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P R O F I L E

ESCUELA AGRICOLA PANAMERICANA

OCTOBER 1982

PROFILE OF ESCUELA AGRICOLA PANAMERICANA

History

The Escuela Agrícola Panamericana was founded in 1941 by Mr. Samuel Zemurray, then President of the United Fruit Company in Boston, in a bold step to address some of the myriad problems facing agriculture in tropical America. Among the problems that he saw were: low productivity per man per acre; continual reliance on traditional methods; and loss of arable land through improper irrigation and denuding of entire forests without replanting. He saw clearly that, with a rapidly increasing population, such problems could only worsen.

With the help of Dr. Wilson Popenoe (who served as Director of the School for its first ~~10~~¹⁵ years), this vision of an institution dedicated to the education of field-trained, practical agronomists was finally realized in the Zamorano Valley, approximately 25 miles southeast of Tegucigalpa in central Honduras. Organized as a Delaware corporation (and recognized as a tax-exempt educational institution), the School was authorized to operate in Honduras by the Congress of the Republic as a private, international entity. It was given land and an initial endowment by the United Fruit Company. Its charter was directed towards native-born citizens of Spanish-speaking tropical American countries. Since its opening, approximately 2,000 gra-

duates, or "Zamoranos" as they are commonly called, have completed the Escuela's program and become significant contributors to agricultural production and know-how throughout Latin America.

The basic instructional philosophy of the Zamorano program has been "learning by doing." Currently the student body is comprised of approximately 420 Latin American young men and women representing over 19 countries. Since its founding, the Escuela has endeavored to foster educational opportunities for young Latin Americans of all socioeconomic backgrounds; Admission is by competitive examination, with approximately 5 applicants for each student accepted. In the early life of the School, admission was permitted with a 8th grade education. In 1959, admission standards were raised to require a high school diploma or equivalent. Since 1980, girls have been admitted as well as boys.

Program

The Zamorano program consists of a 3-year curriculum with each scholastic year extending for 11 months. Therefore, the only period of the year during which the Escuela is not in full operation is between graduation in early December and the admission of new students during the second week in January.

Zamorano adheres to a rigorous academic standard and includes substantial amounts of daily field instruction -- all in all, a well-balanced program of "learning by doing."

The first year curriculum includes courses in horticulture, vegetable and fruit production, and bee keeping as well as soil management and irrigation in addition to a core curriculum of biology, math and English. The second year of study includes coursework in plant pathology, farm machinery, forestry and field crop production. The core educational curriculum in the second year is extended to include chemistry and physics as well as math and English. The third year curriculum adds special work in animal husbandry.

A typical week for students consists of 24 hours of hands-on field instruction in addition to 20 hours of classroom and laboratory study. Students and faculty live on the 5,000 acres campus and enjoy a low student-faculty ratio of approximately 12 to 1.

A central goal of the Zamorano program since its founding has been the development of skilled production agronomists with a strong background in entomology, botany, plant pathology, horticulture and livestock sciences who, as professionals, would have a strong influence on the production of food in their native environments. In this manner, the impact of each individual

Zamorano graduate is multiplied several-fold by their influence on others in their own countries. Graduate achievements testify to the extent to which this goal has been achieved. Of the more than 2,000 graduates, almost all are engaged in agriculture or service to agriculture in business, government, or education throughout Latin America. More than 50% are in government service in strategic positions. This includes several national Directors General and Ministers of Agriculture, and several Deans and Directors of agricultural schools who, through these institutions, have had a considerable impact on agricultural education throughout the region. About 20% of the graduates have gone on to achieve higher degrees. School records indicate that, among the graduates, there are more than 56 doctorates, 130 masters degrees, 220 bachelor of arts degrees and 20 medical degrees in veterinary medicine.

Funding and Current Operating Needs

In its early years, the Escuela managed to keep within the restraints of its budget by virtue of its endowment income and continuing support from the United Fruit Company. Inevitably, increasing costs of education, food and shelter have made it necessary to seek financial support on a broader basis. Over recent years, the Escuela has been actively seeking contributions from both the public and private sectors, from business and

industry, and from individuals and foundations in both Central and Latin America and the United States.

The Republic of Honduras, as host country, has not only cooperated with the Escuela administration but has also given scholarship support. So has the Dominican Republic. Through the German Embassy, assistance has been given to the Forestry Department of the Escuela and many scholarships donated to needy students. The U.S./AID program has strengthened the Escuela's ability to continue an effective program by providing not only badly needed additions to the physical plant, but basic scholarship support as well. United Brands Company has been consistently supportive of EAP. Other corporate contributors over the years have included Exxon, Texaco, Shell, Castle & Cooke, Inc., Monsanto, I.B.M., Gillette Co., W.R. Grace, Kimberly Clark, Citibank, Banco de Bogota, Banco de la Republica in Bogota, Del Monte, Diamond Shamrock, First National Bank of Boston, and many others.

The Rockefeller Foundation has provided expertise and insight in evaluating the Escuela's role over the years and in helping to ensure that the quality remains high. Both the Lilly Foundation and the Tinker Foundation have helped in different ways.

