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**Enabling Zamorano to promote competitiveness,
environmental sustainability and international
standards of industry through its education and
outreach activities**



BIBLIOTECA WILSON POPENO
ESUELA AGRICOLA PANAMERICANA
APARTADO 83
TEQUIGALPA HONDURAS

Zamorano's 2001 ASHA Request for Assistance

June, 2001

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MS. CAROLINA CORTEZ
EXECUTIVE SECRETARY
WASHINGTON, D.C.

June 28, 2001

Mrs. Mable Meares
Director
Office of American Schools and Hospitals Abroad
U.S. Agency for International Development
Washington, D.C. 20532

Dear Mrs. Meares:

I am pleased to present to you our FY 2001 application for ASHA assistance.

The project outlined in this proposal is designed to increase Zamorano's ability to promote competitiveness and international standards of production, processing, environmental management and commercialization of agricultural and agroindustrial products to full-time students, trainees and businesses from throughout Latin America. It will enable Zamorano to help firms produce new or improved products that are more competitive in terms of cost and quality, using more efficient production and processing techniques, improved quality control measures and better packaging and storage technologies.

It will also help Zamorano to serve as a much-needed resource for firms seeking to understand and comply with international standards and guidelines such as those laid out in the ISOs (especially 9000 quality management standards and 14000 environmental management standards), the Codex Alimentarius, the General Agreement on Tariffs and Trade (GATT), the Food and Drug Administration (FDA), the Food Safety and Inspection Service (FSIS), the Environmental Protection Agency (EPA), as well as organizations certifying eco, green and blue labels.

On behalf of Zamorano's Board of Trustees, I would like to thank you for ASHA's support over the years and stress the importance of this particular request. Zamorano is now in its third year of implementing its 1999-2003 Strategic Plan, which involves significant improvements to its education and outreach program. The investments outlined here are necessary to fully implement these important improvements.

Thank you in advance for your consideration.

Sincerely,

Kate Semerad
Chairman, Board of Trustees

209299

Zamorano (Pan-American School of Agriculture

FY 2001 Request for Assistance

- Copy of the proposal cover letter
- Proposal (Form 1010)
- Articles of Incorporation
- By-Laws
- Certification of a Drug Free Workplace
- Certification Regarding Lobbying
- Certification of 501(c)(3) Tax Exempt Status

Also:

- Audited Financial Statements
- Zamorano's Annual Report 1999-2000

**AGENCY FOR INTERNATIONAL DEVELOPMENT
AMERICAN SCHOOLS AND HOSPITALS ABROAD**

OMB Approval No. 0512-0011

Exp. Date: 08/31/2001

APPLICATION FOR ASSISTANCE

This application is for use by private U.S. organizations requesting grant assistance for overseas institutions under Section 214 of the Foreign Assistance Act, as amended. "Applicant" refers to the United States founder or sponsor of the overseas institution. Applications must be received in duplicate before close of business on the last working day of June or postmarked by June 30 for consideration during the current fiscal year ending September 30th, 2001. Submit applications to:

**Office of the American Schools and Hospitals Abroad
Agency for International Development
Washington, DC 20523**

Applications will be accepted only from bona fide and financially responsible applicants. New applicants, and those who have not previously done so, must provide, among other things, the following information: applicant's title of incorporation, by-laws, evidence of U.S. Internal Revenue Service's recognition of tax-exempt status, and the most recent financial statement (less than two years old). The latter, indicating the applicant's conformity with generally accepted accounting principles, must have been completed by a certified public accountant. (For a full check list see cover letter and attachments.)

The information provided about the applicant's organization, the overseas institution, and the grant proposal should be thorough and concise. Use examples to support general statements. Unless instructed otherwise in this application, do not use continuation sheets. When permitted, use only those sheets, the reproduction of which is authorized. Any addendum must be cross referenced and bear the headings and block numbers of this application form.

Sections A., B., and C. pertain to data relevant to PROGRAM CRITERIA NO.1 - *The applicant should be a non-profit U.S. organization that either founded or sponsors the overseas institution for which assistance is sought. Preferably, the applicant should be tax-exempt under Section 501(c)(3) of the Internal Revenue Code of 1954. The applicant must demonstrate a continuing supportive relationship with the overseas institution. Evidence of this would be the provision of financial and management support for the institution.*

A. APPLICANT (U.S. SPONSOR OR FOUNDER)

1. Name Pan American School of Agriculture, also known as Zamorano.	2. Address, Telephone Number, FAX 1010 Vermont Ave, N.W. Ste. 510 Washington, D.C., 20005 Tel: (202) 785-5540 Fax: (202) 737-3539	3. Amount Requested U.S.\$ 1,708,000 For Fiscal Year: 2001
4. Type of Organization: Non-profit Organization	5. Applicant is the Overseas Institution's: Sponsor Date Sponsorship Commenced: October 12, 1942	6.(a) Date Organization Established December 3, 1941 6.(b) Jurisdiction of Incorporation Delaware, U.S.A.
7.(a) IRS Exemption Code Sect. 501(c) (3) Code: 54	7.(b) Number: 04-210-2173	7.(c) Date issued: December 24, 1970

8. Authorized Representative of Applicant for Purpose of this Application

8.(a) Name and Title Mr. Redmond James Hogan Director of External Relations and Development	8.(b) Address, Telephone Number, FAX Escuela Agrícola Panamericana (Zamorano) 1010 Vermont Ave. NW, Suite 510 Washington, DC 20005 Tel: (202) 785-5540 Fax: (202) 737-3539
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B. OVERSEAS INSTITUTION

9. Name of Institution Pan American School of Agriculture, also known as Zamorano.	10. Address and Telephone Number P. O. Box 93 Tegucigalpa, Honduras, C.A. Tel: (504) 776-6140	11. Name and Title of Principal Officer Dr. Keith L. Andrews Director General
12. Date Established: December 3, 1941	13. Chartered by: Delaware, USA	14. Accredited by: 1) AUPRICA (Asociación de Universidades Privadas de Centro América) 2) Consejo de Educación Superior de Honduras (Higher Education Council of Honduras).

C. RELATIONSHIP of the APPLICANT with the OVERSEAS INSTITUTION and OTHER ORGANIZATION(S)

15. Identify organizations responsible for the policies and administration of, and fund raising for, the overseas institution.

(a) U.S. Sponsor, Board of Trustees, Governors, etc..

The Board of Trustees governs the overseas institution. The International Board of Advisors and International Friends of Zamorano assist in fundraising efforts.

(b) Overseas Sponsor, Board of Trustees, Governors, etc..

The Honduran Advisory Council advises Zamorano with regards to conditions and situations in the Host Country, and provides support in fundraising activities.

International Advisory Councils are also being developed for all of the academic careers offered and for principal productive units.

(c) Fund Raising Organization(s) in the U.S. and Other Countries

Mr. Redmond J. Hogan, Director of Development, Zamorano, Washington, DC; Dr. Francille Firebaugh, Chair Development Committee of the Board of Trustees, Special Assistant to the President and Provost, Cornell University in Ithaca, N.Y.

(d) Any Other Individual(s) and Organization(s) Advising and Assisting the Overseas Institution

Zamorano's International Graduate Association (AGEAP) and national chapters of AGEAP in 15 countries throughout Latin America and the Caribbean. In several countries, most notably El Salvador, Guatemala, Ecuador, Bolivia and Dominican Republic, the graduate associations have recently created private foundations that conduct fundraising.

C. RELATIONSHIP of APPLICANT with OVERSEAS INSTITUTION and OTHER ORGANIZATIONS (continued)

16. Provide the name, titles and citizenship of the board(s) of trustees and principal officers of:

16.(a) the applicant:

BOARD OF TRUSTEES

Name	Principal Function	Citizenship
Hon. Kate Semerad	Chairperson	U.S.
Mr. Frederick Q. Falck	Treasurer and Chair, Finance Committee	U.S.
Mr. José Miguel Cordero	Secretary	Dominican Republic (U.S. Resident)
Mr. Luis Bakker	Member	Ecuadorian
Mr. Juan Bonilla	Member	Costa Rican
Dr. Duncan Cameron	Chair, Trustee Committee	U.S.
Dr. Francille Firebaugh	Chair, Development Committee	U.S.
Dr. Alison Stone Golcher	Member	U.S.
Mr. James S. Hughes	Member	U.S.
Mr. Richard Kimberly	Member	U.S.
Mr. Philip Lehner	Member	U.S.
Mr. Cargill MacMillan, Jr.	Member	U.S.
Mr. Osmond L. Maduro, Jr.	Co-Chair, Liaison CHOZA	Honduran
Dr. Simón E. Malo	Member	U.S.
Mr. Pedro Mata	Member	U.S.
Mr. Arturo D. Melo S.	Member	Panamanian
Hon. Mario Nufio Gamero	Co-Chair, Liaison CHOZA	Honduran
Mr. Fernando Paiz	Member	Guatemalan
Dr. Hugh L. Popenoe	Chair, Academic Committee	U.S.
Mr. Jaime Muñoz Reyes	Member	U.S.
Mr. Robert Ross	Chair, Resources Committee	U.S.
Mr. Tony Smith	Member	U.S.
Mr. Fred G. Sutton	Chair, Planning Committee	U.S.
Mr. Richard Voswinkel	Member	German

16(b) the overseas institution:

Dr. Keith L. Andrews	Director General	U.S.
Dr. Mario Contreras	Executive Director	Honduran
Dr. Antonio Flores	Academic Dean	Peruvian
Mr. Redmond James Hogan	Development and External Relations	U.S.
Mr. Andrew Urquhart	Business Manager, CFO	British
Mr. Richard Knab	Communication and Institutional Development	U.S.
Lic. Luis María Solorzano	Human Resources Manager	Salvadorian

C. RELATIONSHIP of APPLICANT with OVERSEAS INSTITUTION and OTHER ORGANIZATIONS
(continued)

17. Participation of the U.S. Sponsor

Annual budget of the U.S. Office: U.S.\$ 218,947.00	Number of paid staff in the U.S.: 2 full-time	Percentage of U.S. staff time devoted to the overseas institution: 100 %	Approximate annual person hours of volunteer time spent on overseas institution's work: Approximately 6,000 hours per year.
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Describe the applicant's organizational structure and functions. Provide examples of the applicant's involvement with the overseas institution, specifically:

17.(a) policy setting and management

The Board of Trustees (sponsoring organization), which meets three times per year (once at Zamorano, once or twice in the United States), is responsible for setting major policies. New initiatives, such as the creation of new departments, significant changes to academic programs, and important infrastructure programs are approved by the Board of Trustees.

An annual budget, including capital investments and operations, is prepared by the overseas institution in consultation with the Trustee's Finance Committee and is submitted to the Board of Directors for approval in November of each year. Budgets are based on a four-year, rolling business plan that includes capital investments. The Treasurer works directly with the overseas institution to guarantee that budget guidelines are respected. In March 1999, the Board approved the Strategic Plan 1999-2003, which consists of four major goals: 1) Sustain Zamorano's traditional values and adapt to a changing world, 2) Orient Zamorano's education and outreach activities to prepare students to meet the changing demands of the market and to address the region's most pressing social and environmental needs, 3) Assure the strong financial base needed to achieve short- and long-term well-being, and 4) Efficiently and effectively manage Zamorano's resources.

17.(b) curriculum and program development

Zamorano's administration must submit any significant changes in the administrative structure, curriculum or orientation of programs to the Board of Trustees for consideration. In March 2000, the Board named an Academic Committee to oversee program and curriculum development. The Board's Planning Committee works closely with the Academic Committee to understand broader implications (infrastructure needs, impact on current and future students, relevance to society, etc.) of any proposed changes. The committees present their recommendations to the entire Board of Trustees for final decisions.

The Planning Committee and Academic Subcommittee played a critical advisory role in the development of Zamorano's new 4X4 Academic Program and the ZamoEnterprise Learning-by-doing system. The Board's new Academic Committee is presently working with Management to monitor implementation. This is one of the most active committees.

17.(c) staffing

The sponsoring organization has the sole responsibility of conducting international searches for the position of Director General and Executive Director of the overseas institution, as well as the final selection and appointment. All key administrative positions in the overseas institution are proposed by the Director General and must be approved by the sponsoring organization. All other staffing decisions are the sole responsibility of Zamorano's Executive Director.

17.(d) other program support and guidance

The sponsoring organization participates directly in the governance of the overseas institution in the following areas: the Finance Committee manages the retirement fund and the endowment portfolio; the Planning Committee oversees strategic planning; the Host Country Committee facilitates the interaction of Zamorano with Honduran authorities; the Nominating Committee is responsible for the selection of new Board members; The Development Committee sponsors activities in the United States and elsewhere for public relations and fund raising purposes; the Resource Committee supervises human and physical resource use and policies. Board members actively participate in International Friends of Zamorano activities. The International Board of Advisors assists in friend and fundraising activities.

C. RELATIONSHIP of APPLICANT with OVERSEAS INSTITUTION and OTHER ORGANIZATIONS (continued)

17.(e) resources mobilization - human, financial, and in-kind resources for the overseas institution (Address Fund Raising in Section E., block number 27.)

The sponsoring organization (the Board of Trustees) plays an active and essential role in fund and fundraising. The Development Committee, which is chaired by Dr. Francille Firebaugh, is comprised of 12 active Trustees and several Trustees Emeriti who all play an active role in securing resources for the institution. In 2000, major "International Friends of Zamorano" activities were held in Washington D.C., New York, Boston and on campus. All trustees make personal contributions to Zamorano every year, and many of them facilitate the interaction of the overseas institution with U.S. and international philanthropists, foundations and donor agencies.

In 1999, 2000, and 2001, Zamorano's Board of Trustees authorized use of endowment funds to strengthen Zamorano's development effort. In 2001, the Board authorized use of endowment funds for certain capital expenditures related to the implementation of Zamorano's 4 Year Plan.

Zamorano's graduates play an increasingly important role in supporting Zamorano. In 1994 the sponsoring organization oversaw the establishment of an Office of Alumni Relations, in order to mobilize members of Zamorano's Alumni Association in fundraising and other activities.

Zamorano's International Alumni Association (AGEAP Internacional) has established an endowment to finance the studies of outstanding students with financial need; as of June 2001, the value of this endowment was US\$210,000. National graduate chapters in El Salvador, Guatemala, Costa Rica, Bolivia, Dominican Republic, and Ecuador have established endowment funds to finance scholarships for students from these countries. Similar initiatives have been initiated in other countries.

Zamorano's graduates also play a central role in the promotion and admissions process, alumni orientation, re-orientation, job placement, etc.

