## ZAMORANO Learning by Doing

Director's Newsletter Simon E. Malo

2–1988

**Escuela Agrícola Panamericana** P.O. Box 93 Tegucigalpa, Honduras

ESCUELA AGRICOLA PANAMERICANA - Teaching today's youth to feed tomorrow's world



## DIRECTOR'S MESSAGE

Escuela Agricola Panamericana (EAP) is one of the oldest institutions for agricultural education in Central America. In Honduras, it is ten years older than Escuela Nacional de Agricultura (ENA) in Catacamas, which was started with EAP's advice and with professors from EAP. From its very beginning, the Ministry of Agriculture in Tegucigalpa operated with the earliest Zamorano graduates, because its first Minister, Ing. Benjamin Membreño depended on the technical advice of EAP's director and faculty.

Forty six years have passed since Zamorano's foundation. The Latin American population has increased enormously during this period, and its food requirements have multiplied at an even larger rate. Taking this into account, 10 years ago we started to develop new goals for the preparation of "agrónomos". The staggering expansion modern science of requires today's agriculturalist to acquire knowledge of all technical and economic aspects, to become more aware of the facts of rural sociology, and to "reach, motivate and influence" the campesino mind. Studies in outreach our programs have

shown that campesinos (small farmers) benefit with the same "Learning-by-Doing" system that has proven so successful in our traditional teaching programs. The W. K. Kellogg Rural Development Center is one of the results of our preliminary work in "rural improvement."

EAP's achievements in this field started more than six years ago, through our Integrated Pest Management in Honduras (IPMH) project. IPMH's main task is to develop and disseminate methods of biological control of pests of basic crops such as bean and corn, that can be applied by campesinos; our scientists also social do research on how best to contact and teach rural people. Results have been surprising, showing that traditional extension methods are costly and, many times, ineffective. Our newer Rural Development Project is a more organized and systematic approach to the core of the problem: How to create and take advantage of innovative attitudes in the campesino, so that he will solve his own problems, with his own resources and in his own property, but using appropriate technology.

EAP modernizing is and expanding. We have added a 4th vear for selected graduates the three-year program from who want more experience in research, they can specialize in Animal Husbandry, Plant Science Agricultural Ecoor nomics. Our first graduation of "Ingenieros Agrónomos", in April 1988. showed the program has a great potential for developing new agricultural knowledge through student conducted research. The 52



EAP's apiculturists have adapted to the invasion of the African bee

theses of the first graduates are proof of the value of research and of the enormous impact that it can have on the economy of Honduras and of the entire region.

Another project of great importance for Central America and the American tropics is the creation of an "International Seed and Grain Science Center" at Zamorano, with the active collaboration of the Kansas and Mississippi State Universities. two world-leading institutions in the technology of seed and grain. Construction has started on the building, at a cost of half a million dollars, donated by American Schools and Hospitals Abroad (ASHA), a division of USAID in Washington, D. C. The Center will offer regular classes and special training for workers, students, extension campesinos or for any person interested in producing seed of good guality for the small farmer, or achieving optimum

grain preservation after harvest.

## FROM THE DEAN'S OFFICE

## Fourth Year Program

The intensive four-year "Ingenieros program produces Agrónomos" with a solid science foundation, and with a practical orientation, which is a product EAP's characteristic of philosophy of "Learning-by-Doing." Our graduates are capable of facing and solving most problems of agricultural develproduction and rural opment in Tropical America.

The new "Zamorano" is prepared to undertake field research and the evaluations and analysis that it requires. However, he will be basically a producer of crops and livestock, not only as primary foodstuffs



Male and female students perform the same type of field work

but as sources of agroindustrial material. Also, he will be able to participate in development projects by contributing to the design and execution of his country's agrarian programs and projects.

Our graduates obtain skills, knowledge and attitudes such as:

Everything Knowledge. conwith nected farming: ecosystems, human community and economic potential. They learn plant protection and aspects pertaining to animal and plant production, the handling and industrialization of such products; plus the understanding of practices that favor and improve yields. Knowledge is the basic acquired about sciences relating to their profession, particularly in areas of sociology, economy and administration. Their formation is complemented by disciplines such as writing and communications. Their education includes a strong command of English and technical writing. Our graduates develop study habits and a special aptitude for observation and research.

Practical experience. Science laboratories, field work, independent production programs, and research performed under guidance teach students to face practical challenges. Zamorano's eduexperience cation imparts in hillside cropping and the incorporation of marginal lands to production, as well as the operation of machinery and equipment best adapted to the task.

Attitude. Our educational selfphilosophy promotes a confident professional. who believes changes are possible if one is determined. He possesses positive traits. such as punctuality, dependability and respect of efficiency. EAP helps him find his strengths, which emerge during the mental and physical demands of our rigorous education.

differentiation. Third-Profile year students start taking elective classes, orienting themselves to their preferred field of interest. Fourth-year students choose an individual research project in one of three research, production aspects: or extension. Major fields are: 1) Plant Science (Agronomy, Horticulture or Plant Protection); 2) Animal Husbandry; 3) Agricultural Economics and Agribusiness, and 4) Rural Development and Communications. This specialization complements the career of the Ingeniero Agrónomo and produces variation in their profile according to interests and capabilities.

This education consists of 12 academic periods of 15 weeks each, resulting in 45 months of study. Zamorano students must work nine daily hours of lectures or supervised field laboratory to fulfil requirements. The following table shows the preparation Zamorano confers its graduates.



" <b>Agrónomo'' Program</b> <u>(Períods 1-9)</u> Basic Science Technical Courses					
Basic Science Technical Courses					
Technical Courses	22				76
	26				74
Elective Technical Courses	6				18
Sub-Total	54	45 45			213
" Ingeniero Agrónomo" Pro (Periods 10-12)	gram	æ 1	· ·		*
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