The cost of student education at the Escuela is approximately \$7,600 per year including tuition, room and board, clothing,

medical and dental costs, and all the education. The School's scholarships permit economically disadvantaged youths to benefit from its exceptional educational program. However, the Escuela is faced with a widening deficit between the rising costs of education and its income from its endowment plus other unrestricted revenue. The continuation of the Escuela Agricola Panamericana program and its uninterrupted tradition of excellence in agricultural education throughout the Americas is dependent upon a broadening of the base of support from those who have learned or are learning that quality agronomic programs are essential to the vitality of developing nations.

Contributions by companies or entities in the United States are deductible for purposes of taxation in the USA.



ESCUELA AGRICOLA PANAMERICANA
APARTADO 93
TEGUCIGALPA, HONDURAS

Apartado Postal 432
Guatemala
Tel: 65796

TO: Trustees of Escuela Agrícola Panamericana—
FROM: John G. Smith, Chairman of the Board—
DATE: July 27, 1981

At a meeting of the Executive Committee, early this month I was able to assure those present about progress at the school. I now wish to discuss this same topic with all Board members.

Dr. Simon Malo is now half way through his third year as Director of the school and is making his influence felt. He has filled important staff positions which had been vacant too long, he has obtained the support of the graduates of the school, he has tightened up administration and has done some useful fund raising.

Dr. Jorge Roman the new Dean has got a good hold on the educational functions of the school and is helping in the livestock department. Sr. Mariano Jiménez, appointed this month as Business Manager, shows definite promise of pulling together the management side of the school's affairs. We should remember that as part of the process of teaching agriculture we are in fact involved in a complex agribusiness operation, which cannot be entirely managed by the teaching staff on a part-time basis. Sr. Jiménez, is a graduate of INCAE (Central América Business School) and is also a graduate of Zamorano as is Dr. Roman. Mr. Monte Dixon as Comptroller is the fourth staff member whose appointment is approved by the Board. Mr. Dixon has been at the school for a long time. He is a faithful and valuable member of the senior staff, who on many occasions has successfully managed the school almost single handed.

Other important staff positions have also been filled by Dr. Malo, so I now feel that we have an organization which is running well and is prepared to tackle any new projects which the Board may approve.

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Memorandum
7/27/81

There has been a well reasoned feeling on the Board since I have been a member (which admittedly has not been for very long) that we should hold back on new projects, so as not to overload a weak administration. I feel that we are over this stage now and should be seriously studying new fields into which the school can move.

We can be justifiably proud of having produced nearly 2000 graduates in the life of the school, most of whom have created an impact in the communities to which they have returned. The graduates of the class of 1981 will undoubtedly be superior to those of the first class of 1946 and the graduates of 1991 must be even better prepared than those of 1981. This I feel is the main function of the Board. To keep the school moving forward into new areas to ensure that we produce ever better graduates and provide other assistance to the communities which we serve. We must keep ahead of the rate of progress in a rapidly developing part of the world.

Let us not delude ourselves that all is perfect. We have a heap of educational, financial and political problems to solve at this moment and many more ahead of us; but we have a team at the school which can and will solve these problems and keep us heading in the right direction.

If I am confident about the functioning of the school I am somewhat less confident about the operation of the Board as a decision-making entity. Our members come from diverse backgrounds, which is as it should be, but they are also widely dispersed geographically which makes communication difficult. Recently, one of the Trustees has questioned and registered protests about various decisions of the Board and the Executive Committee, especially in connection with the management of the endowment fund. Steps have been taken to investigate charges and make any corrections which the Board considers necessary. I feel that a lack of communication between Board members is part of the cause of this type of trouble.

There is always a tendency to resist change rather than make the extra effort necessary to examine and improve existing practices or make new policy decisions. Positive action requires active cooperation and initiative by all Trustees.

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Memorandum
7/27/81

It is also important for Trustees to be well acquainted with the functioning of the school. I therefore encourage you all to visit the school as often as possible. Director Malo is always ready to discuss all phases of the school's operations with Trustees. I myself visit the school several times a year and will always try to coordinate my visits with those of other Trustees if you will advise me of your plans.

Our school is in good shape. Simon Malo and his staff need and deserve support from the Board and clear instructions on future policy.

At the suggestion of certain Trustees the November Board meeting will probably be relocated from the school to some part of the U.S.A. You will receive official notification of this in due course.

Dr. Wayne Rantz,

*Report on present conditions
by A.S. Muller*

INTRODUCTION

The following is a review of EAP operations, relating to curriculum, grading, departments, superintendency, and buildings and grounds, which has been prepared to provide background information for the incoming Director. Its purpose is to help him get off to a good start. It does not aim to find fault with particular persons. It does, however, indicate that a number of operational improvements should be made to bring the EAP more in line with the policies of the Board of Trustees.

CURRICULUM

From 1973 through 1976 a brief description of all courses taught was prepared well before the beginning of each year, accompanying the distribution or position of the courses for each of the nine trimestres. In 1975 and 1976 both required and elective courses were included. This was not done for 1977 and 1978 and should be done for 1979.