17.(f) actual or planned income generation activities

Zamorano generates approximately 26% of its income from educational production and marketing activities carried out by ZamoEnterprises under the guidance of the sponsoring organization's Planning and Finance Committees and advisory boards from the U.S. and Latin American private sector. In early 1999, these activities were integrated under a new system based on seven vertically-integrated production and services enterprises. ASHA has contributed greatly to the development of Zamorano's production and processing capabilities, and thus to the institution's financial stability and sustainability. Zamorano is experimenting with joint ventures with the private sector that will result in income for the institution, as well as valuable educational experiences for Zamorano students. In 2000-2001, such ventures have included sugar cane production, seed processing, vegetable production for export, poultry production and coffee processing. Discussions continue regarding other possible joint ventures related to food technology activities. Zamorano's FY 2001 request for assistance would greatly enhance Zamorano's production and marketing activities.

Outreach activities (training extension and research) generate scholarships, CAPEX, salary subsidies and other benefits. Approximately 34% of the overseas institution's income is related to outreach and is provided by grants from various organizations and institutions, many from the United States, for research and extension activities which are overseen by the sponsoring organization. Once again, ASHA has been instrumental in assisting Zamorano to establish laboratory and training facilities that attract potential students, donors, and collaborators.

40% of Zamorano's income comes from tuition and financial aid programs (scholarships, loans, and other forms of financial support). Fundraising activities geared towards securing additional sources of financial aid is a major priority of Zamorano's Board of Trustees and graduates. Sources include governments, foundations, corporations and individuals. In November 1998, Zamorano's Board of Trustees approved a Strategic Plan for Development (a sub-component to the Strategic Plan 1999-2003) that calls for increased personnel and support to help secure the additional external support Zamorano needs for its long-term well-being.

All members of the Board of Trustees and the International Board of Advisors make yearly annual contributions. In 2000, trustees and Advisory Board members provided \$183,356. The sponsoring organization also facilitates fundraising events, and plays a key role in securing scholarship funds, an important source of income for the institution, from private donors, foundations and governments. Please see section E, block 27 for more information.

D. DESCRIPTION OF OVERSEAS INSTITUTION

PROGRAM CRITERIA NO.2 - An instruction program must serve the secondary or higher level and must reflect American educational ideas and practices (education at the elementary school level will not be supported). A school offering a broad-based academic program must include instruction on the history, geography, political science, cultural institutions or economics of the United States. English should be used in instruction or taught as a second language. However, the foregoing subject matters and language requirements need not apply to a school offering only a specialized course. Assistance may not be used to train persons for religious pursuits.

18. History, Accomplishments, and Objectives. Describe the overseas institution's following attributes:

18.(a) history:

Zamorano (also known as the Pan American School of Agriculture) is a private, international technical college that was incorporated in the State of Delaware and established in Honduras in 1941 with the authorization of the Honduran Government. The United Fruit Company funded all activities for the first 15 years. In 1957, it endowed the institution with a US\$6 million fund. The first Director of Zamorano, Wilson Popenoe, was a U.S. citizen. All his successors have also been U.S. citizens. In January 1993, Keith Andrews became Zamorano's Director, succeeding Simón Malo who served in that capacity for 14 years.

Zamorano has an unparalleled record of continuity and stability. Its development has been steady and constant. In 1961, the institution began to require a formal entrance examination and a high school diploma. In 1981, the institution admitted female students for the first time. English has always been part of Zamorano's curriculum.

Zamorano has always conducted research, but the research program began to grow dramatically in the early 1980s. Today, Zamorano is a leading applied agricultural research organization in the region. The institution trains thousands of farmers, extensionists, technical people, educators, policy makers and researchers each year. Over the past years, Zamorano has consolidated many of its outreach activities under the umbrella of the Yeguaré Sustainable Development Program—a multi-decade, inter-institutional effort aimed at raising the standard of living and environmental conditions in the 500 sq. mile Yeguaré Region that surrounds Zamorano. Increasingly, the Yeguaré program is providing opportunities for international training and dialogue related to sustainable development.

The "Ingeniero Agrónomo Program" (PIA) was added in 1986. In 1992, Zamorano initiated a cooperative Master of Professional Studies Program with Cornell University. In 1997, Zamorano initiated a new specialization in Food Technology. This initiative, which is being carried out in close cooperation with the private sector, will benefit greatly from previous ASHA assistance and will significantly improve our education, training and research activities.

In March 1999, Zamorano's Board of Trustees approved a bold new Strategic Plan that lays the groundwork for major improvements to Zamorano's Academic Programs, including a shift from a three-year program with the option for a fourth year of study, to a complete four-year undergraduate program with four career paths (Agriculture Science and Production, Agribusiness Management, Agroindustry/Food Technology, and Socioeconomic Development and Environment). The Strategic Plan also outlined important adjustments to Zamorano's administrative structure, including the establishment of the positions of Director General and Executive Director. The four academic programs are underway and a comprehensive plan for the improvement of systems and processes has been launched.

18.(b) major accomplishments:

Zamorano has produced technically competent leaders for 59 years without losing a single day due to financial problems, strikes or any one of the other problems that plague other universities in the region. Over the past 10 years Zamorano has raised the percentage of female students from 11% to 27%. Graduates generally become leaders, owners and employers, rather than employees. Approximately 85% of the graduates work in the private sector, while the remaining 15% hold important positions with governments. More than 35 graduates have become ministers or vice ministers of agriculture, finance and natural resources in 11 countries. Presently, a Zamorano graduate serves as Minister of Agriculture and Livestock in Honduras. Zamorano graduates have founded or occupy key positions in many organizations committed to rural development and natural resources protection. The unemployment rate of Zamorano graduates is virtually zero while agriculture graduates from many other regional schools and universities suffer chronic and serious subemployment and unemployment.

Each year, Zamorano's research activities produce improved germplasm, research publications and a significant number of popular articles which serve as important sources of information for farmers and agricultural technicians throughout Latin America and in the United States. Zamorano produces textbooks, guidebooks and other teaching materials every year which are used outside of Zamorano. In 2000, more than 10,000 farmers, farmer-extension agents, and agricultural technicians benefited from the training and extension programs of the departments of Applied Economics and Agribusiness, Rural Development, Plant Protection and others. These programs, conducted in 10 countries in Latin America and the Caribbean, have a significant impact on the well-being of the participants.

Zamorano is recognized regionally as an important player in sustainable development and natural resources management efforts. In the 500 sq. mile Yeguaré Region that surrounds Zamorano, the institution's multifaceted extension activities focus on improving the environmental conditions and standard of living of the region's 50,000 inhabitants while at the same time providing a forum for regional training and dialogue on development and environmental issues. Zamorano's students and faculty conduct applied and strategic research and major non-formal training activities each year that benefit 10,000 Central Americans directly and hundreds of thousands indirectly.

Since Hurricane Mitch hit Honduras in November 1998, Zamorano has played an important role in reconstruction efforts. With the assistance of USAID and other international donors, Zamorano organized and implemented an agricultural rehabilitation project that benefits thousands of farmers in Honduras. Coffee, dairy, plantain, bean, beekeeping, rustic poultry and community-based watershed management are the focus of training and technical assistance in major areas of the country affected by the hurricane.

18.(c) current objectives:

Zamorano is a private center of higher education committed to providing a first-rate, integrated agricultural education that includes the key elements of agricultural production, agribusiness, agroindustry, natural resources management and rural development. The foundations of this education are the principles of Pan-Americanism, learning-by-doing, academic excellence, and character and leadership formation.

Zamorano's Mission is to prepare leaders for the Americas in sustainable agriculture, agribusiness, natural resources management, agroindustry, and rural development. Zamorano's central objective during 2001 and the next several years will be to successfully consolidate the curricular changes approved by Zamorano's Board of Trustees and implemented beginning January 1999. Key activities will include: a) fully implementing the 4X4 Program (a four year program with four career paths) and the ZamoEnterprise learning-by-doing system (based on seven commercial scale, educational production and services enterprises), b) stimulating active learning in and beyond the classroom, c) significantly enhancing the institution's friend and fundraising program, and d) modernizing administrative systems and procedures to ensure that Zamorano efficiently utilizes its institutional resources.

A major overriding objective is to improve the quality and impact of Zamorano's programs, while simultaneously increasing cost-effectiveness and sustainability. This goal requires Zamorano to implement best practices in all areas of its educational and administrative activities, utilize existing infrastructure to its maximum capacity, and devise ways to reduce costs and increase revenues related to learning-by-doing activities.

Another important ongoing objective continues to be to increase the impact of Zamorano's infrastructure, faculty and accumulated experience via outreach activities that simultaneously help rural Latin America and strengthen our core educational program.

Zamorano's FY 2001 request would help the institution meet these priority goals.

D. DESCRIPTION OF OVERSEAS INSTITUTION *(continued)*

19. Curriculum (all institutions)

19.(a) As applicable, insert number of courses and credits:

In January 1999, Zamorano began to implement its new 4X4 Academic Program (a four-year program with four career paths) with the incoming freshman class. First, second and third year students presently participate in the new program, which will be fully implemented next year. The 4X4 Program consists of:

	Courses	Credit Hours
Two-year core curriculum:	24	72
Specialization (in each career):	12	48
Advanced Seminars:		4
Sports and Extracurriculars:		4
Personal Development:		3
Special Project:		4
Learning-by-doing:		70
	36	205

Beginning in their third year, students chose to specialize in: Agricultural Science and Production, Agribusiness Management, Agroindustry, or Socioeconomic Development and Environment.

Upperclassmen in their fourth years continue to participate in the Ingeniero Agrónomo Program (an optional fourth-year for specialization). This program consists of:

	Courses:	Majors:	Total Credit Hours Required:
Ingeniero Agronomo Program	41	8 - see details in section 19c	57

19.(b) English is the second language of instruction and is taught as an obligatory second language. Zamorano understands the importance of English skills for our graduates and is committed to extending the bilingual nature of its campus.

In 1999 Zamorano implemented a requirement that all students must obtain a score of 500 on the TOEFL in order to graduate. English is not required for Admissions. With ASHA support Zamorano has installed a multimedia, computer-based language laboratory enabling students with all levels of English to improve their skills through their use of specialized software and self-paced learning.

Several courses (including Biology and Botany) are presently being taught in English to advanced English students. Many reading assignments are in English high.

*(Identify courses taught in English with an asterisk *)
(underscore those courses that are mandatory for all students or trainees)*

19.(c) Describe levels of instruction and provide details on the curriculum offered.

For secondary schools, list courses offered by year.

For colleges and universities, list majors offered with brief description of each course content and degrees given.

For special courses, list and describe non-degree courses offered.

For hospital centers, describe the scope of training and/or research.

For all institutions, besides listing non-degree courses offered, briefly describe any special education or training program that may be offered outside the institution.

Formal Degree Programs

1. 4X4 PROGRAM (List includes first, second and third year courses presently offered to freshmen, sophomores, and juniors that entered in January 1999, 2000, and 2001)

Zamorano's 4X4 Program is a rigorous 44-month course of study designed to meet the evolving demands of the region's labor market. It consists of two years of core curriculum followed by two years of specialization in one of four career paths: Agricultural Science and Production, Agribusiness, Agroindustry, or Socioeconomic Development and Environment. Under the 4X4, learning-by-doing takes place in seven simulated production and service enterprises that help students develop an understanding of systems and processes while acquiring the technical, administrative and entrepreneurial skills they need to become successful professionals. Graduates with a degree from this program will be able to enter directly into master-level programs in the United States.

Courses (All core curriculum courses in years 1 and 2 are mandatory)

First Year

Term 1	Description
Introduction to Agriculture and Natural Resources in Latin America	Paradigms of technologists, economists, ecologists and social scientists; case studies
Spanish and Communication	Basic principles and skills of communication in Spanish
Philosophy and Logic	Methods of thought and research
Computer Science	Use of computers in their different applications
Mathematics	Arithmetic, basic algebra and geometry
English*	English as a second language (different levels, depending on ability)
Sports	Basketball, soccer, softball, volleyball, jogging, swimming

Term 2	Description
Micro-organism and Cellular Biology Anatomy and Physiology of Plants And Animals General and Inorganic Chemistry Mathematics II English* Sports and Extracurricular activities	Study of cells and different micro-organisms Study of main plant and animal parts and their functions Use of periodic table, inorganic components and laboratory equipment Linear functions and programming English as a second language (different levels, depending on ability) Individual and team sports, eco-hiking, theatre, mountain biking, horseback riding, etc.
Term 3	Description
Soil and Water Science Vegetable Production Accounting for Decision Making Business Administration English* Sports and Extracurricular Activities	Soil characteristics, management and water use Vegetable production in the tropics, field management and general requirements Accounting and its application in the enterprise and agricultural endeavors Management, decision-making and case study analysis English as a second language (different levels, depending on ability) Individual and team sports, eco-hiking, theatre, mountain biking, horseback riding, etc.
<u>Second Year</u>	
Term 4	Description
General Physics Environmental Sciences and Ecology Agroindustry and Food Sciences Mathematics III English Sports and Extracurricular Activities	Mechanics, fluids, mass and energy balance, movement, electricity, and optics Natural resources management, reforestation, ecological dynamics Agroindustry in the world, food and non-food processing, human nutrition Calculus, integrals and derivatives, Mathematical models for Management English as a second language (different levels, depending on ability) Individual and team sports, eco-hiking, theatre, mountain biking, horseback riding, etc.
Term 5	Description
Introductory Animal Production Organic Molecules and Biochemistry Finances and Credit Analysis Microeconomics General Practices II English Sports and extracurricular activities	Breeds, nutrition, reproduction, and management. Planning of animal production More important molecules of biological value and their utilization as energy Financial analysis of industrial operations and credit proposals and judgement Production economy. Market analysis and production mathematical functions Workshops in interpersonal relationships, team building, and communications English as a second language (different levels, depending on ability) Individual and team sports, eco-hiking, theatre, mountain biking, horseback riding, etc.
Term 6	Description
Latin American History Sociology and Sustainable Development General statistics Marketing Project Management and Evaluation English Sports and Extracurricular Activities etc.	History of social evolution of agriculture and industry in Latin America Socioeconomic Development and strategies that make them sustainable Statistical bases for population characterization and comparisons Markets study and research, strategies and techniques to improve sales Projects development, conduction and evaluation. Proposal preparation English as a second language (different levels, depending on ability) Individual and team sports, eco-hiking, theatre, mountain biking, horseback riding,

Learning-by-doing under the 4X4 Program

During their first two years, students spend a total of 14 non-continuous weeks in each of the following simulated Production and Service Enterprises:

Field Crops Enterprise: Planning for seed and grain production; land preparation and soil management; integrated management of crop pests and diseases; harvest and postharvest practices; classification and treatment of seeds; processing and handling of seed, food and feed grain; and management and evaluation of production costs.

Agricultural Services Enterprise: Management of water resources and irrigation and drainage systems; soil preparation and management; management and use of farm machinery for soil preparation and harvesting; topography; use of GPS technology for mapping and characterization of production areas; and administration of agricultural services.

