

are given instruction, must be of a manual nature, principally in hand weaving and needlework. The hand weaving most successfully taught in these grades is the making of baskets and coir mats for boys; and hats, mats, and mat products for boys and girls. The needlework that can best be taught girls, is elementary lace of various kinds, and simple embroidery.

It is essential that as much of the work as possible be taught in the second and third years of schools. The first year, which includes about 268,000 pupils, cannot be seriously considered, since the youth of the children and the short time spent in school, precludes the possibility of teaching many of them enough to be of any commercial value. The same is true, to some extent, of the 115,000 who are enrolled in the second year; although the fact that the industrial grade of a child does not depend upon the length of time he is in school, but upon his size and ability to do industrial work, makes it possible to give commercial training of value to a number of pupils of the second year. But the daily program must be so arranged that all pupils take industrial work at the same period, so that they can be divided into industrial, instead of academic grades.

Pupils who stay in school for three or four years can be fairly well trained to make a living upon leaving school, or at least, to add materially to the family income. Not much can be done in less than three years. Many parents are satisfied with the academic work of a child as soon as it learns to read and write, which it does in about two years; but at present parents do not begin to understand the value of industrial instruction before the child has had two or three years of training.

In order to keep pupils in school for three years, it will be necessary so to arrange the courses of study in industrial work as to give the maximum of instruction in the first and second grades, the object being to secure practical results sufficient to induce parents to keep their children in school longer than they have been doing in past years.

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#### TEGALGONDO—A JAVANESE AGRICULTURAL SCHOOL.

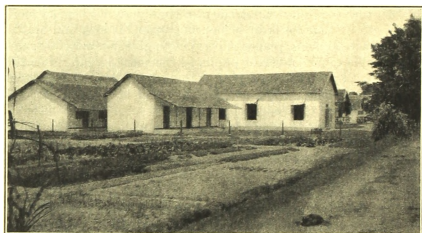
By ERNEST H. HESPELT, Department Industrial Supervisor, Mindanao and Sulu.

Java is, without doubt, the most intensively cultivated island in the tropics. Yet previous to 1912 there was no such thing as agricultural instruction for the natives. After almost a hundred years of uninterrupted Dutch rule the work of enlightening the vast majority of its thirty million people, who are mostly

tillers of the soil, has just commenced. It has been begun in much the same manner as the task was undertaken in the Philippines—by the establishment of elementary agricultural schools aiming to train teachers who will spread the propaganda for agricultural betterment.

At present some ten district agricultural schools have been established in various localities on the island. Two of these are located in the residency of Djokjakarta but the largest and best equipped one is at Tegalgondo in the residency of Soerakarta.

At the latter place one finds an imposing group of five buildings consisting of a recitation hall, a teacher's cottage, a dormitory, a museum, and a storehouse, in addition to accessory



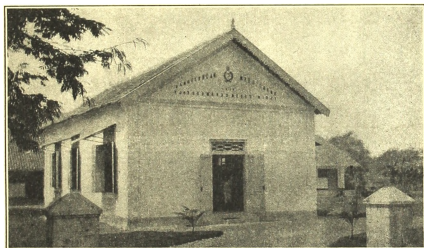
General view of the Tegalgondo buildings with part of the vegetable garden. From right to left are seen the teacher's cottage, recitation hall, museum, storehouse (only top of roof visible), and a portion of the dormitory.

structures. All are constructed of brick, with tile roofs, and are neatly whitewashed both inside and out. The dormitory consists of a row of small rooms each three meters by four meters in size and very simply furnished with a low bamboo cot and a sleeping mat.

The school was erected in 1914 by the Soenan of Soerakarta or Sulu, as the residency is locally known, at a cost of F1 17,000 (P13,600) and it is maintained entirely by him. He has set aside approximately 10 bouws (7 hectares) of land surrounding the school as a site, and he grants each pupil a monthly allowance of 7½ guilders (P6) for subsistence.

The course is of two years' duration and comprises field work, nature study and plant life, mensuration, animal husbandry,

elementary physics and chemistry, cooperative institutions, and elementary banking. The greatest emphasis is placed upon the field work. Each boy spends daily from 6 o'clock in the morning till noon, with a recess hour at 9, in the cultivation of his plots. In these he must cultivate 100 square meters planted to such vegetable as onions, purslane, beets, celery, pechay, and eggplant, and 400 square meters of field crops including rice, sweet potatoes, cassava, peanuts, beans, and corn. All the field work is done by hand, since the school possesses no work animals. The product is sold, and the proceeds are divided into three parts, one of which goes to the boy, one to the Soenan, and the other to the school.

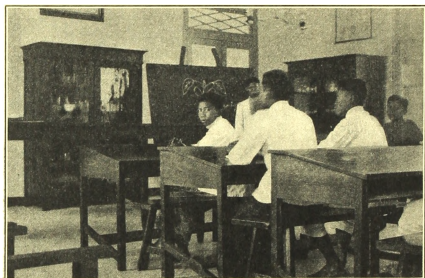


The recitation hall.

Recitations are held about twice a week in each subject, generally in the afternoon between the hours of 3 and 5. All instruction is given in Javanese. Due to the fact that the work is still in its infancy no textbooks are yet in use. Hectographed sheets, printed in the native dialect are supplemented by oral directions which are copied into notebooks. As the sheets and the notes become sufficiently complete and prove desirable for the course, they are put into pamphlets which are to form the nucleus of the future text.