In 1976 and 1977 a complete description of all courses was added, specifying course content in detail, along with descriptions of field practice modules, but this was not done in 1978. This should be done for 1979. The schedule of courses for given trimestres in the last two years was not posted until just prior to a trimestre. For the third trimestre of 1978, the schedule for the third trimestre was posted two days before classes without the Director having seen it or authorized it as satisfactory. Two courses, formerly electives, had been changed to required and it is questionable whether they should have been offered as electives. During the last few years there have been several changes from required to elective and vice versa without a thorough study to first determine how that affected the overall educational programs of the School.

Between 1973 and 1978 the number of required courses increased from 44 to 53, and from 1975 to 1976 the elective courses increased from 11 to 13. In 1978 the number of elective courses offered, but not all given, reached 23, way out of line. Some of the elective courses have been taught by competent experts from Honduras and international agencies and banks without budget charges, others by staff members. It could be that some of the staff were able to add electives or required courses so that their teaching loads could reach the 2 or 3 courses per year which would be normal for regular teachers.

In view of the present financial situation and for other reasons a careful review of the curriculum should be made on matters such as the excessive number of courses and the inclusion of some of these in courses already existing to prevent duplication.

GRADING

For 15 years grading students followed fairly well the normal curve. There was some deviation in grading 3rd year students who have become a more capable group, most of the poorer students who had failed, having been eliminated after the first and second years. It is not unexpected that a higher percentage of 3rd year students would receive high grades in comparison with the results of the first and second year groups.

The results of grading in 1977 and 1978 for the first and second trimesters have been carefully examined and they are way out of line. For 44 courses given, involving 3356 students, there were in the highest category (A and B) 2213 students, whereas normal curve expectancy would be nearer 712. In 1977 there were 1293 A and B given, with 10 out of 27 teachers giving 658 of these, and 17 teachers giving 636. In 1978, A and B amounted to 1143.

In the C category there were 1001 students in 1977 and 1978, whereas by the normal curve the number expected would be 1424 or much more. In the lowest category, D and F there were 534 with a normal curve expectancy of 712 or less.

In 1977, of 31 teachers 8 gave 192 students D and F with 23 teachers giving no F. In 1978, of 28 teachers 19 gave 342 students D and F and 9 teachers gave no F.

It was obvious that too many teachers, 15 out of 27, had not taken into consideration normal curve expectancy with respect to A and B grades. There were 20 out of 31 teachers giving a more or less reasonable number of C, but 11 teachers were completely out of line, giving an extremely small number. In 1978 there were 12 out of 28 teachers who gave less than the normal curve expectancy for D and F, while 5 gave no F, 9 gave an excessive number of D, and 5 an unreasonable number of F.

DEPARTMENTS AND DIVISIONS

Plant Sciences

Following the arrival of the new Head of the Plant Sciences Department a reorganization of the divisions and sections is being worked out which will greatly enhance all operations and teaching. Those in charge of the divisions of both Agronomy and Horticulture will have offices adjacent to the office of the Department Head in the Agronomy building where a few space alterations can be made at a small cost. The Director will receive a written project shortly.

Agronomy Division

Prospects for a very good agricultural year are bright with bumper crops of beans and sorghum at Rapaco and all crops at Zamorano. This year rainfall was more than adequate, contrary to the drought of last year which was disastrous for crops. Measures are being taken to reduce drying and storage problems of surplus grains. The bad condition of several old silos is being remedied and a new storage silo is on order. Sales of surplus grain will begin right away, but, as usual, on account of late harvests income from some sales will be credited in 1979, not 1978.

Horticulture Division

There are three sections in this division with a person in charge of vegetable production, a second in fruit production who handles beekeeping also, and a third in plant propagation, handling also the distribution and sale of all surplus products, including ornamentals. All are needed because the vegetable area is estimated at 16 Has, and the fruit area 24 Has.

The seedbeds and nurseries are fine and the two greenhouses are used effectively. Two new nurseries are being established, also, near the horticultural building so that plant propagation will not have to be done in the distant vegetable area.

There are extensive new plantings of avocado, papaya and grapes, the cost of the last named being subsidized and under supervision of a donor of the plant material. The old plantings of 12 varieties of coffee will give an exceptionally fine crop this year and production comparisons are being made.

A new planting of 13 varieties, including a rust tolerant variety, planted 2 years ago shows great promise. The older citrus plantings of 31 varieties look good. There are also 51 varieties of mango, 10 varieties of papaya, 21 varieties of avocado and 4 varieties of banana.

Two new small ponds for irrigation water have been constructed in the vegetable area. A field of 1 Ha. of potatoes, using Honduran criollo seed, and well managed, will yield an extraordinary crop, despite summer planting which is unusual for this valley, where winter planting is customary because of disease problems. A new sweet corn variety from Hawaii has given excellent results.

A problem with respect to the roadside sales unit has arisen from a division proposal to, either greatly expand the present unit or construct a costly new one with refrigeration which would doubtfully pay for its high cost, estimated at least \$20,000. Too much emphasis on sales is not a school policy.