Forestry Enterprise: Management of biomass for forest fire control; maintenance of access roads and forest areas susceptible to landslides; management of forest nurseries; evaluation of the productive capacity of forest areas; sustainable lumber harvesting; integrated management of natural resources and biodiversity.

Dairy and Meat Production Enterprise: Management of dairy cattle and hogs to produce milk and meat under intensive production systems; integrating pasture and animal management; processing and marketing activities. Students become aware of environmental concerns related to animal production in the tropics.

Intensive Crop Production Enterprise: Field and greenhouse production of vegetables. Students learn about appropriate, intensive use of soils and water. This operation is linked with the vegetable processing plant where fruits and vegetables are packaged, canned and preserved.

Rural Development and Environmental Enterprise: This ZamoEnterprise functions as a non-governmental organization (NGO), development organization, conducting externally-funded outreach projects designed to help small farmers to improve their production and increase income. Students participate in different activities to train and support the farmers in the use of improved technologies and administrative and organizational skills.

Third Year

In their third year all the students have to select one of the four careers, and attend classes separately. Few classes are common for more than one career. These enrich the students' curricula and experience, and open their minds to other disciplines. The following is the description of all the courses a student takes once he or she progresses in one of the four career tracks.

CAREER IN AGROINDUSTRY

Term 7	Description
Food Microbiology	Principles of food microbiology and industrial use of microorganisms
Food Chemistry and Nutrition	The chemistry of food constituents and their nutritional value
Experimental Design	Advanced statistics and its applications in biological research
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 8	Description
Guaranteeing Quality Control	Basis of food quality control and processes quality management
Food Engineering	Unit operation and design of transformation processes
Food Analysis	Chemical, physical and organoleptic evaluation of foods
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 9	Description
Processing Agricultural Products	Grains, vegetables and fruits processing and quality control
Processing Animal Products	Dairy and meat processing and quality control
Business Decision Making	Strategies for decision making in business and agricultural enterprises
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry

Learning-by-doing in the ZamoEnterprises

In Agroindustry third year students rotate among four different processing plants (dairy, meat, vegetables and fruits, and grain and seeds) and the food quality control laboratory and food services. In the plants they learn and conduct complete product processing flows, understanding the different factors that can affect or alter the final product and economic efficiencies. Food quality assurance is controlled by microbiological and chemical analysis and sampling. Students also perform process quality management of different products. Through our linkages with the fast food industry, students are involved in food management practices and service to clients in food stores.

CAREER IN SCIENCE AND PRODUCTION

Term 7	Description
Biology of Insects and Other Pests	Entomology in agriculture and plant insects interactions
Soil and Crop Management	Best practices in soil conservation and nutrients availability for crops
Machinery and Irrigation	Administration of agricultural services and watersheds management
Experimental Design	Advanced statistics and its applications in biological research
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 8	Description
Crop Protection	Integrated crop and pest management based on biological control methods
Genetics and Crop Improvement	Basis of genetics and practical applications in crop yield and quality
Pastures and Forages	Pasture geography and management for best nutritional quality
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 9	Description
Animal Nutrition and Feeding	Nutrition principles and digestive physiology of ruminants and non-ruminants
Anim. Reproduction and Breeding	Reproductive physiology and management for high animal production
Aquaculture	Principles of water management for fish and shrimp production
Business Decision Making	Strategies for decision making in business and agricultural enterprises
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry

Learning-by-doing in the ZamoEnterprises

Students are organized in teams that conduct different production projects, taking the responsibility of different size production plots or animal herds to obtain the maximum yield at the lowest cost, taking into consideration environmental issues. The products they produce have to meet national and international quality standards. Students also become aware of the potential use of biotechnology for improving yields and resistance. They work in the tissue culture lab and in the aquaculture experimental ponds.

Students are encouraged to focus on process management rather than production technology. They plant, seed and maintain crops. Also they raise hogs for meat processing. Economics, efficiency and environmental concerns are the main elements of their practical learning in the ZamoEnterprises.

CAREER IN SOCIO ECONOMIC DEVELOPMENT AND ENVIRONMENT

Term 7	Description
Principles of Development Theories	Study of the different trends and theories on rural development
Natural Resources Management	Strategies for the integral management of forests and natural resources
Project Management	Project design, management and evaluation of rural development
Elective I	A course elected among the courses offered by other career tracks
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 8	Description
Environmental Economics	The economics of environmental and natural resources management
Statistics for Social Sciences	Sampling techniques and statistical evaluation of social and commercial events
Social Research	Study of research methodologies applied to social events and responses
English	Different levels of English as a second language
Personal Development Seminar	Different seminars on values, ethics, human relationships and leadership
Advanced Seminars	Different topics on agroindustry
Term 9	Description
Business Decision Making	Strategies for decision making in business and agricultural enterprises
Geographic Information Systems	Interpretation of computational images of geographical surfaces for decision making process
Agroforestry	Study of crop production alternatives based on crop-forest equilibrium
Elective II	A course selected from those offered by other career tracks
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry

Learning-by-doing in the ZamoEnterprises

Students organized in small teams work on different development projects, learning from the farmers' experiences at the same time they are providing training in sustainable resource management and organizational and managerial issues. Zamorano's micro- and small-enterprise project serves as a living laboratory where the students learn-by-doing the most important lessons associated with socioeconomic and rural development. They also work with the Development and Environment ZamoEnterprise in managing the Uyuca Biological Reserve and controlling forest fires. A third section on environmentally friendly production (organic crop production) is where the students strengthen their sense of eco-efficiency, combining crops and animals in one integrated production systems.

CAREER IN AGRIBUSINESS

Term 7	Description
Analysis of International Credit and Finance	Study and analysis of world finances and its impact on national or regional business opportunities
Production Economics	Mathematical models in production trend analysis and production economical evaluation
Informatics for Business Management	Use of computers and information technology for business decisions
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 8	Description
Sales Management	Management principles, techniques and applications for sales
Market Research and Strategies	World market analysis for business opportunities. International trading agreements
Statistics for Social Science	Sampling techniques and statistical evaluation of social and commercial events
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry
Term 9	Description
Analysis of the Business Environment	Understanding of the business context for new enterprise development
Personnel Management and Organizational Change	Strategic planning and managing change in business administration
Business Decision Making	Strategies for decision making in business and agricultural enterprises
English	English as a second language
Personal Development Seminar	Seminars on values, ethics, human relationships and leadership
Advanced Seminars	Topics on agroindustry

Learning-by-doing in the ZamoEnterprises

In Agribusiness, students in third year, work in various ZamoEnterprises as managers' assistants, learning to conduct budget analysis, cost studies, efficiency studies, organizational climate surveys, market studies or financial predictions for new products or enterprise expansions. They start making recommendations and sharing criteria for decision making. At the end of their third year, it is expected that the students will be well prepared to play a major role in the operations, managing and training first and second year students.

3. INGENIERO AGRONOMO PROGRAM

Until the pioneer students participating in the 4X4 Program reach their final year (January 2002), outstanding students wishing to obtain the equivalent of a B.S. degree at Zamorano can apply to Zamorano's advanced Ingeniero Agrónomo Program (PIA). This program, which requires at least one additional year of study (15 courses in the classroom, plus research and work experience totaling 51 credit hours), culminates in the student's presentation of an original thesis in an area of his or her interest. PIA students specialize in and develop research projects under the supervision of professors from the following departments: Agricultural Economics and Agribusiness, Agronomy, Animal Science, Horticulture, Crop Protection, Natural Resources and Conservation Biology or Rural Development. Since the inception of the Ingeniero Agrónomo Program in 1987, Zamorano has graduated 11 classes totaling 753 students. Presently, 178 students are enrolled in the PIA program. A graduate with an PIA degree can apply directly to a Master's program at many U.S. universities.

Mandatory Courses	Description
Statistics II	Statistical data analysis using computers
Methods of Communication	Introduction to the teaching-learning process
Writing Workshop	Preparation and presentation of written reports
Biotechnology	Scientific principles of biotechnology
Pesticide Management	Rational use of natural, organic and biological pesticides
Marketing	Management aspects of marketing, considering consumer behavior, pricing, and marketing strategies
Systems of Management Decision Making	Introduction to methods of strategic planning
Electives	Description
Vegetable Production II	Techniques, problems, and trends in the cultivation, harvesting and storage of vegetable crops
Fruit Crops II	Techniques, problems, and trends in the cultivation, harvesting and storage of fruit crops
Ornamental Horticulture	Landscape management
System of Agronomic Production	Inter-relationship between soil, water and crops
Vegetable Nutrition	Basic processes of plant nutrition
Advanced Plant Breeding	Application of various techniques and methods of plant breeding; biotechnology in plant breeding
Animal Nutrition	Digestive physiology and metabolism; nutrient properties and requirements for different aspects of animal production
Animal Reproduction	Anatomy and physiology of mammalian and avian reproduction. Fundamental aspects of reproduction and reproductive technology
Animal Breeding	Translating genetic principles into effective breeding schemes
Management of Domestic Animals	Cattle, sheep, pig, and chicken production
Pests of Tropical Crops I	Diagnosis of pests in annual crops, integrated pest management
Biological Control	Procedures in biological control of arthropod pest and weeds
Advanced Plant Protection	Integrated pest management
Macroeconomic and Agricultural Policies	Concepts of macroeconomics and modern agricultural policies
Cost Accounting	Application of accounting concepts for farm businesses
Quantitative Methods	Statistical and operations research methods
Microeconomics	General concepts of microeconomic theory
Natural Resources Utilization	Management of wildlife, fishery and forest resources
Natural Resources Protection	Principles of natural resources protection and biodiversity
Rural Economics	Introduction to agriculture and development economics
Management of Development Projects	Modern methods and procedures of management applied to development projects
Social Research Methodology	Relevant aspects of research in social sciences
Food Chemistry	Physical, chemical, nutritional and functional characteristics of foods and their changes during processing
Food Microbiology	Microbiological food quality assurance; and utilization of micro-organisms in the food industry
Food Engineering	Application of engineering principles in food processing
Development of New Products	Integrated food product development based on raw materials optimization, processing technologies and consumer needs.
Special Project Seminar	Individual thesis project; presentation of a seminar

4. MASTER'S OF PROFESSIONAL STUDIES PROGRAM

Participants in the Master's of Professional Studies Program complete 24 credits at Cornell University and at least six credits of academic work at Zamorano. At least one course in ecology and sustainable resources management and one course in economic development are required. In addition, during the course of his/her participation in the program the students must demonstrate proficiency and/or complete course work in communications, problem solving and analysis, and management and leadership skills. Participants also complete a six-month internship under an approved mentor in Latin America. This completely bilingual program culminates in the submission and defense of an original thesis. Please see attached program brochure.

5. NON-DEGREE WORKSHOPS AND COURSES

Zamorano's Training Program offers a series of non-degree courses covering topics such as agribusiness, entrepreneurship, rural development, farm management, soil conservation, post-harvest storage technology, artificial insemination, integrated pest management, animal husbandry, fruit tree production and value added food processing technology. Yearly, more than 10,000 professionals, farmers, extension agents, technicians and U.S. Peace Corps Volunteers benefit from 300 short courses presented

...by Zamorano's Agricultural Science and Production, Agribusiness Management, Agroindustry and Socioeconomic Development and Environment careers. Zamorano also conducts on-going extension and training work in Honduras, Nicaragua and El Salvador.

6. SAMPLE OF NON-DEGREE COURSES: (Many courses are offered several times during the year)

Farm Management
Administration of Development Projects
Administration of Agricultural Machinery
Data Base Management
Credit and Finance Management
Use of Information Technology to Enhance Farming Operations
Management of Export Operations
Financial and Economic Analysis of Farming Operations and Agribusinesses
Teaching Skills Workshop
Agricultural Policy analysis
Natural Resource Valuation
Artificial Insemination in Bovines
Agricultural Policy Analysis and Development
Production and Management of Africanized Bees
Artificial Insemination in Hogs
Experimental Design
Poultry Production
Rational Pesticide Use and Management
Biological Pest Control
Natural Pest Control
Integrated Pest Management for Hillside Farmers
The Extraction of Neem Oil for Natural Pest Control
Post-Harvest Grain Storage for Small-Scale Farmers
Technologies for Sausage Production
An Introduction to Fish Culture for Small-Scale Farmers
An Introduction to Fish Culture for Extension agents
Principles of Grain Storage
Technologies for Meat Processing
Diagnosis and Control of Diseases in Bovines and Swine
Multi-Purpose Cattle Production
Post-Harvest Pest Control
Tropical Fruit Tree Production
Animal Nutrition
Soil Conservation Techniques
Production and Management of Tropical Pastures
Goat Production and Management
Tropical Nematology
Appropriate Technology Transfer
Manufacture of Natural Vinegar
Processing of Fruits and Vegetables
Irrigation and Drainage
Small-scale Rabbit Production
Dairy Cattle Management
Ruminant Production in the Tropics
Natural Resource Management and Biological Conservation

D. DESCRIPTION OF OVERSEAS INSTITUTION (continued)

PROGRAM CRITERIA No.5 - The faculty and staff of a school or a hospital center should include a significant number of U.S. citizens or other persons trained in U.S. institutions who are in residence and teaching at the school or hospital on either a full-time or part-time basis.

21. Overseas Institution's Staff

21.(a) Total Number of Persons	Administration Full-time	Administration Part-time	Faculty/ Medical Staff Full-time	Faculty/ Medical Staff Part-time	Maintenance/ Clerical	Total
(1) U.S. Citizens	4		10	9	0	23
(2) Citizens of Host Country	187		62		340	589
(3) Citizens of Other Countries	18		50	3	6	77
Total Number	209		122	12	346	689
21.(b) Academic Background						
(1) U.S. Degrees	16		29	9	0	45
(2) Non-degree U.S. Training	5		10		0	15
(3) Others	188		83	3	346	620
Total Number	209		122	12	346	689

22. Staff Salaries in U.S. Dollars

22.(a) Annual Salary Range for the Following Personnel	from minimum	to maximum
(1) President, Principal or Medical Director	\$ 84,816.00	\$ 96,390.00
(2) Faculty or Medical Staff	\$ 2,560.00	\$ 76,102.00
(3) Administrative Staff	\$ 1,645.00	\$ 73,440.00
(4) Clerical, Maintenance Staff	\$ 1,695.00	\$ 8,235.00

22.(b) Explain and give value of any benefit or perquisite available to personnel that are not included in the salary, such social and health insurance, housing allowance, other allowances (specify), etc..

Honduran staff receive salary and daily transportation. Zamorano pays Honduran income tax after one year of employment, and provides housing for some Honduran administrative personnel and faculty. Internationally recruited faculty and administrators receive salary, free housing and utilities on campus (approximate value US\$400 - \$600.00 per month). They receive an airline ticket (average value is US\$1,350.00 for faculty member and spouse and two tickets for children). All employees are offered medical and life insurance and retirement costs are split between the institution and the staff member. The total value of the insurance and retirement costs average US\$850.00 per year for U.S. citizens. Faculty members with children in secondary school receive US\$140.00 - \$250.00 per year as an educational allowance.