Tegalondo is in charge of a native teacher who has studied in Holland. This is, however, an exceptional case. It is planned to place similar schools in charge of teachers who have completed a three-year agricultural course given at the Tjikenmenh Agricultural School near Buitenzorg. The entrance salary for these teachers is usually about 100 guilders (P80) monthly.

Though the school was planned for only thirty boys, the number at present maintained is thirty-four. Half of these are selected each year from among three to four hundred applicants who must be at least 16 years of age, and who must have completed the course in a second-class native school. This preparation is the equivalent of the four-year primary course in the Philippine public schools, without the industrial instruction. Upon their graduation from Tegalondo the most promising boys are selected as teachers for "dessa" or village agricultural courses, with an entrance salary of about 20 guilders (₣16) monthly. In these courses they are given charge of about thirty



A classroom in the Tegalondo recitation hall.

selected boys who have completed the work of the second-class native school, and who were enrolled for two-years' work in gardening prior to their entering the agricultural schools. In addition to their duties as teachers, the graduates act as members of local native agricultural boards through which the people are advised as to the best season for planting, the best varieties of seed, the proper selection of seed and the rotation of crops. They also assist in establishing coöperative agricultural societies and coöperative village banks.

Administratively the school is in charge of the Dutch agricultural teacher, "Landbouwleeraar," whose position, to a certain degree, is comparable to that of the supervising teacher in the Philippines. His work is largely of a supervisory nature

and is under the control of the bureau of agriculture. He is in no way connected with the bureau of education but is directly responsible for the work of the agricultural schools, whose courses he plans. He selects all the pupils for these schools as well as the boys who are to take the *desa* or village gardening course. He conducts teachers' meetings and must acquaint himself thoroughly with local conditions as he chooses the majority of the members of the local agricultural boards, whose adviser he is. He directs the founding of the local agricultural cooperative societies and cooperative village banks. Since his work necessitates a great deal of traveling he is required to provide



Some of the boys in front of their dormitory.

himself with a motor car for the maintenance of which he is allowed a liberal mileage.

In Java there are, at present, about fifteen regularly appointed agricultural teachers and as many assistants. Each one has charge of the work in one, and sometimes in two, residencies. The appointments are made only after a definite course of training has been completed. This begins in Holland where the teacher must spend three or four years at Wageningen where he is thoroughly grounded in the theory of the fundamentals of tropical agriculture and in the Malay language. He is then sent to Java as assistant to some regular agricultural teacher with an entrance salary of Fl 250 (₹200) per month. When he has served in this capacity for about eighteen months he is required to pass an oral and written examination in the use of Malay and one of the local dialects, Javanese, Madoerese, or Sun-

danese. Later, when he feels himself qualified, he may request the final examination in which his acquaintance with the local agricultural and agrarian conditions and his knowledge of tropical agriculture, are put to a severe test. If he passes this examination, he is usually appointed agricultural teacher with an entrance salary of Fl 500 (₱400) per month. He is usually stationed in one locality for long periods of time. At the end of each five years of service he is entitled to a leave of absence with pay, and at the expiration of twenty years of service he is retired with an annual pension of one third of his last salary which should amount to about Fl 800 to 1,000 (₱640 to ₱800) per month.

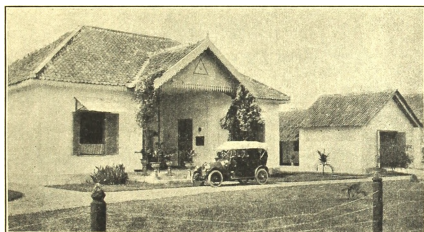


The dormitory.

The teachers of the residencies of Soerakarta and Djokjakarta are considered more fortunate than the others, since, due to the fact that their schools are supported respectively by the Soenan and the Sultan, their appropriations are much more liberal than those of other residencies in which the Dutch government exercises full control.

One of the aims sought for the agricultural schools is to have them serve as plant-breeding centers whose work shall be spread through the agency of the *desa* or village gardening courses; but each one has its separate mission. In order to understand that of Tegalondo, one must appreciate the fact that native princes, known respectively as the Soenan and the Sultan, nominally exercise full control over the rich sugar and tobacco producing residencies of Soerakarta and Djokjakarta. In times

past these princes leased out large tracts of land to sugar and tobacco companies for terms of seventy-five years. Since the people as loyal subjects to the princes could not leave the land, they soon became peons on the vast sugar and tobacco estates and fell into the condition of abject poverty which these industries seem to bring in their train. While the leases are still in force the present generation will, doubtless, remain in peonage but through the schools it is hoped to emancipate the people from this condition when the present leases run out. By that time it is expected that the people will either be independent farmers, planting what they will—since they are now prohibited from planting sugar cane or other crops grown by the companies—or



The teacher's cottage.

that they will be trained and intelligent enough to participate in the profits on a cooperative basis.

Though the work has just begun it has already shown itself productive of gratifying results, and has become popular with the natives. The spirit in which they have taken advantage of the opportunities granted them augurs well for a rapid development, and much is expected from the new movement for native agricultural education.

#### THE MORO GIRLS' DORMITORY.

By EGERT M. SMYER, Division Superintendent, Jolo.

The Moro Girls' Dormitory at Jolo, Sulu, was opened on August 29, 1916, shortly after the departure of Mr. J. V. Crowe, during whose superintendency most of the work preliminary