All equipment for a food processing unit has arrived or is on the way. The division head wants this unit to be built away and outside of the horticultural building. When this building was designed and constructed, 146 sq. m. of it were planned for use by a food processing unit. The cost of a new building is estimated at over \$30,000. The food processing unit was never authorized to be a large commercial enterprise for sales income purposes.

Animal Sciences

There are five important sections for efficient operation of this department with a person in charge of the dairy herd and stable, one for the dairy plant, and one for swine and poultry production. The head of the department

is in charge of the beef cattle. The veterinarian is in charge of the slaughterhouse operations.

Monthly budget expenditures have been reduced. Descriptive lists of 55 head of beef cattle have been prepared and distributed to potential buyers. More than 200 head of beef cattle are being pastured at Rapaco where existing pastures look fine this year. More beef cattle should be sent there. New pastures are being planted at Rapaco with Star grass, which does well there. At Zamorano there are 32 fenced pastures, occupying 240 Has. By eliminating some of them, these could be planted to grains needed by the department or to other agronomic crops. Not all trench silos are being filled this year, freshly chopped sugar cane being used for dairy cows instead of silage which is costly to prepare.

Dairy operations are satisfactory but a number of pieces of equipment should be replaced, particularly in the dairy plant, with available grant funds. Unreasonably, however, the person in charge of the plant visualizes not only greatly increased capacity for each piece of new equipment, but also a new large plant. He has proposed the purchase of just one piece with capacity of 2000 gal. in substitution of one having a 200 gal. capacity. That would cost \$25,000 delivered. A fair estimate for the cost of his project would be between \$70 and \$100,000 and it would involve running a large commercial operation, a costly herd increase and heavy feed costs, none of which are in line with school policy. It would be opposed by Honduran milk producers and subject to severe action by the IRS.

General Studies

For a number of years this department has been a catch-all for the academic activities not assigned to the other departments. For a few years the person in charge was Dean and later an Associate Director for Academics.

In 1978 neither position is occupied. The position of Dean would seem to be the one that should be filled as soon as possible, certainly not both under our present financial stress.

It would be logical that Soils, Irrigation and Drainage, Topography, Plant Pathology and Entomology be included in the Plant Sciences Department where laboratories are already functioning for these activities in the agronomy building to give better coordination with agronomic and horticultural operations under the new head of the Department.

At present there seems to be no capable person to replace the one in charge of the expensive photography unit which is costly to operate. It is questionable that he should be replaced until finances are better or real need is demonstrated.

In the Agricultural Economics section there are grant funds for having two, not one teacher, because there are a number of courses to be taught which at present are not given on a regular basis in some cases. The amount of work to be done outside of classes might even justify approval of the "Greenman" recommendation to create a department. A good Agricultural Extension specialist, formerly teaching this course here, could replace the Ministry teacher who comes once a week to give three successive classes. He is capable of teaching other courses.

Superintendence

On the departure of the Superintendent, G. Perez at the end of June, 1977, the Director authorized the Comptroller to reorganize operations with results which were of great benefit. After some weeks V. Narvaez, previously in the M. & S. section, took charge and his work has been as satisfactory as could be expected despite the fact that his work has included also, handling the many aspects of auxiliary enterprises. There seems

to be no real reason for re-instating Perez in that position, if and when he returns from leave-of-absence in July, 1979. He has already shown willingness to accept a different assignment. The Superintendent is a little behind in submitting reports but can catch up. The work being done by the man transferred to the M. & S. Section is satisfactory. Work done in the shops is better organized and under better control than previously.

Buildings and Grounds

The customary activities in these sectors have resulted in the usual good appearance everywhere in the School. Masonry and plumbing repairs are taken care of properly. However, it would appear that the expenditures involved are somewhat high and could be reduced. More supervision of the workers, in particular those caring for grounds would result in more work done per day and their number might be reduced a little.

Albert S. Muller

ASM/aml

17 September 1978

Excerpts of Commencement Speech, December 3, 1977

Agricultural Education

The Role of the Escuela Agricola Panamericana in Latin America

Simon E. Malo
University of Florida, IFAS
Agricultural Research and Education Center
Homestead, Florida 33031

I want to discuss with you the role that the Escuela Agricola Panamericana is playing in training Latin American students in agriculture. Speaking with first hand information of many institutions around the world, but particularly in the tropics, I know of no other training in such a unique atmosphere of strict discipline and "esprit de corps". There is no other agricultural school where so much training is crammed into a 33-month curriculum. There is no other agricultural school with such a multinational mixture of social and financial backgrounds, which in itself is an education to most students. There is no other school in Latin America with such a high budget in relation to the size of the student body. It should be pointed out that while being the best for agriculture training, the system of learning-by-doing is also by far the most expensive that any institution could have. The maintenance of elaborate indoor and outdoor laboratories and a complex, up-to-date and costly physical plant contrasts sharply with other sister institutions of Latin America, where the usual facilities provided are part-time teachers, some classrooms and blackboards.