23. Enrollment, Selection, and Cost Information

PROGRAM CRITERIA No.6 - The majority of the users of any institution, e.g., students or patients, must be citizens of countries other than the U.S.

23.(a) ENROLLMENT (secondary and higher levels only, including hospitals)						
Period	Degree/Diploma Students Full-time	Degree/Diploma Students Part-time	Non-degree/Diploma Students Full-time	Non-degree/Diploma Students Part-time	Student to Faculty Ratio	
Previous 1998	796				10 : 1	
Three 1999	847				10 : 1	
Years 2000	819				11 : 1	
Current Year 2001	780				11 : 1	
Next 2002	857				11 : 1	
Three 2003	897				11 : 1	
Years 2004	930				11 : 1	
23.(b) Give Number of Students by Country of Citizenship. Information as of 2001:						
Ecuador	224	Peru	17	U.S.A.	3	
Honduras	221	Costa Rica	12	Spain	0	
Guatemala	75	Chile	3	Germany	1	
Bolivia	55	Paraguay	5	Belgium	1	
El Salvador	90	Dominican Rep.	2			
Nicaragua	54	Haiti	5			
Panama	4	Belize	5			
Colombia	12	Mexico	1			
23.(c) For Degree/Diploma Students, Indicate the Number of Male: 579 and Female: 185 students. Information as of June 2000.						
23.(d) Indicate the Number of Students Applying for Available Spaces in the Past Three Years:						
			1997	1998	1999	2000
Number of students: Examined			1,348	1,205	853	1659
Selected			442	679	455	605
Enrolled			214	283	256	242

D. DESCRIPTION OF OVERSEAS INSTITUTION (continued)

23.(e) ANNUAL COSTS AND CHARGES for One Full-time Student (in 1,000 U.S. Dollars). (For the year 2000)			
(1) Tuition Charged per School Year	student	OSI	totals
	\$ 5.3	\$	\$ 5.3
(2) Other Fees Paid by Student	\$ 0.2	\$	\$ 0.2
(3) Additional Cost to the OSI for Instructions	\$ 0.3	\$ 5.6	\$ 5.9
(4) Room and Board Charged	\$ 3.3	\$	\$ 3.3
(5) Additional Cost to the OSI for Room and Board	\$ 0.9	\$	\$ 0.9
(6) All Other Indirect Costs per Student, Exclusive of Students Assistance	\$	\$ 1.4	\$ 1.4
Total per Student:	\$ 10.0	\$ 7.0	\$ 17.0

23.(f) Total Student Aid or Scholarship Assistance Provided	Number of students assisted: 767
(1) 28% from student	(2) 5% from host country Government (To Honduran students only)
(3) 42% from Zamorano	(4) 25% from other sources: Private sector in the United States and Latin America (businesses, individuals and foundations), Governments (United States, Switzerland, Germany, Great Britain, Belize, Nicaragua) and graduates.

PROGRAM CRITERIA No.7 - The institution must be open to all persons regardless of race, religion, sex, color or national origin. The foregoing shall not be construed to require enrollment of students of both sexes at an educational institution enrolling either boys or girls only.

23.(g) SELECTION - Describe briefly the methods used for faculty, staff, selection of students, and awarding scholarships. Include efforts taken to ensure that the institution is open to all persons without regard to race, color or national origin.

Students

Zamorano cooperates with the 13 national chapters of its Alumni association to inform interested candidates about Zamorano and about requirements for admission. Zamorano develops yearly marketing plans to attract potential students and has named country contacts in 17 countries to help facilitate the promotion and admissions process. Special emphasis is placed on encouraging rural youth, women and minorities to apply. Zamorano has undertaken an active program to increase the percentage of women students. Present school enrollment is 27% female; the goal is to increase that percentage to 30% in the next five years. Exam schedules are published in national newspaper and magazines, radio commercials are aired, posters are hung, and personal visits to high schools inform potential candidates of the opportunity to study at Zamorano. In July of each year, candidates take a four-hour comprehensive exam that includes sections on biology, physics, chemistry, mathematics, and general knowledge. The entrance exam is complemented by an interview with a Zamorano faculty member, contact, and and/or representative of the alumni association to determine the candidate's academic potential, aspirations and commitment to agriculture and natural resources management, and intangibles such as character, maturity, motivation, and personality. Applicants provide transcripts of high school studies. Ability to pay tuition is not taken into consideration at the time students are accepted. No national quotas are used, but some consideration is given to the needs of the different countries, the total number of applicants from each country and the availability of financial support. Students who come from disadvantaged backgrounds (i.e. rural youth, minorities and women) are actively sought and their applications are given special consideration. The Admissions Committee makes all decisions regarding admissions. Political influence or pressure does not affect admissions decisions. Final admission decisions are sent to the alumni chapters and applicants around 2 weeks after giving the exam. Information regarding applicants is then provided to potential donors such as USAID, appropriate embassies and other sponsoring organizations so they may assign their scholarships. Zamorano attempts to influence the awarding of scholarships so that those students who do not have the resources to pay for studies at Zamorano receive support.

Faculty and Staff

The Director General and key administrators are chosen after extensive international searches are made. The selection of the Director General is made by the sponsoring organization. Again, race, national origin, sex, color, religion are not used to exclude anyone from the selection process. Faculty and staff are selected on the basis of their qualifications and the availability of resources. Search and screening committees pre-select applicants and make recommendations to the Executive Director, who makes the final decisions in all faculty and staff contracts. Zamorano actively recruits female professionals. The percentage of female professors has averaged about 24% over the past few years.

24. Physical Plant - Describe the institution's physical plant, including real estate and the number of buildings and their use. Indicate any facility or land leased—rather than owned—and explain.

Zamorano's infrastructure includes the following:

Buildings: 19 student dormitories (14,862 m²); 4 staff dormitories (1,373 m²); 2 guest dormitories (3,366 m²); 94 staff residences (18,115 m²); 27 classrooms (4,499 m²); 20 laboratories (6,242 m²); administrative offices (5,336 m²); 23 warehouses (6,586 m²); 6 workshops (4,862 m²); 4 commercial buildings (727 m²); 2 dining facilities (1,101 m²); library and herbarium (2,398 m²); clinic (417 m²); 5 processing plants (5,254 m²); laundry facility (305 m²); student center (2,557 m²); total area of roofed infrastructure: 78,000 m².

Land: 109 ha. campus; 1,174 ha. pasture; 61 ha. Vegetable production; 51 ha. fruit production; 653 ha. grain production; 2,841 ha. forest; 539 ha. Watersheds and reserve; 42 ha. support staff housing; 25 ha. Roads. Total area of Zamorano lands: 5,495 ha. Zamorano is responsible for the management of an additional 1,200 hectares of reserve lands.

Book Value of Plant	Estimated Replacement Value of Plant	Annual Income	Annual Operating Costs Including Depreciation	For the year:
U.S.\$ 18,145,562	U.S.\$ 90,000,000	U.S.\$ 22,938,901	U.S.\$ 24,556,386*	2000

D. DESCRIPTION OF OVERSEAS INSTITUTION (continued)

25. FOR HOSPITALS ONLY - If more than one facility, indicate 1) as the main hospital, 2) as the secondary facility or facilities.

25.(a) Average Monthly Number of In-patients		25.(b) Average Monthly Number of Out-patients		25.(c) Persons Served by Outreach Program	
1)	2)	1)	2)	1)	2)
25.(d) Number of Beds Authorized:		25.(e) Rate(s) of Occupancy		25.(f) Actual Cost per Bed per Day (in U.S. Dollars)	25.(g) Average Length of Stay (in days)
1)	each	1)	%	1)-\$	1) days
2)	each				
Actual Number of Beds					
1)	each	2)	%	2)-\$	2) days
2)	each				

25.(h) Diagnosis of patients on Entry:

Number of medical	most frequent medical categories:	number of surgical	most frequent surgical categories	Identify any long term care unit
1) each	1)	1) each	1)	1) each
2) each	2)	2) each	2)	2) each

25.(i) Describe Hospital's Rate Structure and Income Level. As appropriate, describe hospital or auxiliary activities providing additional income to the institution.

N/A

25.(j) Describe Managerial Structure. (Note any special review committees. Do private physicians have hospital privileges? Indicate what kind.)

N/A

25.(k) Describe the Institution's Major Areas and Types of Research and/or Training. (Include epidemiological and survey activities. Note the number of persons involved and uses made of research results.)

N/A

E. FINANCIAL INFORMATION

PROGRAM CRITERIA NO.8 - An existing institution must demonstrate competence in professional skills and must exhibit sound management and financial practices. An applicant for a new institution must demonstrate the ability to achieve professional competence and to operate in accordance with sound management and financial practices.

26. Endowments - Indicate size of applicant's and/or institution's endowment, amount of income earned and percentage return on investment. Also, explain extent to which endowment is restricted and for what purposes.

Zamorano has three separate endowments. The first is located in the U.S. and has a value of approximately \$44.8 million. The second is an endowment in local currency (Lempiras), totaling 30,000,000 Lempiras (US\$2.4 million). The third is the retirement fund, which has a value of US\$2.3 million.

The U.S. Endowment generated \$832,730 in 2000. In most years, the sponsoring organization (Board of Trustees) has decided to reinvest most of the interest rather than use it to help finance Zamorano's operating budget. In 2001, the endowment will pay out 5% or \$2 million per year used for CAPEX, land purchases and fundraising activities.

All interest generated by the Honduran Lempira Endowment is used to support scholarships for Honduran students and environmental activities in Honduras. It is anticipated that the average rate of return for 2001 will be about 18%, but devaluation seriously affects the real value of both the income and principal of this endowment.

Zamorano received a contribution of \$1.1 million for endowment from the Swiss Government in early 1998. As of 2001, contributions from the Swiss Government totaled \$2.9 million for the endowment fund; 100 percent of the interest is used to support poor students at Zamorano and to enhance their educational experience. Since that time, various donors have contributed a total of US\$2.7 million to Zamorano's scholarship endowments.

27. Applicant's Direct Financial and In-kind Contribution. Specify any direct and financial contribution to the overseas institution in each of the past three years. Describe recent, current, and planned fund-raising efforts by the applicant and the institution in the U.S., in the host country, and other areas. Describe how fund-raising efforts are managed and indicate how much has been spent on such efforts in each of the past three years.

The year 2000-2001:

During 2000-2001, Zamorano's fund-raising effort, coordinated by the Director of External Relations and Development in Washington, D.C., has continued to exceed goals, despite a continued difficult economic environment in many of the countries Zamorano serves. Donations from corporations, foundations, governments and individuals surpassed 4.5 million in 2000, and the institution is on track to surpass goals in 2001. In 2000, the budget of the Washington Office was \$234,000; in 2001 it is \$246,000. Additionally, in 2000 and 2001, Zamorano's Board of Trustees approved an earmark of \$169,000 and \$200,000, respectively, from its Dollar endowment to strengthen fundraising efforts in Latin America (additional staff and marketing activities) as well as a new position in the Washington office directed at strengthening our fund-raising from individuals, corporations and foundations. The Washington office has been active in organizing IFZ (Friends of Zamorano) events in the United States and other countries as well as trips to campus by donors and influential supporters. It also serves as the Executive Secretariat of the two Zamorano Boards which together number over 50 prominent United States, European and Latin American citizens. These Board members are actively engaged in our fund-raising efforts. Several important new donors, including the governments of the Republic of China, Japan and Belgium, as well as a number of individuals, corporations and foundations, have joined Zamorano's traditional donor base. The major challenge for the 2000-2001 development effort continues to be the establishment of scholarship projects to support needy students from Ecuador, Honduras and Nicaragua - countries where the economic climate makes it very difficult for students to self-finance their studies. A key element of our strategy is the establishment of national foundations in the countries we serve to provide scholarship and loan assistance to successful candidates who require financial support. Another challenge is to raise funds and secure in-kind donations to modernize Zamorano's learning-by-doing infrastructure. Zamorano's 2001 request for assistance addresses this need.

The year 1999:

In 1999, Zamorano's fund-raising effort exceeded its annual goals for the sixth year in a row. The 1999 budget for the Washington Office was US\$218,497. Donations from corporations, foundations, government and individuals surpassed U.S.\$ 4.8 million (the total was particularly high as a result of Mitch-related donations). Zamorano's continued involvement with a wide variety of groups and individuals in its post-hurricane Mitch projects gained the institution new collaborators and friends. More than \$50,000 in individual donations for reconstruction were raised by the Washington office one year after the hurricane. Zamorano and the Government of Guatemala signed an agreement that will enable Zamorano to help strengthen elementary and secondary agricultural and vocational schools serving the indigenous communities in the highlands of Guatemala, and provide scholarship opportunities for the most successful students to study at Zamorano. In El Salvador, the number of students attending Zamorano increased by 50% due to the financial support of banks and corporations there. We established additional country foundations in Bolivia and Costa Rica. Zamorano made investments in improving information and donor databases to communicate with graduates and friends throughout the hemisphere, and to target increased fundraising among our graduates.

The year 1998:

This was a very active and productive year for Zamorano's fund-raising team. The Office of Development and External Relations in Washington, DC continued to coordinate Zamorano's fundraising activities, involving the Office of the Directors, the Board of Trustees, the International Board of Advisors, International Friends of Zamorano and Zamorano's graduates. The 1998 budget for the Washington Office was US\$202,000. Over the past year, donations from corporations, foundations, government and individuals surpassed U.S.\$4 million. Over the past year, the Development Committee of the Board of Trustees, in conjunction with Management, developed a Strategic Plan for Development as a sub-component of Zamorano's Strategic Plan 1999-2003. The Development Plan, subsequently approved by the Board in March 1999, sets out ambitious, yet realizable targets for support for both current use and endowment, and calls for increasing the human and financial resources dedicated to the development effort. Investments in personnel have been made and are already bearing fruit. In December 1998, Zamorano was granted a USDA Food for Progress Monetization Project that will generate scholarships for Honduran youth with financial need. Zamorano's Mitch Reconstruction Fund generated over \$250,000 in support. Trustees, friends and staff participated actively in fundraising activities in Honduras (August) and Bolivia (September) of 1999.

28. Annual Report, Brochure, Catalogs. Enclose applicant's and overseas institution's latest independently audited financial reports. Enclose descriptive brochures used in public relations, fund-raising, and recruitment. Also enclose the institution's latest catalog.

See attachments

E. FINANCIAL INFORMATION (continued)

PROGRAM CRITERIA No. 9 - The institution must be located outside the U.S. and should not be under the control or management of a government or any of its agencies. The receipt of financial or other assistance from a government agency or the observance of national education or medical standards required by the host country does not in itself mean that the institution is "under the control or management" of such government.

