AGRICULTURAL INSTRUCTION IN THE PRIMARY GRADES.

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Gardening is at once the most practical and popular of industrial courses assigned to boys of the primary grades. It is the most practical because 70 per cent of the people of the Philippines depend upon agriculture for a livelihood; the most popular because there exists the hope that the schools will train boys to become farmers whose remuneration will be greater than that of the Philippine farmers of today.

The farm schools of intermediate grades together with the intermediate schools giving gardening in the sixth grade are producing highly satisfactory results. Boys taking these courses are being equipped to become successful farmers. The number of intermediate graduates, however, who go back to the farm is comparatively small, too small in fact greatly to influence the haphazard methods now used on the farm. Higher education, or positions with moderate salaries, appeal to these graduates more than does the farm.

Yet the farm schools do have a strong influence in their vicinities. The methods used by the schools are adopted; more modern machinery is in operation; hills of corn are more carefully spaced, more attention is given to seed selection, improved methods of planting and of harvesting are adopted, and the land is more carefully cultivated. In fact, on such farms a rivalry appears to exist among the farmers themselves to outdo one another in thrift. Actual demonstration work in each farming community is the most effective way to reach and teach the great body of Philippine farmers. Any other method will be slow.

The Bureau of Education, with its central and barrio schools in every agricultural community, is the only organization available for demonstration work on as large a scale as is desirable. It has been found that the influence of a successful school farm or garden does not extend beyond a very limited radius. From planting time till harvest farmers must frequently observe and inspect the crops near their own before they adopt the methods demonstrated to be superior. Moreover, the personal influence of the teacher is very necessary.

Should the primary schools undertake this agricultural dem-

onstration work on a much larger scale than at present, it would be advisable to limit the industrial courses regularly assigned as work for boys. United effort with one object in view would be necessary. The boys of all four grades in a small barrio school, or of two or more grades in the larger primary schools, could be assigned to this work, as conditions warrant. In fact, the primary farm schools, so successful among the non-Christian people, would prove of great value in a large number of Christian communities. Such schools could be established only where a considerable area of fertile land is available—one hectare or more to each class of forty boys.

A course in gardening for primary boys, which would include the cultivation of plots of field crops, would fill the needs in many schools today and would require but little more additional land. Such a course should be patterned very closely after the course in gardening now authorized in intermediate schools. In most barrios land is available for rent or purchase at very reasonable rates. The 1 by 4 meter individual vegetable plots could be continued and there could be added several fields of 100 to 200 square meters each for staple farm crops, an orchard, and a nurserv.

Fields of corn grown from selected seed, and properly spaced and cultivated, could supply seed corn for the farmers of the neighborhood, and would surely increase the next year's harvest. The Philippine farmer is too busy with his fields of staple crops to consider seriously the introduction of additional varieties of garden vegetables. But his loyalty and coöperation would be assured if the primary school, the only one which he knows and calls his own, would adopt the one industrial course aimed to increase and build up his farm rather than to change it into a truck garden.

In such schools as have land available primary gardening is, as a rule, assigned to only part of the pupils of Grades III and IV. In some places, the boys of Grade II, and in a very few schools the boys of Grade, i, either assist those of the higher grades, or take the regular course. In the larger central schools the classes are of sufficient size to warrant the assignment of one teacher to no industrial subject but gardening. In most of these schools, perhaps, there would not be land available for more than one or two grades to take gardening, and for the larger towns, the establishment of home industries would be more practicable. In such schools, however, the sons of local farmers should be selected for assignment to the gardening course.

In small barrio schools, conditions are entirely different. In

a one-teacher school, it is quite impossible properly to instruct from one to four grades of boys and girls in several industrial courses all at one time. The teachers find themselves unable to instruct girls in plain sewing and embroidery. Grade I boys in hand weaving. Grade II boys in basketry, perhaps, and at the same time to supervise the class of Grades III and IV boys at garden work. The only remedy for such a condition is the elimination of courses, and the problem will be greatly simplified and better results will be obtained by assigning all the boys to gardening. With such specialization it would be possible to obtain trained instructors for teaching this subject. Graduates of provincial and other farm schools would be available for appointment. Institute and vacation-assembly training would add to their efficiency. The difficulty of obtaining municipal teachers qualified to teach several courses of industrial work would then he largely avoided.

Continuity in the assignment of industrial work in the primary grades is as important as in higher grades. By modifying the primary course in gardening to make it more like the intermediate course, gardening could be taken by boys during the entire four years of the primary course. The objection may be offered that first-grade boys are too small for this kind of work, but a visit to the farm homes will show that they do a considerable amount of farm work. In rice harvest it has been observed that these boys often are kept from school to assist on the farm while their brothers in Grade III remain in school. The fence building and the plowing may be done by the larger boys of the school. Even in this work the smaller boys will be of assistance. In field work, with light tools, there is much that they can do. A 6-year-old boy will take as great an interest in a 4-meter plot as an older boy will. In the various grades, the nature of assignments may be changed. For instance, second-grade boys may be assigned to field work, and those of the third grade to the orchard and nursery, and to such experimental work as fertilizing plots.

It is highly important that arrangements be made to provide for the care of gardens and field plots during vacations. Much labor is lost through destruction of plants and fences during these periods. Much more than the vacation time is lost, for the work of the preceding year must be begun over again. Crops not matured are often not made use of. At least one teacher should remain on duty during vacation periods. The gardens must be permanent to be of the greatest value.