In this age of esoteric space biology when agricultural students in most universities work only with wheat coleoptiles and pea embryos, and when they are no~~r~~ closer to cows and cornfields than ^{those in} western movies, Zamorano is one of the few, if not the only institution of higher learning that remains close to the fundamentals of food production. I can assure you that you have at this moment a more versatile and useful education than any average graduate

with a bachelor's degree from most American universities. Any one of you could, at this moment, run a diversified 100-hectare farm without much difficulty, since you have been exposed to and have actually performed with your hands perhaps 95% of the operations involved in a farm of this size. I would not want to lay odds that an average graduate from Cornell, Texas A & M, Monterrey, La Molina, Davis or Gainesville could do the same thing. Today, modern agricultural education is unfortunately leaning more and more away from basic concepts of production. In graduate training the situation is even worse. Plant breeders are quickly becoming geneticists, agronomists are changing into biometricians and horticulturists are nothing but plant physiologists. Certainly, we need all the basic sciences but who is going to produce the food for an overpopulated planet if every professional turns in this direction? Legions of university graduates have never learned how to grow plants, from germinating their seeds to bringing them to production. They have read books on how to do it but they have never actually done it themselves. Agricultural learning is absorbed into our brains only by doing things with our hands, moreover, you never forget anything that has been accomplished this way.

It is evident that the place of an EAP graduate is increasingly important in today's worldwide effort to attain food sufficiency. To my knowledge, no other agricultural education institution has contributed so much and in such short time, considering the number of graduates produced, to the welfare of Latin American countries. Wherever you see important agricultural operations, whether they are the production of roses, bananas, sugar, coffee, or cattle, you will find Zamoranos. They are in businesses such as chemicals, fertilizer, feeds, import-export and even banking. They are in administration, research, teaching and other institutional work. In all these fields they are very influential in promoting Zamorano's concepts of self-reliance and sufficiency and in expounding the philosophy of learning-by-doing. When this system of education was established in this isolated valley it was done with the idea that an agricultural

school does not have relevance and cannot endure if it is situated in the main plaza of the capital city. Zamorano is a response to the inadequacy of the essentially theoretical southern European system of agricultural education which, unfortunately, is still alive and well throughout Latin America.

As long as we recognize the impact of Zamorano's education in our countries, we must nourish its fundamental concepts, and if possible expand its possibilities which admittedly are limited at present by the number of graduates. However, we should not tamper with the basic format of its curriculum which has worked so well for so long. I don't see how the basic 3 years of this school, which form the basis of a solid foundation in the agricultural education of any professional, could be improved. It consists of the A, B, C's of any general agriculturist and lays the ground work for specialties to come. Four or more years of this curriculum would strain some of the fundamental components, and the school would become such an academic pressure cooker that some of its goals could become self-defeating. I am sure that the graduate of EAP will eventually need more technology and science than what 33 months can provide. However, this additional training should be taken in another environment, with different professors, and if possible, in a different language. I hope we have put to rest the laudable but misguided intentions of some to improve the school by adding one year to its curriculum. Most of these commendable ideas no doubt came from people who were never EAP students but who were motivated by the idea of granting an "improved" degree. I want to add one thing, and I hope those of you in the graduating class heed my words: the only things that count in a professional's life are his performance and his contributions. The fact that he has a PhD from Harvard or Stanford may help him get a good job, but it won't help him a bit to keep it if he does not perform well, either through incompetency or laziness.

As you probably know, Zamorano has had many imitators in its 36 years of existence. Numerous 3-year agricultural schools were started in many countries

particularly in the decade of the 1950's when educators and governments were just discovering the virtues of the learning-by-doing game. It appears to me very eloquent and significant that very few if any have remained the way they were conceived, most of them gradually slid into oblivion and disappeared for lack of funds or evolved into something different due to political pressures. They all found out very quickly the hard realities of cost and the political vulnerability of the learning-by-doing concept. This leads us to the question: What are the essential elements for the survival and the flourishing of the Zamorano concept? I suppose an agricultural education community is like any other biological system. Initially it needs a certain intrinsic critical mass and then continuity to grow up and mature into a productive unit. After that what are the indispensable components necessary to attain a desired degree of excellence? 1) Obviously it has to be completely isolated from local or hemispheric political convulsions and protected against taxpayer's pressures which could threaten its security and performance. 2) This brings us to the logical conclusion that in order to be viable and to endure it is desirable that an educational system such as Zamorano's be privately administered and financially independent. 3) The third requirement is an inescapable one and that is money. It takes a bundle to make the learning-by-doing concept work, and it should come preferably from an endowment. A large physical plant is needed both indoors and outdoors and its expensive equipment requires continuous maintenance and upkeep. 4) The fourth ingredient is people. Given security, independence and funds, capable personnel make the system work. Leadership and support are essential from a responsible Board of Trustees to a first rate administrative body and faculty, ending with good students chosen for their motivation and desire to work.

Most of the failures of Zamorano's aforementioned imitators can be traced directly to both lack of funds and political pressures. The two problems go hand in hand, but may not necessarily occur simultaneously. Thus, the first of many

forms of political pressure is to constrain the funding pipeline. The first to feel the pinch are the professors, especially the most competent ones who usually leave the institution, depriving it of its most important asset.

