised either by agricultural societies or by private persons.

The agricultural clubs, organised on the model of the clubs established in the Prussian provinces, were a very important factor in providing technical training in agriculture for adults. The figures for 1913 prove how wide was their activity. There were 1,051 clubs with about 100,000 members. The work carried on in these clubs is not comparable with work at a special centre where a consecutive programme is followed, but the rural population owes to them considerable knowledge of natural science and a great deal of agricultural information.

Of special institutes mention must be made of the important School of Horticulture at Warsaw, subsidised by the Agricultural Society of Warsaw. This institute offered two courses, one for jobbing gardeners capable of attending to small gardens and orchards, the other for professional gardeners capable of managing large horticultural establishments. The curricula for the agricultural training centres also included horticulture ; the centres offering the eleven month courses gave altogether 120 hours to this subject, in addition to practical work out of doors.

There were no advanced schools of agriculture in Russian Poland, as the Government invariably refused to authorise them. The agricultural courses at Warsaw, which were begun in 1911, were academic in character ; they conferred no diploma, and consisted almost exclusively of lectures on theory. A parallel course in horticulture was started in 1913, and use was made of an experimental garden of six hectares. These two courses were financed by private persons and by agricultural societies.

A Russian advanced school of agriculture existed at Poulavy, formerly a Polish model estate ; from 1893 onwards the constitution of this institute was made to conform to the

requirements of Russian law relating to academic institutes, and it was fully subsidised by the Russian Government. The school had its own experimental station and model farm. As practically no Poles were admitted as students, it was without influence on the progress of Polish agriculture, and did not count as an important national institution.

#### THE SITUATION AFTER THE RECONSTITUTION OF THE POLISH STATE

Almost immediately after the Russian evacuation of Poland in August 1915 the Civil Committee established at Warsaw proclaimed compulsory education throughout the country. When in 1917 the German Occupying Authorities granted a charter of autonomy to the country, and included public education in that charter, one of the first acts of those benefiting was to set up primary schools. But the chief legislative measure regulating education in reconstituted Poland has been the Decree of February 1919. Under the terms of this Decree education is compulsory for all children from 7 to 14 years of age. Any commune where there are more than 40 children of school age must establish a school. A common school may be established for several communes together, if there are less than 40 such children in each commune, provided that the area embraced shall have a radius not exceeding three kilometres. Provision is made for compelling communes to fulfil their duties. Pending the establishment of these schools, schools having a course of studies of from four to five years are recognised, but the Order of 8 August 1919 provides that in this case children shall be compelled to attend a supplementary class up to the age of 14 years, the period of attendance being from two to three years. The object is to encourage the general progress of education and to stimulate young people to a desire for further instruction. This supplementary instruction covers at least four hours a week and is continuous throughout the year.

With a view to ensuring that the law on compulsory attendance shall be properly observed, and in order to induce parents to send their children to school, guardianship societies have been established, under the name of "school guardians", for one or more schools in the same locality. "School guardians" have also other duties, such as the giving of assistance to poor children, the provision of conveyances for children living at a distance from the schools, and so on. They also prepare a list of children of school age in their area and communicate it to the school managers.

The school year lasts from the beginning of September to the end of June, but the "school guardians" may establish two interruptions of 14 days each during the seasons when field work is done; they may also change the attendance



hours so as to facilitate such work, but may not reduce them.

Non-attendance may be excused on account of the scholar's own illness, the death of a member of his family, contagious disease in his home, and on account of such other causes as may appear to the teacher sufficient. Attendance is supervised by the teacher and the principal guardian. Persons failing to send their children to school are liable to one or two days' imprisonment or to a fine of 40 marks; failure to enter the child at a school is punishable by five days' imprisonment and a fine of 100 marks. Children certified as ill by the school doctor, or whose home is more than three kilometres from the school, or who are receiving instruction in other institutions, are exempted from attendance. Children certified as ill may be exempted for one year or more. Exemptions are granted by school supervisors, exercising in the whole commune functions similar to those exercised by the "school guardians" in their particular area.