29. U.S. and Other Country Assistance.

29.(a) Is the Institution benefiting from any A.I.D. or other U.S. Government assistance? (indicate amount and type for the past three years)

YES.

	(\$US executed)		
Source	1998	1999	2000
USDA/Food for Progress	0	388,577	315,250
AID/ASHA	580,037	108,686	864,463
Ministry of Natural Resources PL-480	93,079	36,854	37,798
USAID/Honduras	0	57,902	3,552,899
Mississippi State University (CASP)	16,918	27,927	0
University of Puerto Rico (Bean Cowpea CRSP)	21,770	8,327	59,566
University of Nebraska	1,650	28,354	28,573
University of Wisconsin (Bean Cowpea CRSP)	8,130	3,965	0
University of Michigan	3,776	5,529	0
Cornell University (UDLP)	2,962	0	0
University of Georgia (SANREM CRSP)	0	0	0
Total	728,322	766,121	4,858,549

29.(b) Specify any assistance to the institution from the host country Government or para-statal entity(ies) in the past three years. Describe services performed for or on behalf of those entities for which the institution was reimbursed.

The year 2000: \$693,339

Zamorano's Honduran Lempira Endowment (Established in 1987 in conjunction with the Honduran Government and USAID) produced \$100,000 for scholarships; Scholarships granted by the Ministry of Agriculture total \$593,339.

The year 1999: \$ 482,000

Zamorano's Honduran Lempira Endowment (Established in 1987 in conjunction with the Honduran Government and USAID) produced \$315,000 for scholarships; Scholarships granted by the Ministry of Agriculture totaled \$177,000.

The year 1998: \$600,000

The Honduran Lempira Endowment produced \$500,000; Scholarships granted by the Ministry of Agriculture totaled \$100,000.

PROGRAM CRITERIA No.10 - An applicant requesting capital construction assistance must provide information sufficient to permit a firm estimate of the total cost to the U.S. Government of the construction for which assistance is requested. Such an applicant must also provide information and assurance with respect to rights to the land on which construction is planned. Assistance may not be used to construct buildings or other facilities intended for worship or religious instruction.

30. PURPOSE AND JUSTIFICATION OF REQUESTED ASSISTANCE. If the proposal is part of a larger development plan, describe overall plan and extent of its completion. Specify:

Enabling Zamorano to promote competitiveness, environmental responsibility and international standards of industry through its educational and training activities

Purpose

Zamorano's FY 2001 ASHA proposal is designed to increase the institution's ability to promote competitiveness and international standards of production, processing, environmental management and commercialization of agricultural and agroindustrial products to full-time students and trainees from throughout Latin America, in order to help agricultural producers and processors to compete in more demanding, global markets. Through this project and other ongoing activities, Zamorano will become a regional leader for education and training on issues related to competitiveness and international standards of agroindustry.

Context

Latin American agricultural and agroindustrial operations face the challenge of having to learn to compete successfully in highly demanding international markets that are opening up as a result of globalization, while fighting to maintain their market share in increasingly competitive national markets. They must face this challenge within the context of growing demand for certification that products and processes meet international phytosanitary, labor and environmental standards.

To be successful on an international (and even national) level, firms must produce new or improved products that are more competitive in terms of cost and quality. They must consider new production and processing techniques, improved quality control measures and better packaging and storage technologies.

Increasingly, in order to be competitive, firms must comply with international standards and guidelines such as those laid out in the ISOs (especially 9000 quality management standards and 14000 environmental management standards), the Codex Alimentarius, the General Agreement on Tariffs and Trade (GATT), the Food and Drug Administration (FDA), the Food Safety and Inspection Service (FSIS), the Environmental Protection Agency (EPA), as well as organizations certifying eco, green and blue labels.

The benefits associated with increased competitiveness will be considerable for the firms (increased operational efficiency and savings), Latin American society (mitigation of negative environmental impact and increased economic activity) and consumers (high-quality, safer products). The consumers' perspectives of food safety issues are particularly important given the increase in foreign agricultural products entering the US and other markets. This will be especially important when the American Free Trade Zone becomes fully operationally, perhaps as early as 2005.

Latin American producers and processors face considerable barriers as they attempt to compete on an international level. They face a steep learning curve and must be prepared to invest in improved technologies and management practices. The challenge is made even greater by the fact that in the region there are relatively few models of best practices for firms to look to towards or technological expertise to provide assistance in this process.

Zamorano's ongoing activities and role as a change agent

For nearly 60 years, Zamorano has worked to train human resources capable of improving the efficiency and competitiveness of agricultural and agroindustrial operations. In its Strategic Plan 1999-2003 and its associated 4-Year Business Plan, Zamorano outlines important improvements in its classroom instruction, learning-by-doing and outreach activities that will significantly improve its ability to help such operations face the challenges of increased competition.

Specifically, Zamorano has developed four distinct career paths or majors (Agroindustry, Agribusiness, Agricultural Science and Production, and Socioeconomic Development and Environment). In addition to addressing social development and environmental needs of Latin America, these programs are designed to provide the human resources and technical backstopping that agricultural and agroindustrial operations of all scales need to be successful in more open markets. Zamorano has strengthened its learning-by-doing program by establishing a system of vertically integrated educational enterprises, known as "ZamoEnterprises," that serve as living laboratories for market-oriented practical training as well as showcases for best practices in the entire value chain associated with each operation.

Zamorano has made considerable advances in implementing its new program and in making necessary improvements to its infrastructure. For example: investments have been made in a wide range of equipment associated with learning-by-doing; with the help of ASHA, Zamorano will soon break ground on a new Food Technology Innovation Center; and the dairy cattle area is being modernized and relocated from its present location, where it represents a serious threat of contamination for food processing activities. However, there is much more to be done.

Zamorano's undergraduate degree-granting program is only part of what the college does. Zamorano's outreach program is responsible for training as well as applied research and extension activities that benefit producers and processors of all sizes. The magnitude and impact of these outreach activities has increased by several orders of magnitude in the last 15 years (ASHA support has been instrumental in this positive change). Zamorano intends to lead Latin American agribusiness and agroindustry into the future by increasingly large outreach programs, especially in emerging areas like food safety and value-added activities.

(continued from the Purpose of the Proposal)

For more information regarding the new Careers and ZamoEnterprises, please refer to pages 10-27 of Zamorano's 1999-2000 Annual Report. Outreach activities are described within each Career.

Project components

Zamorano's FY 2001 Project involves two interrelated components that will increase Zamorano's ability to promote competitiveness and international standards of industry through its education and outreach activities:

1. Consolidation of a Food Technology Corridor on campus that will serve as a showcase for best practices and a training ground for large numbers of students and trainees.
2. Modernization and, in some cases, relocation of crop and animal production activities. Several activities must be moved from their current location where they are inappropriately situated adjacent to food processing facilities.

Component 1: Consolidation of the Food Technology Corridor

Agroindustry in Latin America, especially the food processing sector, faces enormous challenges as food safety and environmental concerns come to the fore. The Joint FAO/WHO Food Standards Programme, the Codex Alimentarius Commission, the Uruguay Round Agreements, the Agreement on the Application of Sanitary and Phytosanitary Measures, and ISO 9000 and 14000 all outline norms and standards which Latin American industry must begin to meet, if it hopes to be competitive in national and international markets.

Through this project, Zamorano will undertake several activities that are critical to providing high quality education, training and technical assistance in this area. Specifically, it will:

Create a model environment for education and training in Food Technology. For nearly two decades, Zamorano's commercial-scale food processing facilities have provided high-quality education and training in the area of food technology. However, these facilities were built at a time when food security issues were not appreciated as they are today. As a result, the dairy and meat processing facilities do not fully meet international food safety standards because animal production activities (poultry, hog and feed production) are interspersed with the processing facilities. The first step of the project will involve the relocation of the animal production activities to more appropriate areas (the modernization and relocation of these facilities are discussed in component 2 of the proposal) and the paving of the service roads in this area. Once these activities have occurred, and site clean-up is complete, Zamorano's Food Technology Corridor will be able to meet international standards outlined by the Codex Alimentarius, the Food and Drug Administration (FDA) the Food Safety and Inspection Service (FSIS), and the Environmental Protection Agency (EPA), related to establishing, maintaining and monitoring an environment conducive to safe food processing and safeguarding the natural environment.

*Acquire equipment to meet and teach international standards.*** The project will help Zamorano acquire equipment that is necessary to adhere to and teach food safety standards, including:

- Hazard Analysis and Critical Control Points (HACCP). Students and faculty need equipment to help define, monitor and control critical points in food processing, such as temperature, time, pressure, air velocity, gas mixtures and weight controls that are required to meet HACCP standards.
- Sanitary Standard Operational Procedures (SSOP). The processing facilities need equipment that is easily cleanable and that will not adulterate food with lubricants, fuel, metal, or any other contaminants. Food contact surfaces must be made of corrosion-resistant, non-toxic materials designed to withstand damage from foods, cleaning compounds and sanitizing agents.
- FDA standards for packaging and labeling. The current processing facilities lack equipment to enable students and faculty to fully adhere to FDA and Codex Alimentarius standards of packaging and labeling.
- Good Manufacturing Practices (GMP). All equipment will be used as part of daily good manufacturing practices that enforce controls in all food processing operations.

Component 2: Relocating and Modernizing Animal and Crop Production Activities

All ZamoEnterprises provide high-quality education, training and applied research related to the entire value chain in their respective areas. This project will help to optimize infrastructure used for learning-by-doing for students and trainees in five of Zamorano's seven ZamoEnterprises (Forest and Product Services, Extensive Crops, Intensive Crops, Dairy and Meat Processing, and Agricultural Services).

1. Intensive Crops**

Over the past several years, the Intensive Crops ZamoEnterprise has invested institutional and Japanese government financing in additional greenhouses for year-round intensive production of vegetables, increasing the area of protected agriculture to 11,000 m². It has also begun to make improvements to its ASHA-financed fruit and vegetable processing facility with support from the private sector. Despite these improvements, Zamorano must adopt more modern greenhouse, field production and postharvest technologies to provide the kind of education and outreach activities needed to increase the competitiveness of flower, ornamental and vegetable producers and processors from throughout the region.

This project will enable Zamorano to make the following improvements:

Improved greenhouse production. Greenhouse production enables Latin American producers to grow high-quality vegetables, ornamentals and flowers even under extreme meteorological conditions (extreme drought, extreme rain) with fewer chemical inputs. This is especially important for producers seeking to take advantage of export markets that

**A full list of commodities can be found in response 30 (e).

...are prepared to pay a premium price for products that meet and exceed standards of pesticide use established by the Food and Drug Administration (FDA), the Environmental Protection Agency (EPA) and the Global Environment Management Initiative (GEMI). While Zamorano has increased the area under protected cultivation, the total area is insufficient to meet educational demand and additional investments in ventilation, irrigation and fertilization equipment are necessary. Zamorano needs additional greenhouses as well as state-of-the-art computerized irrigation and fertilization system for hydroponic production of flowers and vegetables. This technology is especially important for areas with fragile ecosystems, such as the Bay Islands in Honduras and the Galapagos Islands in Ecuador, which have requested technical assistance and training from Zamorano.

Improved postharvest storage and processing. With private sector assistance, the Intensive Crops ZamoEnterprise has made some technological improvements to the Fruit and Vegetable Processing Plant. With ASHA support, it will establish a modern, semi-automated production line to increase production Zamorano's green hot sauce—one of the institution's most popular products with potential for export. This will be used as a model system through which the Intensive Crops ZamoEnterprise, the Agribusiness Career and the Food technology Career will work together to provide education and training opportunities related to the production and export of a high-quality, competitive product. Also, new refrigeration equipment is needed to replace inefficient, 12 year-old post-harvest equipment.

Eco-efficient field production. This project will help the ZamoEnterprise to increase the eco-efficiency of field production of vegetables by optimizing the use of soil and water resources. Investments will include a sprinkler irrigation system for 1 ha. and a chipper and shredder to produce high-quality organic compost. With this technology, the ZamoEnterprise will be able to adhere to and promote standards such as those of the European EMAS, ISO 14000, the International Chamber of Commerce (ICC), the United Nations Environmental Program (UNEP), and the International Federation of Engineering Consultants (IFCI).

2. Forest Products and Services**

The challenges related to achieving cost effective, sustainable forest industries in the Tropics are many and varied. Zamorano's Forest Products and Services ZamoEnterprise must obtain and demonstrate the effective use of technologies that result in enhanced labor productivity, increased yields, improved quality, and environmental responsibility in the entire value chain, from nursery to the commercialization of value-added forest products. This is essential for both the cost effectiveness of Zamorano's learning-by-doing activities and for the teaching of best practices to students and trainees who will return to their home countries to implement these practices on a commercial scale.

This project will help Zamorano to make the following improvements:

Relocation and modernization of nursery production. Zamorano's present tree nursery was established in the 1950s at what was then the edge of the campus. However, with the growth of the infrastructure, it is now within the urbanized zone and very close to offices and classrooms. With ASHA assistance, Zamorano will relocate the nursery on land with limited value for agriculture or infrastructure and easy access for trucks and machinery. The operation will be modernized with a drip and micro-irrigation system, equipment for producing planting mixes and an industrial autoclave for sterilizing soils without chemicals.

Improved timber harvesting. Current practices used by Zamorano for harvesting timber (felling of trees and dragging them off site by animal traction or truck) are typical in Latin America but are neither efficient nor sufficiently environmentally friendly. The proposed cable extraction equipment will allow us to cut and extract timber from steep hillsides where natural forests must be thinned and harvested selectively in a rapid, cost effective and eco-friendly manner.

Relocation and modernization of Zamorano's sawmill. Established in the 1950s with used equipment dating back to the 1940s, Zamorano's sawmill is inefficient, unsafe and labor intensive. The technology employed by this facility is outdated and illegal in many countries. Located adjacent to the tree nursery, the sawmill is located close to offices and classrooms. The proposed investments will allow the ZamoEnterprise to process timber legally and effectively with minimal waste and half the labor currently required. A new sawmill and kilns will allow Zamorano to process timber year around and generate considerable net returns for the institution. The sawmill will include a workshop with industrial power tools to produce wood products.

Improved information and communications systems. In order to efficiently manage Zamorano's forest resources (plan extraction and plantings, measure soil characteristics and condition, monitor fire hazard and damage, monitor biodiversity, etc.) the ZamoEnterprise must invest in hand-held and office-based GPS, SIG and data recording equipment. A new radio communication system is needed to carry out more effective forest management activities, especially fire prevention and control. Also, the new nursery and sawmill must be included on Zamorano's campus computer network.