The only way to measure the effectiveness of the training in an agricultural institution is to analyze its impact on the welfare of the people it is supposed to favorably change. An indirect manner of accomplishing this is by examining what the graduates are doing. What is their combined worth politically, intellectually or monetarily? How many jobs are they providing, and how much food and fiber are being produced by their activities? What is their combined influence on their countries' destinies? An important aspect of an agricultural school worth investigating is how much change it has brought to peasants and small farmers. Have their lives been changed for the better as the result of newly introduced technology? On all these points, we have to give high grades to EAP and its graduates. Their influence has been particularly good at the grass roots level, showing small farmers how to work their land and how to obtain a decent profit from their efforts.

If we look around Latin America and examine other agricultural institutions objectively we will find there are pitifully few which are good or working efficiently, and if they are good today there is no assurance that even the best will continue to be so 5 years hence. I doubt that there is one institution which has not been the victim of politics, both the debilitating infighting type and normal government interference. This is terribly unfortunate for the more than 300 million people in Latin America whose need for an efficient agriculture and more food is becoming ever more critical. What are the crucial factors in the prosperity equation? Certainly one is the production of more and better trained technical people in the agricultural sciences. It has long been suspected that the best place to bring about social and agricultural transformations is at the lowest functional level of society. In most agricultural countries this is at the peasant

level; consequently, we have to direct our efforts toward this unfortunate group of people who have been ignored for so long by the city-oriented mentality of governments everywhere.

By the very nature of their training, Zamorano graduates are ideally qualified to participate and contribute to programs of rural renewal. If developed nations want to expand their markets by helping raise the standards of living of developing nations I would encourage them to analyze Zamorano's impact first. I am sure that this will result in the creation of more independent schools like this throughout the hemisphere.



ESCUELA AGRICOLA PANAMERICANA
TEGUCIGALPA, HONDURAS

18 January 1976

Dr. Hugh L. Popenoe
Chairman, Board of Trustees
Escuela Agrícola Panamericana
Center for Tropical Agriculture
2001 McCarty Hall
University of Florida
Gainesville, Florida 32611

Dear Hugh:

Since over a month has passed since graduation, I thought I would write and bring you up to date on the latest events.

Nothing much happened during the latter part of December, and practically all activities came to a halt throughout the country. Even the Honduran postal service was closed down for five days during the Christmas holidays. About five months ago, I sent a memorandum requiring all personnel, except those absolutely essential for maintenance and operations, to take their annual leave during school vacations. Since this was not formerly a common practice, the teaching schedule was often disrupted due to the professor's requesting their leave during the period when they were scheduled to give classes. Perhaps I overdid it a little because I left only one of our lower level secretaries on duty and she turned out to be inefficient in dealing with the Spanish correspondence and was incapable of typing a letter in English even after four attempts. Fortunately, Armando Medina has returned and we are getting things back in order.

Other than the above mentioned slight inconvenience, everything ran smoothly. Rodolfo Cojulón managed the Horticulture Division and made sure that the vegetable crops were planted and maintained in order to assure a constant flow of vegetables to meet School demands upon the return of the students. Roberto García took over the Agronomy Division and the harvesting of the field crops proceeded normally. Aurelio Revilla directed the Animal Husbandry Department. After assuring an adequate supply of dairy products for future consumption, the excess milk was sold in Tegucigalpa. An attack of piroplasmosis broke out among the

newly arrived heifers, but it was quickly brought under control, and the animals look as thrifty as ever. Gustavo Pérez remained on the job to supervise the yearly dormitory maintenance and the manufacture of the additional furniture required for the increased enrollment. The mess hall and bakery were closed so that those of us remaining on the Campus were able to enjoy home baked bread.

The departure of Dorothy and Kermit for California via Volkswagon on December 23 was indeed a sad event for both Marina and me. We had been friends and worked together for the past six years. Hopefully their health will improve rapidly and that Kermit can continue to be of service to the School.

A friend of mine Ron Curtis, the Deputy Ag. Officer USAID/Honduras, dropped by over the holidays and informed me that the Mission had \$600,000 allotted to Honduras over a three year period for the development of intermediate technology which would be applicable to the small and medium farmer. Since he justifiably feared that the Ministry would be incapable of performing the tasks he asked if we would be interested. After discussing the matter with him for most of the morning, I came to the conclusion that the E.A.P. is capable of undertaking the venture given ample financing and the adequate backstopping. Ron said that Iowa State University had been charged with overseeing the international program and asked if that would be a problem. He was informed that, although the E.A.P. has strong ties with the University of Florida, I could foresee no problem, especially if the technicians assigned to the program could commute from Tegucigalpa and perform limited teaching duties.

According to Ron's explanation, the contract would involve the testing of cropping systems, the testing and developing of small machines, economic studies concerning the feasibility of animal vs. mechanical traction and the optimum combination of the two, the testing of an inexpensive grain dryer using solar energy, etc.