The principle of compulsory education established by the new Constitution of the Polish State, as adopted on 17 March 1921, proves the importance which the country attaches to this question. Articles 115 and 119 run as follows:—

Education in a primary school shall be compulsory for all citizens. The period of instruction, the scope of the curriculum, and the methods to be followed shall be defined by a special Act.

Instruction in state schools and communal schools shall be free. The state shall confer upon pupils with exceptional gifts and not possessing pecuniary means scholarships for the purpose of enabling them to continue their studies in secondary and higher schools.

During the first three years of its existence the Polish State concentrated all its efforts on the organisation of these primary schools. Some attempt, however, has been made to raise the standard of technical agricultural training centres. The legislative work in this direction is already almost complete. In the first place, it was felt that such training centres must be created and must have model farms attached, and in the second place, it was essential to secure the attendance of the agricultural and working population. But this could not be done unless the problem of technical agricultural training were, in a manner, linked up with the problem of agrarian reform. Agrarian reform in Poland, under the Act of 15 July 1920, took the form of dividing the great agricultural estates and of helping to establish farmers on land acquired under agreement or by compulsory purchase. The work is to be entrusted to a Central Estates Office appointed *ad hoc*. Section 15 of the Act stipulates that before parcelling out any estate the Central Estates Office must consult the Ministry of Agriculture, which has general powers over all elementary training centres for agriculture, and exercises them through a special department; the Ministry is entitled to reserve all lands or buildings suitable for agricultural training centres. Section 59 of the same Act stipulates that small owners and

agricultural workers, who were formerly students at such a centre, shall have priority in regard to the benefits of agrarian reform, in other words that they shall have the first right to acquire parcels of land.

While the Act of 15 July smoothes the way for the work of the training centres, their organisation is really based on a special Act of 9 July 1920 "relating to popular training centres of agriculture". This Act provides for centres of technical instruction in agriculture, public or private. Private centres cannot be established without the consent of the Minister of Agriculture, and the Ministry is charged with seeing that the curricula are up to standard. Public centres are attached to the state, the districts, or to chambers of agriculture. State centres will be established by decision of the Minister of Agriculture as they are called for from time to time. District centres, on the other hand, must be established. There will be two in each district, one for boys and one for girls. In establishing these compulsory public courses in agriculture under the Act, the district authorities and chambers of agriculture will be granted large assistance from the state. It will (1) give them a free grant of the land needed for the training centre and its model farm; (2) allocate to them for building purposes a sum equal to one-fourth of the amount of the estimate approved by the Minister of Agriculture and, in addition, advance one half of the total estimate as a long-term loan at 3 per cent. interest; (3) provide the teachers' salaries. In addition to this general financial assistance, the Ministry must, on its own initiative, allow other grants, which must be budgeted for in its annual estimates.

The Ministry will supervise the standard of the instruction, will determine the qualifications of the teachers, and will prepare detailed curricula. The text of the Act says:—

Courses of study shall cover not less than eleven months. Instruction shall include both theoretical work and practical work carried out on the farms attached to the centres. Students of sixteen years of age shall be admitted to the boys' centres and students of fourteen years of age to the girls' centres, provided that they have completed the primary school course. All pupils, boys or girls, shall be required to live during the course of their studies in the boarding establishments attached to the centres.

A maximum period of twenty years is allowed under the Act for the organisation of training centres throughout the country. In order to adapt the instruction closely to local requirements, a supervising committee is constituted in each district; its function will be to supervise the regular working of the centres and of the model farms. In addition, it will represent the interests and requirements of the training centres on the small district diets. Each committee is to consist of three representatives of the small district diet and of the chamber of agriculture, a representative of the Ministry of Agriculture, and an inspector of primary schools; the

heads of the training centres in the district will attend in a consultative capacity<sup>(2)</sup>.