3. Agricultural Services**

The students involved in the Agricultural Services ZamoEnterprise provide the Extensive and Intensive Crops ZamoEnterprises and the Dairy and Meat ZamoEnterprise with a wide range of services, including topography, land preparation, planting, cultivation, irrigation and harvesting. Zamorano's farm machinery is a mix of old and new. Important investments must be made to expose students and trainees to modern, efficient US machinery. Zamorano needs to lower costs associated with the maintenance and inefficiency of aging equipment.

**A full list of commodities can be found in response 30 (e).

This project will help Zamorano make the following investments:

Improved irrigation system. The extended dry season in Zamorano, typical of much of the semi-arid tropics, coupled with increased competition for water resources at the height of the dry season, means that efficient irrigation systems are essential for competitive crop production. With ASHA assistance, Zamorano will invest in an automated lateral move irrigation system that will increase the area under irrigation by 30ha. and extend the growing season from six to 12 months. This system will help the ZamoEnterprises to increase their competitiveness by allowing them to produce more crops and train year-round, outside the traditional harvest windows. It will also allow Zamorano to take full advantage of the increased water storage capacity that it has established during the past year.

Automated Meteorological Station. Accurate meteorological data is essential for effective crop management and agro-ecosystem modeling. Zamorano's current weather station was installed in the 1940s and has been partially updated since then. Still, the facility utilizes manually-operated technology that requires three daily visits for data collection; it is inadequate for collecting the accurate data necessary for modeling to predict the effects of local meteorological conditions on crops and simulate the application of different agricultural practices designed optimize crop management under these conditions.

Improved farm machinery. With support from ASHA, Zamorano will purchase a new tractor, a precision seed planter and a combine that will enable students to prepare soils, plant and harvest with greater efficiency. These investments will help increase the productivity of personnel while reducing the high maintenance costs associated with the older equipment. (Zamorano is moving towards developing a capability in precision agriculture, but that is not the focus of the present proposal.)

4. Eco-efficient Hog Production**

Zamorano's hog production operation should provide important learning-by-doing opportunities for students as well as in-service training and applied research for producers. Unfortunately, part of the current facility dates back to the early 1940s and must be replaced; it is inefficient and anachronistic. Moreover, its location within a few meters of the Meat and Dairy Processing Plants represents a serious problem in terms of waste management and serious threats of cross contamination.

The new hog production facilities will be strategically located in the animal and crop production area of the campus where solid wastes will be used directly to improve soils. Liquid wastes will enter Zamorano's sewage recycling system before being applied to annual and perennial crops. Some wastes will be reused in the fish culture area. The facility will employ total confinement practices to maximize production efficiency. With this new facility in place, students and trainees will be exposed in an integrated fashion to modern technological practices in hog reproduction, sanitary and bio-security issues, and nutritional, environmental and business concepts (the value chain, record keeping, marketing and management). These topics are essential for increased competitiveness of hog production in Latin America.

5. Eco-efficient Poultry Production**

The poultry industry is one of the fastest growing industries in Latin America, due in large part to the growing demand for high quality protein at a reasonable cost. Zamorano's poultry production unit has traditionally been respected among industry leaders and the scientific community in both the United States and Latin America because of the training and research conducted by faculty and students. However, its aging production and processing infrastructure, located in close proximity to laboratories and the dairy and meat processing facility, must be relocated and modernized. Worse yet, the present processing facility is completely inadequate in terms of efficiency and sanitary standards.

With ASHA support, Zamorano will establish new production and processing facilities that will serve as the cornerstone of the Center for Excellence in Poultry Research and Production, whose mission will be to help Zamorano students and producers from throughout the region to produce poultry and eggs in a more efficient, competitive manner. Located far to the east of their present location on land of little agricultural value, the new infrastructure will no longer endanger the food processing activities. Moreover, it will enable cost-effective incorporation of manure in aquaculture and crop production activities and will be equipped with state-of-the-art poultry management, nutrition and processing technologies. These improvements are necessary for Zamorano to continue to provide the level and quality of education, training and research activities demanded by Latin America's growing poultry sector.

6. Feed Concentrate Production**

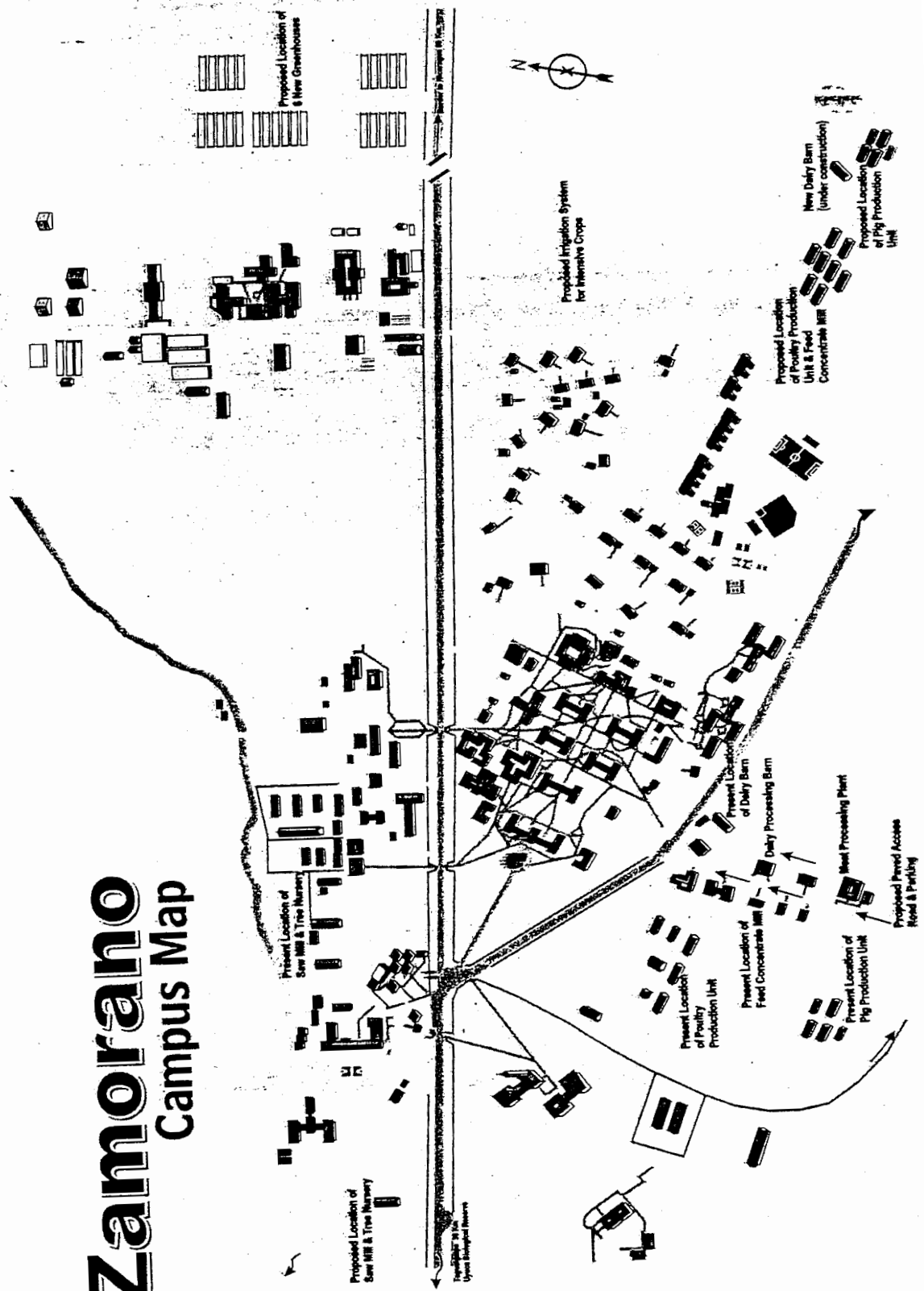
Increased competitiveness of animal production requires improved feed quality. Zamorano's concentrate plant utilizes too much outdated equipment that does not permit adequate quality control or research on animal feeds. Also, its location adjacent to a student auditorium and in front of the Dairy Processing Plant causes unacceptable noise and dust contamination.

With ASHA support, Zamorano will relocate and modernize the concentrate processing plant to the area of the Extensive Crops ZamoEnterprise. The new facility will be capable of producing much higher-quality feed concentrate, and thus improved cattle and poultry production at Zamorano. The floor plan and improved pellet technology used in the new facility will be better suited for learning-by-doing and research on different concentrate formulas for cattle and poultry production. Also, the new facility will generate income for Zamorano from the sale of quality feed concentrate to local producers and training in feed production and management of feed plants.

**A full list of commodities can be found in response 30 (e).

Zamorano

Campus Map



F. PROPOSED USE OF REQUESTED FUNDS (continued)

30.(e) Budget (broken down by major elements)

	Construction	Commodities
Component 1: Consolidation of the Food Technology Corridor		
Modern processing equipment ¹		150,000
Paved service roads in the corridor ²	75,000	
Information systems for learning-by-doing and classrooms.....		35,000
Relocation of animal production units (see below)		
Component 2: Relocating and modernizing animal and crop production		
Intensive Crops		
6 new greenhouses ³	115,000	
Greenhouse equipment ⁴		57,000
Field production equipment ⁵		30,000
Fruit and vegetable postharvest/processing equipment ⁶		66,000
Communication and information systems ⁷		40,000
Forest Products and Services		
New, relocated sawmill with classroom and administrative space ⁸	121,000	
Cable timber extraction equipment.....		60,000
Sawmill and nursery equipment ⁹		88,000
Equipment for wood product development ¹⁰		55,000
Communication and information systems ¹¹		45,000
Agricultural Services		
Irrigation system ¹²		45,000
Automated meteorological station.....		15,000
Improved farm machinery ¹³		70,000
Communication and information systems ¹⁴		25,000
Poultry Production		
New, relocated poultry houses ¹⁵	75,000	
Broiler processing unit.....	40,000	
Production and production equipment ¹⁶		95,000
Communication and information systems ¹⁷		15,000
Hog Production		
New, relocated production facility ¹⁸	181,000	
Production equipment ¹⁹		12,000
Communication and information systems ²⁰		15,000
Feed Concentrate Production		
New, relocated facility ²¹	108,000	
Production equipment ²²		60,000
Communication and information systems ²³		15,000
Sub Total	\$ 715,000	\$ 993,000

Total Budget (from ASHA): \$ 1,708,000

1. Includes: gas/electric conveyor oven, plate heat exchanger, oil press, vacuum film concentrator, single chamber vacuum, HACCP logger, spray washer, hammer mill, seed counter, seed germinator, pasta machine laboratory scale, small-scale extruder, flavor cylinder, analytical balances, digital moisture bench top analyzer, portable digital moisture analyzer, ultraviolet lamps, dust vacuum aspirator, bread slicer, pocket thermometers, belt drier, huller rice mill, grain sample grinder, rice polisher, hygrothermographs, boerner divisor, stereoscopes, pycnometer, cooling racks, electric balance, tray drier, refrigerator, mixer, blender/food processor, pressure cooker, griddle, cookware, portion control scale, sterilizer, portable pH meters, general-purpose centrifuge, head space gas analyzer (oxygen and carbon dioxide), hand-held oxygen indicator for modified atmosphere package, display stopwatch.
2. Cement cobble stones will be used to ensure longer life and easier repair.
3. Steel framed, plastic covered greenhouses, each with basic drip irrigation system.
4. Ventilation and irrigation system for all the greenhouses, plus fertilization and irrigation system for 6 hydroponic production greenhouse.
5. Includes: chipper, 1 ha. sprinkler irrigation system, electric irrigation pump for drip system, portable autoclave/steamer for soil sterilization.
6. Includes: pulper and finisher, automatic filler, automatic canner and automatic labeler, and cold room refrigeration unit.
7. Expansion of campus computer network to the greenhouses and computer hardware and software to manage production.
8. Roofed work area for sawmill and added value activities, with attached classroom, offices and storage area.
9. Includes: commercial band saw for cutting lumber, solar drying kilns, automatic micro-irrigation system for the nursery, autoclave/steamer.
10. Power tools for the development of wood products.
11. Radio communication system, computers for education and management, and inclusion to the campus computer network.
12. Automated lateral move irrigation system for 30 ha of field crops.
13. Tractor, combine, precision seed planter/sower, tensionometers.
14. Radio equipment, computers and computer projecting equipment for labs and classrooms.
15. Includes research broiler houses, cage laying house and pullet growout house.
16. Includes: automated feeders, waterers and cages.
17. Wireless connection of the unit to the campus computer network and hardware and software to manage production.
18. Includes: farrowing, nursery, breeding and gestation, growing-finishing and boars facilities.
19. Includes: automated feeders, waterers and cages.
20. Wireless connection of the unit to the campus computer network and computer hardware and software to manage production.
21. Includes processing and storage area.
22. Includes: hammer mill, batch mixers and extruder, dies and dryer.
23. Wireless connection of the unit to the campus computer network and hardware and software to manage production.

F. PROPOSED USE OF REQUESTED FUNDS (continued)

31. Cost Sharing

31.(a) Indicate the amount and percent of total costs as follows:

Requested Assistance (ASHA)		Cost Sharing (APPLICANT)		Cost Sharing (OTHER SOURCES) (specify)	
\$1,708,000	63%	\$755,000	28%	\$250,000	9%

31.(b) Give your rationale for the cost sharing cited above

Cost Sharing

Zamorano will invest in complementary, related infrastructure in each of the project areas using internally-generated funds and interest from its endowment (modernization and relocation of the dairy barn, additional production and processing equipment, installation costs, structural design and supervision). External government sources have already contributed to the effort, and several equipment producers have provided support and have expressed interest in associated in-kind donations and special discounts. Zamorano is confident that the estimated cost sharing will be achieved.

31(c) List individually amounts received, pledged, and requested from sources other than ASHA. Describe a firm FINANCIAL PLAN for raising the remaining needed funds and the time-frame involved.

For applicants who have already received ASHA grant(s), add a brief report on the status of the grant(s)

Financial Plan

This project will be fully executed within one year of final grant approval.

Source	Pledged	Received	Requested	Total
ASHA	—	—	1,798,000	1,798,000 (63%)
Zamorano	755,000	—	—	755,000 (28%)
Others**	—	175,000	75,000	250,000 (9%)
Totals	755,000	175,000	1,873,000	2,803,000 (100%)

**Others: Zamorano has received approximately \$175,000 from the Japanese Government and equipment suppliers (in in-kind and purchase discounts). Zamorano will complete its cost-sharing before the completion of the ASHA-financed portion of this project.

Please refer to the next page for status of existing grants.