Having worked with the AID for a number of years, I realized the Ron's visit was a probing action aimed at determining our initial reaction. Consequently, Mr. Curtis was informed of the following:

1. Any contract would have to be approved by the Board of Trustees.
2. The primary objective of the E.A.P. is the training of Latin American youth in agriculture and that research is given a second priority.
3. Any program undertaken could not in any way place a burden on the School's teaching or administrative staff.
4. Abundant financing would have to be available and an adequate overhead charge would be made.
5. Adequate technical supervision and support would have to be provided.
6. The E.A.P. would prefer to refrain from undertaking any research program if it considered that there was the slightest chance of the School's being unable to perform such research in an orderly, systematic and scientific manner. Although this project is most certainly in the preliminary planning stage within the Mission, I thought it oportune to inform you of this future possibility.

It was indeed gratifying to learn of the Lilly Foundation grant for the purchase of a Caterpillar tractor and the construction of a building to serve as a dinning hall and classroom in RAPACO. Upon making inquiries as to the immediate delivery of a Caterpillar tractor, the local agency understandably tried to convince us of the advisability of purchasing a model in stock in San Pedro Sula suitable only for earth moving and completely inadequate for our needs; the justification being that the price could increase at any moment. I refused to be persuaded and our agricultural machinery expert, Henry Naranjo is selecting a more versatile model designed for on the farm use and which we will order by the end of next week. After his recent visit to the U. S. Ing. Naranjo can foresee no increase in heavy machinery prices during the next few months.

Prof. Galo has finished cataloguing the valuable books found in the library with the help of Prof. Molina. Ing. Casco has been instructed to design a suitable room located in the science building in order to adequately preserve the books against deterioration due mainly to the humidity during the rainy season.

A copy of your suggestions regarding Uyuca has been sent to the Horticulture and Agronomy Divisions and to Dr. Marco Flores Rodas. Alfonso Torres is presently having the area cleaned up and the Agronomy Division has been instructed to design a forestry module in cooperation with Dr. Flores Rodas. Since the approval was given to cut the old trees existing in Uyuca, Marco has made weekly visits to the area with other CODEFOR technicians to determine the most expedient manner to log the area and the most profitable way to market the timber. I wish that all of our graduates were as enthusiastic and cooperative as he is.

To date the present enrollment is as follows:

1st year	89
2nd year	105
3rd year	63

In spite of two visits to Venezuela by Julio Pineda and innumerable cables and telephone calls during the last two months, the Venezuelan Government has not even sent a list of candidates for their regular students. It seems that the Gran Mariscal de Ayacucho Program is in flux due to the resignation of its former director, Dr. Leopoldo Lopez. I will visit the Venezuelan Ambassador tomorrow and advise him that if no word is received within the next week, we will be unable to accept regular students this year. Their excuse is that the applications were placed in the diplomatic pouch which has not yet arrived at the Embassy. We have received no word either regarding the short course students from Venezuela and no agreement has been formalized with Panamá. A different, more strict approach will be given this year regarding the handling of short course students and they will not be allowed to wear the Zamorano uniform. Depending upon the response that we get from Venezuela it may be advisable to send Julio Pineda to Caracas, select the students and bring them back with him.

The surprise donation from the United Brands Company was a pleasant addition to the Lilly Foundation contribution, and was very timely indeed. Mr. Booth arrived by private plane at 2:00 P.M. accompanied by Messrs. Houston Lacombe and Roy Larson of the Tela RR. Co. Our committee composed of Adolfo Midence, Mario Nufio, Julio Pineda, Monte Dixon and Jacobo Zelaya met him at the airport and he was given a tour of the School followed by an informal gathering at the Casa Popenoe during which Mr. Booth presented the check for \$30,000. I thanked him in the name of the School and Adolfo Midence expressed the appreciation of the Board of Trustees. The group departed at 4:00 P.M. and were apparently very favorably impressed with the School. Of the above sum, \$5,000 is to be designated as support for the Zemurray-Popenoe Scholarship Award, and the balance is unrestricted.

The Agronomy Division is in the process of harvesting the grain sorghum at RAPACO. Since the combine is worn out, we are harvesting the grain by hand and threshing it with the combine. The sorghum heads are first cut and carried to piles located about 100 meters apart. It is then fed into the combine which moves from one pile to another. The yield for the first 22 hectares was 60 quintales / ha., and it appears that a total of over 4,000 quintales will be harvested. No fertilizer was applied. We have also made 3,500 bales of African Star grass hay. Placing a conservative price of \$5.00 per quintal for the sorghum and \$1.00 per bale of hay, the School should obtain a gross income of \$23,500 from the property.

I was very glad to hear that Dr. Greenman will visit us during April. His observations will undoubtedly serve to further increase our efficiency and his conducting of a survey is very desirable at this time due to the expansion in the scope of activities being undertaken by the E.A.P.

The School year has begun very smoothly. I gave a talk to the freshmen students promptly at 6:30 A.M. during the first work day and explained the School philosophy and told them what was expected of them. One hour a week has been set aside for freshman orientation during which talks will be given by members of the faculty and I have made arrangements for prominent guest speakers from the private and public agricultural sectors to participate.