The events referred to at the beginning of this article prevented the immediate carrying out of the Act of 9 July. So far the state has not been able to go beyond recognising centres which were already in existence at the moment of the reconstitution of Poland. In the former Prussian provinces training centres have been thrown open to Polish nationals, who had previously been unable to gain admittance, but the general working of the centres remains unchanged. In Little Poland (formerly Galicia) the system of grants to existing centres is being reorganised. In the old kingdom of Poland, all centres which used to be supported by private subscriptions have been transferred to the state account, thus establishing their work on a solid material basis. The Education Department in the Ministry of Agriculture is at this moment working for the realisation of the programme laid down in the Act.

The state has been able to display much greater activity in the sphere of advanced agricultural education. It was stated above that before the war Poland possessed only two advanced schools of agriculture, at the University of Cracow and at Dublany in Little Poland. There are now six, two in each of the three parts of the country. The advanced schools of Little Poland remain unchanged. In the former Prussian provinces the newly-founded University at Posen has established a Faculty of Agriculture and Sylviculture analogous to that at Cracow and conferring similar diplomas and degrees. In addition, an Institute of Agriculture has been opened at

(2) The following grants were made to the training centres for agriculture by the Ministry for Agriculture and Public Estates :—

1919-1920. From 1 Jan. 1919 to 1 April 1920 :

(a) general expenses and equipment . . . . .	1,641,300	marks	(Polish)
(b) special courses . . . . .	413,557	"	"
(c) scholarship grants . . . . .	90,593	"	"
	2,145,450	"	"

1920. From 1 April 1920 to 31 December 1920 :

(a) general expenses and equipment . . . . .	6,857,000	marks	(Polish)
(b) special courses . . . . .	155,000	"	"
(c) scholarship grants . . . . .	224,500	"	"
	7,236,500	"	"

1921. From 1 January 1921 to 30 April 1921 :

(a) expenses of the district centres . . . . .	2,340,000	marks	(Polish)
(b) expenses of centres maintained by various organisations . . . . .	3,470,000	"	"
(c) equipment . . . . .	12,350,000	"	"
(d) scholarship grants . . . . .	226,500	"	"

18,386,500 " "

Total grants from 1 January 1919 to 30 April 1921, 27,768,450 marks (Polish).

The above figures have been supplied by the Department for Technical Education in Agriculture in the Ministry for Agriculture and Public Estates.

Bydgoszcz (Bromberg), side by side with the experimental institute already existing, with a two years' course for students who have had six years' instruction in a secondary school; this institution is intended for the training of landowners and managers of important agricultural establishments who are unable to devote three, four, or five years to more thorough theoretical study; the rich collections, laboratories, and experimenting rooms at the Institute of Bydgoszcz greatly assist the work of the new institution. The three years' agronomic courses at Warsaw, founded in 1911 and referred to above, have been transformed into an Advanced School of Agriculture; this is at present the most important agricultural teaching centre in the country. This School includes three faculties, in agriculture, silviculture, and horticulture, and aims more at training agriculturists, horticulturists, and silviculturists than at turning out an army of theorists. The minimum course is three years. The first year's curriculum consists of lectures on the principles of natural science and practical work in the school laboratories. During the second and third years lectures on agriculture play a chief part; they are supplemented by experiments carried out on the farms attached to the institution. Students not wishing to pursue more advanced studies leave the School at the end of the three years, after obtaining an academic diploma on the results of an examination. Those who continue their residence work under the direction of the separate professors, specialising in some one branch of agriculture, such as stock-raising, horticulture, agricultural chemistry, agrarian policy, and so on. After specialising for a year with a view to becoming real scientists, they offer themselves for a detailed examination on their subjects, and take the degree of "magister". The dignity of Doctor of Agrarian Sciences is conferred only on students who continue their studies and write an original thesis constituting, according to the regulations, a real contribution to scientific knowledge.

In addition to the advanced schools of agriculture, the Institute of Poulawy is in course of reorganisation; it has not yet been decided, however, whether this perfectly equipped laboratory shall be utilised for purely theoretical and scientific purposes, or whether it shall serve for the practical education of professional agriculturists, like the Dublany and Bydgoszcz institutes.

All the advanced schools are under the Ministry of Public Instruction, and enjoy large government grants.