F. PROPOSED USE OF REQUESTED FUNDS (continued)

(c) FINANCIAL PLAN and status of existing grant(s) - (continued)

GRANT NUMBER	BUDGET	EXECUTED	RESIDUAL FUNDS
HSH-G-00-98-00019-00-ASHA-736	400,000	311,633	88,367
HSH-G-00-99-00005-00-ASHA-753	480,000	260,000	220,000
HSH-G-00-00-00003-00-ASHA-782	380,000	—	380,000
TOTAL	1,260,000	571,333	688,367

Zamorano has worked hard to minimize its ASHA pipeline. By May of 2002, all currently available funds will be fully executed. Presently, the status of these grants is as follows:

GRANT 763. Most commodities have been purchased, and final decisions are being made regarding the campus labeling initiative. The project will be completed in early 2002.

GRANT 753. All components of this project have been completed, with the exception of the student Dining Hall Renovation (75% complete). The project will be fully executed in October 2001.

GRANT 782. ASHA is presently reviewing the design for the Agroindustry Innovation Center, and price quotes for commodities have been obtained. Purchase of commodities will be complete by September 2001. Pending final approval of the design, construction of the Innovation Center could be completed as early as May 2002.

32. Operating Cost Estimates. Provide estimate of staffing, maintenance and other operating costs for the three years following the completion of the project. Explain how applicant proposes to cover these costs.

Operating costs:

This project proposes substituting new technology and processes for outdated, inefficient ones; it does not require additional operational expenses. In fact, maintenance costs will decline as aging infrastructure is replaced and improved management systems are adopted. A certain portion of operations presently funded by Zamorano could be covered by external funds generated by training and technical assistance activities. Zamorano will continue to cover, with core funds, operational costs (staffing, maintenance, etc.) of the Food Technology Career, Intensive Crops ZamoEnterprise, Agricultural Services ZamoEnterprise, Forest Products and Services ZamoEnterprise, and the hog, poultry and feed production units.

In addition to routine maintenance, Zamorano will earmark at least \$30,000 to ensure that new ASHA-financed infrastructure is well maintained during the first three years of this project.

BIBLIOTECA WILSON POPENC
ESCUELA AGRICOLA PANAMERICANA
APARTADO 93
TEGUIGALPA HONDURAS

F. PROPOSED USE OF REQUESTED FUNDS (continued)

33. For Construction Projects Only.

33.(a) Extent of architectural-engineering (A/E) planning undertaken to date:

Potential sites for relocating learning-by-doing activities have been identified by an inter-disciplinary team of Zamorano professionals charged with developing an integrated land and water use plan for the institution. The recommended sites have been reviewed by members of Zamorano's Board of Trustees and external specialists. Please refer to the map attached to response 30 (Purpose and Justification of the Request) for their location.

Designs for the new production facilities have not yet been developed. It is important to stress that these will be very simple structures that will most likely follow existing industry-accepted designs.

33.(b) Name(s) and address(es) of A/E firm(s) or consultant(s):

Dr. Eduard Aguilar, a trained architect and former head of Zamorano's Office of Design and Construction Management, is responsible for monitoring all construction projects, including those financed by Zamorano.

34. Host Country Approvals

34.(a) Has the Host Country Government approved the institution and/or any planned expansion? YES

If yes, specify: Name and Title

The Government of Honduras, through separate complementary Laws (Decree No.47 of 1972, Decree 795 of 1975, and decree 522 of 1980 and decree 962 of June 1980) approved the establishment and expansion of Zamorano. No pending approval is required.

34.(b) Indicate any pending approval needed:

The Honduran Government welcomes and encourages donations to, and expansion of, Zamorano. No pending approval is needed.

PLEASE NOTE

PROGRAM CRITERIA NO.11 - To help achieve the objectives of the Foreign Assistance Act and ensure that the American Schools and Hospitals Abroad program is as geographically balanced as possible, special consideration will be given to applications for institutions that increase the geographical distribution of the program and contribute to economic and social progress of areas that are the focus of A.I.D.'s development efforts.

G. CERTIFICATION

The undersigned, as an official of the applicant organization, certifies that the information in this application is complete and free from misrepresentation and does not knowingly omit any material fact to the information requested.

Name and Title of Person Signing

Redmond James Hogan
Director of Development & External Relations

Signature

Date, June 28, 2001

NOTE: Failure to provide all requested information in this application form 1010 may be cause for rejection, and this application will be returned to the applicant. Please, assure that necessary attachments are included with each of the TWO copies of this application, and that they are identified and cross-referenced to the appropriate headings of this form. Be also sure that the attached DATA SUMMARY (page 22) is correctly executed.

DATA SUMMARY SHEET

American Schools and Hospitals Abroad
Agency for International Development
Washington, DC 20523

This table is designed to summarize and collate information about the institution. This is not a substitute for documentation required by all other sheets of this application form.

Please present all financial data in U.S. Dollars. Footnote specific items as necessary for explanation in the REMARKS section.

Name of the Overseas Institution: Escuela Agricola Panamericana (Zamorano). Year of Request: 2001
Name of the U.S. Sponsor: Escuela Agricola Panamericana
Institution's Fiscal Year: from January to December
Exchange Rate Used: U.S.\$1.00 = see remarks

INCOME 2000			EXPENSES 2000		
	AMOUNT	%		AMOUNT	%
Tuition/Fees	3,801,943	17	Faculty/Medical Staff	4,545,787	19
Private Gifts and Grants from	1,693,487	7	Administrative Staff	2,396,869	10
U.S. Sources	708,116		Operation/Maintenance	1,978,245	8
Host Country Sources	202,852		Auxiliary Enterprises	5,127,500	21
International Sources	782,519		Students' Services/Activities	1,435,805	6
Government Grants/Contracts	9,878,342	43	Students-aid/Scholarships	1,216,494	5
ASHA	864,463		Outreach/Extension, etc.	5,856,466	23
Other A.I.D.	3,897,779		Plant improvement	1,736,934	7
Other U.S.Gov	1,251,268		Debt Service	0	
Host Country Govt	645,240		Cash Transfers	0	
Other Donor Govt	546,450		Publicity/Fund-raising	262,286	1
Intern'l Agencies	2,673,142		Other (specify)	0	
Auxiliary Enterprises (specify) **	6,668,489	29			
Endowment Income	476,186	2			
Other Sources (specify below)	420,454	2			
TOTAL INCOME: \$	22,938,901	100	TOTAL EXPENSES:	24,556,386	100

ENDOWMENT	Year 2000
Market Value	\$47,252,588
% Return on Value	2.43%
PHYSICAL PLANT	Year 2000
Replacement Value	\$90,000,000
Date of Last Assessment	Dec. 31st 2000

PRIVATE FUND-RAISING	Year 2000
Contributions	number amount
Individuals	61 \$165,817
Foundations/Corporations	79 \$1,519,580
Alumni	223 \$8,090
Total Donors	363 \$1,693,487
Alumni as % Value of Private Gifts	(0.0%)

BENEFICIARIES

Students:

No. Full-time Degree Earning	767
No. Part-time Degree Earning	
No. Non-degree	
TOTAL: EACH	767

Patients

Inpatients (annually)	
Outpatients (annually)	
TOTAL: EACH	10,000
Others benefitting from outreach/-activities not included in the above	

SUMMARY of USE of REQUESTED FUNDS: A grant of U.S.\$1,708,000 is requested on behalf of the overseas institution to enable Zamorano to promote competitiveness, environmental responsibility and international standards of industry through its educational and training activities

REMARKS:

EXCHANGE RATE USED:

JAN	14.5538	MAY	14.7902	SEPT	15.0141
FEB	14.6241	JUN	14.8207	OCT	15.0458
MAR	14.6750	JUL	14.8732	NOV	15.1116
APR	14.7274	AUG	14.9417	DIC	15.1407

** Departmental sales, Zamorano's Roadside Store, Sale of Services, Internal Production, Outreach and other related activities.

Articles of Incorporation

State of Delaware



Office of Secretary of State

I, GLENN C. KENTON, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF RESTATED CERTIFICATE OF INCORPORATION OF ESCUELA AGRICOLA PAN-AMERICANA, INC. FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY OF NOVEMBER, A.D. 1984, AT 9 O'CLOCK A.M.

| | | | | | | | | |

A handwritten signature of Glenn C. Kenton in dark ink.

Glenn C. Kenton, Secretary of State

843280034

AUTHENTICATION: 10383364
DATE: 12/03/1984

FILED

9A

NOV 23 1964

William C. Kip
SECRETARY OF STATE

RESTATED CERTIFICATE OF INCORPORATION

OF

ESCUELA AGRICOLA PAN-AMERICANA, INC.
(A corporation without capital stock)

ESCUELA AGRICOLA PAN-AMERICANA, INC., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

1. The name of the corporation is ESCUELA AGRICOLA PAN-AMERICANA, INC.

The date of filing of the original Certificate of Incorporation with the Secretary of State was December 3, 1941. An amendment of the original Certificate of Incorporation was filed with the Secretary of State on April 17, 1961.

2. This Restated Certificate of Incorporation restates and integrates and further amends the Certificate of Incorporation as heretofore amended (a) by eliminating from Article THIRD (relating to the purposes for which the corporation is formed) those provisions which are merely statements of powers enjoyed by all Delaware corporations and by redefining the geographical area to which the corporation is to devote its activities, (b) by adding, at the end of Article THIRD, a paragraph expressly limiting the exercise by this corporation of its powers to activities permissible to organizations exempt under Section 501(c)(3) of the Internal Revenue Code of 1954 and Regulations thereunder, (c) by clarifying the language of Article FOURTH and adding thereto language specifically requiring that distributees of corporate property upon the dissolution of this corporation must be organizations exempted under Section 501(c)(3) of the Internal Revenue Code of 1954 and Regulations thereunder, (d) by modifying the provisions relating to membership in the corporation, (e) by eliminating the provision (former Article NINTH and now covered by statute) exempting the private property of members from liability for debts of the corporation and (f) by making, for the sake of clarity, certain editorial changes in, and amplifications of, language previously used in the Certificate of Incorporation.

3. The text of the Certificate of Incorporation as amended or supplemented heretofore is further amended hereby to read as herein set forth in full:

FIRST: The name of the corporation is ESCUELA AGRICOLA PAN-AMERICANA, INC.

SECOND: The registered office of the corporation in the State of Delaware shall be located at 10th floor, One Rodney Square, Tenth and King Streets in the City of Wilmington, Zip Code 19801, County of New

Castle. The registered agent in charge thereof at such address is RIAF Service Corp.

THIRD: The objects and purposes of the corporation are

(1) to promote the science of agriculture and advance the knowledge thereof in Western Hemisphere countries other than the United States of America and Canada by educational means; to establish and maintain in any or all such countries institutions of learning, agricultural or farm schools and colleges, experimental or training farms or plantations, agricultural field stations and other educational establishments or organizations for the accumulation of knowledge, dissemination of learning or instruction and training of students in agricultural and related subjects; to impart such knowledge, learning, instruction and training to any persons in any part of the world, whether attending such aforesaid establishments or otherwise, by personal tuition, correspondence, publication or other means whatsoever; to teach such other subjects and furnish such other courses of study both academic and technical as are usually advisable at agricultural schools or may be considered advisable or appropriate in connection with the study of agriculture; and to grant scholarships and to make its educational facilities available to such persons, with or without charge or compensation therefor, and upon such terms, as the Board of Trustees may deem expedient; and

(2) in furtherance of its purposes aforesaid, to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

Notwithstanding any other provisions of this Certificate of Incorporation, the corporation shall not conduct or carry on any activities not permitted to be conducted or carried on by an organization exempt under Section 501(c)(3) of the Internal Revenue Code of 1954 and Regulations thereunder as they now exist or as they may hereafter be amended (or under corresponding provisions of any future United States internal revenue law and regulations thereunder), or by an organization contributions to which are deductible under Section 170(c)(2) of such Code and Regulations thereunder as they now exist or as they may hereafter be amended (or under corresponding provisions of any future United States internal revenue law and regulations thereunder).

FOURTH: The corporation shall not have any capital stock. It shall pay no dividends and no part of the net income of the corporation shall directly or indirectly be used for or diverted to purposes other than the charitable purposes for which the corporation was formed. No member, trustee, officer, employee or agent of the corporation shall, directly or indirectly, receive or be entitled to any pecuniary profit from the operations thereof beyond reasonable remuneration for services actually

rendered, or the fair market value of goods or other property actually furnished, to the corporation. Upon the termination of the existence of the corporation, by dissolution, or otherwise, the assets remaining after payment of its debts shall be distributed to such charitable organization or organizations as the members by majority vote may direct and which would then qualify for exemption under the provisions of Section 501(c)(3) of the Internal Revenue Code of 1954 and Regulations thereunder as then in force (or under corresponding provisions of any future United States internal revenue law and regulations thereunder at the time in force).

FIFTH: Any natural person may be elected by a majority of the whole membership to be a member of the corporation at any annual meeting or at any special meeting called for the purpose, inter alia, of electing members. The number of members shall not be less than nine or such larger number as may be fixed by vote of the members at any annual meeting or at any special meeting of the members called for the purpose, inter alia, of electing members. Membership in the corporation shall be terminated automatically by death or failure to attend in person three consecutive annual meetings of the members held after December 31, 1984 (any meeting of the members held in lieu of and for the purposes of an annual meeting shall constitute an annual meeting for the purposes of this sentence). A member may resign at any time by notice to such effect directed to the corporation. Any such resignation shall take effect without necessity for its acceptance by the corporation.

SIXTH: The members of the corporation shall meet at least once a year, each such meeting being held at such place, at such time and upon such notice as the by-laws of the corporation may provide. The presence in person or by proxy at any meeting of a majority of the members shall constitute a quorum for the transaction of business and the action of a majority of the members present in person or represented by proxy at any meeting and constituting a quorum shall be deemed the action of the entire membership.

SEVENTH: The power to make, alter and repeal by-laws shall be in the members, but the members may, in the by-laws, confer that power upon the trustees.

EIGHTH: To the extent provided in the by-laws, the affairs of the corporation shall be governed by a board of trustees elected by the members, of such number (not less than three nor more than twenty-five), and with such powers, duties and tenure of office, as may be provided in the by-laws.

NINTH: The trustees may hold their meetings and have an office or offices within or without the State of Delaware. The books and records of the corporation may be kept (subject to legal requirements) outside

the State of Delaware at such place or places as may be from time to time designated by the members or by the board of trustees.

4. This Restated Certificate of Incorporation was declared advisable by the Board of Trustees of said corporation at a meeting duly called and held on September 7, 1984 and was duly adopted by vote of at least two-thirds of the members of the corporation at a meeting duly called and held on October 26, 1984, all in accordance with the applicable provisions of Sections 242 and 243 of the General Corporation Law of the State of Delaware and of the Certificate of Incorporation (as heretofore amended) and By-Laws of the corporation.

IN WITNESS WHEREOF, said ESCUELA AGRICOLA PAN-AMERICANA, INC., has caused this Restated Certificate of Incorporation to be signed by John G. Smith, the Chairman of its Board of Trustees and its corporate seal to be affixed hereto and attested by J. Wayne Reitz, its Secretary, each thereunto duly authorized, this 30th day of October, 1984.