-6- Dr. Hugh L. Popenoe

That evening I spoke to the second and third year students. I reminded them that their main reason for being at Zamorano was to improve themselves intellectually and morally and to develop the necessary leadership in order to better face the realities of life which they will have to confront in the future. It was explained that the E.A.P. in order to accomplish its objectives, demanded hard work, dedicated study and discipline. I finished the brief talk by telling them very firmly that there would be no relaxing in the discipline and that I hoped that they would not oblige me to dismiss any of them for lack of discipline or poor academic performance. Strangely enough they applauded me.

The professors have dropped by the office one by one to wish me the best during the coming year and offer me their support while performing my additional duties. Hopefully, they will live up to their promise and that there won't be any militancy by the professor's association. I can foresee no problems.

In closing, I would like thank you and the Board of Trustees for the confidence that has been displayed in naming me interim director and I will do my best to properly interpret and execute the policy determined by the Board.

Marina joins me in wishing you a very happy and successful New Year.

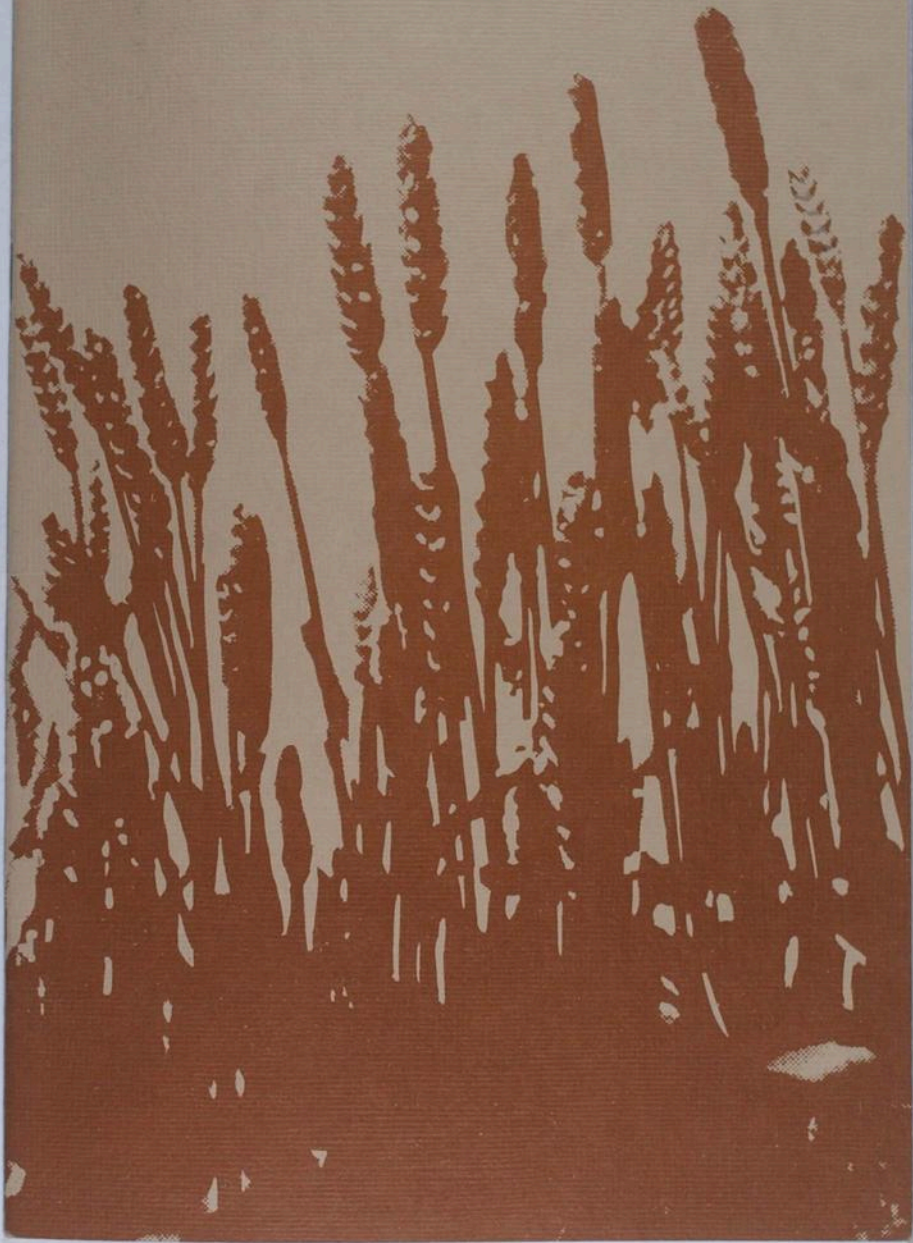
Sincerely,



Joseph S. Courand
Interim Director

JSC/aml

Escuela Agrícola Panamericana



THE STORY OF THE
ESCUELA
AGRICOLA
PANAMERICANA

(PAN AMERICAN SCHOOL OF AGRICULTURE)