ESCUELA AGRICOLA PAN-AMERICANA, INC.

By

John G. Smith
Chairman

ATTEST:

By

J. Wayne Reitz
Secretary

STATE OF FLORIDA)
) ss.:
 COUNTY)

I, the undersigned, a Notary Public duly authorized to take acknowledgements in and for said State and County, do hereby certify that John G. Smith, to me well known and known to me to be one of the individuals described in and who executed the foregoing instrument, personally appeared before me this day, and did declare that he is the Chairman of the Board of Trustees of Escuela Agricola Pan-Americana, Inc., the corporation referred to in said instrument, and he did acknowledge to and before me that he executed said instrument on the behalf of the corporation pursuant to authority conferred upon him by the members of said corporation and that said instrument is his free act and deed and the free act and deed of said corporation and that the facts stated in said instrument are true.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at in said State and County this day of , 1984.

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES NOV 7, 1986
BONDED THRU GENERAL INSURANCE UND.

Peggy Sue Smith
Notary Public

STATE OF FLORIDA)
ALACHUA COUNTY) ss.:

I, the undersigned, a Notary Public duly authorized to take acknowledgements in and for said State and County, do hereby certify that J. Wayne Reitz, to me well known and known to me to be one of the individuals described in and who executed the foregoing instrument, personally appeared before me this day, and did declare that he is the Secretary of the Board of Trustees of Escuela Agricola Pan-Americana, Inc., the corporation referred to in said instrument, and he did acknowledge to and before me that he executed said instrument on the behalf of the corporation pursuant to authority conferred upon him by the members of said corporation and that said instrument is his free act and deed and the free act and deed of said corporation and that the facts stated in said instrument are true.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at Gainesville in said State and County this 30 day of October, 1984.

Gladys E. Carter
Notary Public

Notary Public, State of Florida
My Commission Expires Oct. 16, 1988
Bonded thru General Insurance, Inc.

By-Laws

ESCUELA AGRICOLA PAN-AMERICANA, INC.

BY-LAWS

Adopted May , 1957

Section 7. Adjournments. The chairman may, with the consent of any meeting of the members at which a quorum is present (and shall if so directed by the meeting), adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting except business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned (except pursuant to Section 5 of this Article on account of the lack of a quorum) for 30 days or more, notice specifying the place and time of the adjourned meeting shall be given as in the case of the original meeting but it shall not be necessary to state in such notice the nature of the business to be transacted at the adjourned meeting.

Section 8. Voting by Members; Proxies. Except as otherwise provided by law or the Certificate of Incorporation, each member of the Corporation shall have one vote on each question on which a vote is taken. Any member may vote in person or by proxy dated not more than six months prior to the meeting and filed with the Secretary of the meeting. Each proxy shall be in writing, subscribed by a member or his or her authorized attorney-in-fact, and dated. A proxy need not be sealed, witnessed or acknowledged. No proxy shall be valid after the final adjournment of the meeting for which it was given. A proxy for a particular meeting shall not be revoked by the attendance thereof of the member who gave the proxy unless he or she shall have notified the Secretary or the meeting at anytime prior to the voting of the proxy.

At all meetings of the members, all questions, except as otherwise expressly provided by law or the Certificate of Incorporation or these By-Laws, shall be determined by a majority vote of the members who are present in person or represented by Proxy. Except as otherwise expressly provided by law, the Certificate of Incorporation or these By-Laws, at all meetings of the members, the voting shall be by show of hands or voice vote, but any member may demand a vote by ballot upon any question (except one of adjournment), whereupon such vote shall be taken by ballot, each of which shall state the name of the member and, if such ballot be cast by a proxy, it shall also state the name of the proxy. All elections shall be decided by plurality vote.

Section 9. Action Without Meeting. Any action required to be taken or which can be taken by the members at a meeting can also be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by members having not less than the minimum number of votes that would be necessary to authorize or approve such action at a meeting at which all the members having the right to vote thereat were present and voted. Prompt notice shall be given to all members of the taking of any corporate

action upon the written consents of fewer than all of the members. Any such consent (which may consist of several counterparts signed separately by one or more of the members) shall be treated for all purposes as a vote at a meeting and may be described as such in any certificate or other document filed with or furnished to any public official, governmental agency or other person having dealings with the Corporation. Prompt notice of the taking of corporate action without a meeting by less than unanimous written consent of the members shall be given to those members whose written consent to such action was not obtained.

ARTICLE III

Board of Trustees

Section 1. General Powers. Subject to the direction and control of the members, the Corporation shall manage Escuela Agricola Panamericana ("School") under the direction of the Board of Trustees which may exercise all such powers of the Corporation as are not by law or by the Certificate of Incorporation or these By-Laws required to be exercised or done by the members.

Section 2. Number, Qualification, Election and Term of Office. The Board of Trustees shall be composed of not less than three nor more than twenty-five Trustees. Within the limits specified, the number of Trustees shall be determined by vote of a majority of the whole the Board of Trustees or by the members of the Corporation at the annual meeting. Trustees need not be members of the Corporation. Except in the case of Trustees appointed by the Board of Trustees to fill vacancies pursuant to Section 14 of this Article III, Trustees shall be elected by ballot at the annual meeting of the members; provided, that in the event of a failure to hold such a meeting or to hold such an election at such meeting, such election may be held at any special meeting of the members called for that purpose. Trustees, except those appointed by the Board of Trustees to fill vacancies, shall be elected by a plurality vote of the members, voting by ballot either in person or by proxy. Each Trustee so elected shall hold office during the term for which he or she was elected and until his or her successor is elected or until his or her earlier resignation, death or removal. The normal term of office of a Trustee is three years, but it may be fixed at two years or one year in order to bring about that the terms of office of one-third (or as nearly that fraction as is reasonably possible) of the number of Trustees in office immediately after any annual election of Trustees will expire at the ensuing annual election. Retiring Trustees are eligible for re-election.

Section 3. First Meeting. The Board of Trustees elected at any annual meeting of the members of the Corporation (or at any special meeting held in lieu of the annual meeting of the members) shall meet at the place of such meeting of the members

immediately after the final adjournment of such meeting or as soon as practicable (but not more than 30 days) thereafter for purposes of organization, the election of officers for the succeeding year and the transaction of other business.

Section 4. Regular Meetings. Except for the first meeting of the Board of Trustees to be held immediately following the annual election of Trustees, regular meetings of the Board of Trustees may be held at such times and places as the Chairman or the Board of Trustees may determine from time to time. Any regular meeting of the Board of Trustees may be dispensed with by an appropriate resolution passed by the Board of Trustees at any prior meeting.

Section 5. Special Meetings. Special meetings of the Board of Trustees may be called by the Chairman of the Board and shall be called by the Secretary at the written request of two or more Trustees. Special meetings of the Board of Trustees may be held at such place or places as may be fixed in the notices thereof.

Section 6. Notices of Meetings. Notice of the time and place of each first meeting, regular or special meeting of the Board of Trustees shall be given to each Trustee by the Secretary or, in the event of his or her absence, disability or refusal to do so, by the Chairman of the Board or by the Trustees calling the meeting. Such notice may be given to a Trustee orally, either face to face or by telephone, or by printed or typewritten notice delivered to him or her personally or left at his or her last-known place of business or residence as it appears on the books of the Corporation at least 20 days before the date appointed for the holding of the meeting, or mailed by first-class mail, with postage prepaid, addressed to such Trustee at his or her address as it appears on the books of the Corporation or transmitted by telegraph or telex to such residence or place of business at least 20 days before the date appointed for the holding of such meeting. Notice of a meeting need not have been given to any Trustee who shall have waived such notice by a writing executed by him or her before or after the meeting and filed with the records of the meeting or to any Trustee who attends the meeting. No notice of any adjourned meeting of the Board of Trustees need be given. Failure to give notice of any meeting, or any irregularity in the notice thereof, shall not invalidate any proceedings taken thereat if a quorum shall have been in attendance. Notices and waivers of notice of meetings of the Board of Trustees need not include a statement of the business to be transacted thereat unless required by law or Certificate of Incorporation or other provisions of these By-Laws.

Section 7. Chairman and Secretary of Meetings of the Board of Trustees. The Chairman of the Board shall preside at every meeting of the Trustees except that if there is no Chairman of

the Board in office or if he or she shall not be present within fifteen minutes after the time appointed for the holding of a meeting, the Vice Chairman of the Board, if any is then in office and present (or if there are two or more Vice Chairmen of the Board in office and present, one of them chosen by lot) shall preside, and if at any meeting neither the Chairman of the Board nor any Vice Chairman of the Board is present within fifteen minutes after the time appointed for the holding of the meeting, the Trustees present by majority vote shall choose one of their number to be Chairman of the meeting. At every meeting of the Trustees the Secretary, or if there is no Secretary in office or if he or she shall not be present within fifteen minutes after the time appointed for the meeting, a person appointed by the Chairman shall keep a record of the proceedings. The Secretary of the meeting need not be sworn.

Section 8. Quorum. One-third of the number of the Trustees in office (but in no event fewer than three) shall be a quorum for the transaction of business at any meeting. In the absence of a quorum, a majority of the Trustees present, or if only two Trustees are present, either Trustee, or the sole Trustee present, may adjourn any meeting from time to time and from place to place until a quorum is present.

Section 9. Voting. A vote of the majority of the Trustees present at any meeting at which a quorum is present shall be the act of the Board of Trustees unless action by a larger number is required by law or the Certificate of Incorporation or other provisions of these By-Laws. In case of an equality of votes at any meeting, whether on a show of hands or on a poll, the Chairman of the meeting shall be entitled to a second or casting vote.

Section 10. Order of Business. At all meetings of the Board of Trustees, business shall be transacted in the order determined by the chairman of the meeting.

Section 11. Telephonic Participation in Meetings. Members of the Board of Trustees or of any standing or special committee thereof may participate in a meeting of the Board or of any such committee by means of conference telephone or similar communications equipment which makes it possible for all of those participating in the meeting to hear one another, and participation in a meeting in accordance with this Section shall constitute presence in person at such meeting.

Section 12. Resignation. Any Trustee may resign at anytime by giving written notice of his or her resignation to the Chairman of the Board or the Secretary. Such resignation shall take effect upon its receipt or at any later date specified therein; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 13. Removal. A Trustee may be removed from office with or without cause by vote of a majority of the members of the Corporation and may be removed from office with cause by vote of a majority of the Trustees then in office. A Trustee may be removed for cause only after reasonable notice and opportunity to be heard before the body proposing to remove him or her.

Section 14. Vacancies. The Board of Trustees may act notwithstanding a vacancy or vacancies in its membership; but if the office of any Trustee becomes vacant by reason of resignation, death or any other circumstance, the remaining Trustees in office, although more or less than a quorum, by a majority vote of such remaining Trustees may appoint a successor Trustee who shall hold office for the unexpired term of office of the Trustee whose place he or she is taking and until his or her successor is chosen or until his or her earlier resignation, death or removal.

Section 15. Remuneration of Trustees. Trustees shall receive no remuneration for their services as such, but may be paid their reasonable out-of-pocket expenses, if any, of attending any meeting of the Board of Trustees or of any standing or special committee thereof.

Section 16. Validity of Acts of Trustees. All actions taken by any meeting of the Board of Trustees or of a committee of the Trustees or by any person acting as a Trustee shall, notwithstanding that it shall afterwards be discovered that there was some defect in the election or appointment or continuance in office of any such Trustee or person acting as a Trustee, or that they or any of them were disqualified, or had vacated office, or were not entitled to vote in relation to the matter acted upon, be as valid as if such person had been duly elected or appointed, had continued in office and was qualified to be a Trustee and entitled to vote on such matter.

Section 17. Honorary Trustees. The Board of Trustees may, at any time from time to time, in recognition of their past services and devotion to the objects of the Corporation, designate one or more retiring or former Trustees as Honorary Trustees. Although Honorary Trustees shall have no duties as such, they shall be entitled to attend and take part in the discussions at meetings of the Trustees but shall not have any vote.

ARTICLE IV

The Council

The Board of Trustees shall be at liberty to appoint a Council composed of individuals whose association with the

Corporation could, in the opinion of the Board, be expected to aid in advancing its objects and welfare. The number of members of the Council may be fixed or varied and appointments to the Council may be made from time to time as the Board of Trustees deems expedient. Each member of the Council shall have such term of office (not less than one year) as the Board of Trustees may determine at the time of his or her appointment. A Council in being may be allowed to expire upon the termination of the terms of office of its members, but such expiration shall not preclude the reconstitution of a Council at a later date. Council members need not be members of the Corporation. The Council shall elect a Chairman and a Secretary and may adopt such rules and regulations for their own guidance as are not inconsistent with these By-Laws. Each year the Council may appoint from its own membership a nominating committee whose responsibilities shall be to nominate individuals for appointment to the Council and to renominate, if deemed expedient, any member or members whose term or terms of office will expire within the ensuing twelve months. The Council shall meet annually on the same date and at the same place as is designated in the notice of annual meeting of the members of the Corporation in the particular year, at 3:00 P.M., local time, or at such other place and time as the Chairman of the Council in his or her discretion may designate by notice in writing to each member of the Council at least 30 days prior to the date of the meeting fixed in such notice. Special meetings of the Council may be held at such times and places as the Chairman of the Council may designate. The Council shall keep a record of its proceedings which shall be open to inspection by the Trustees.

ARTICLE V

Committees

Section 1. Executive Committee. The Board of Trustees by resolution passed by a majority of the Trustees at a meeting at which a quorum is present, may designate an Executive Committee to be composed of the Chairman of the Board, each Vice Chairman of the Board at the time in office, the Treasurer, the Secretary and such number of other Trustees (not less than four nor more than seven) as the Board of Trustees may appoint to serve thereon during the pleasure of the Board of Trustees.

During the intervals between the meetings of the Board of Trustees, the Executive Committee shall have, and may exercise, to the extent permitted by law, the Certificate of Incorporation and these By-Laws, and subject to review and approval or alteration of its actions by the Board of Trustees, all of the powers of the Board of Trustees in the management of the business, affairs and property of the Corporation, including the power to decide all questions of policy and personnel and power to authorize the seal of the Corporation to be affixed to all

papers which may require it; but the Executive Committee shall not have the powers.

(a) to change the number of Trustees or to fill vacancies in the Board of Trustees, or

(b) to abolish, discharge or change the membership of or to fill vacancies occurring in any committee appointed by the Board of Trustees, or

(c) to exercise any power specifically delegated by these By-Laws or by the Board of Trustees to any other committee, or

(d) to amend or repeal the By-Laws of the Corporation, or

(e) to amend or repeal any resolution of the Board of Trustees unless it is by its terms amendable or repealable by the Executive Committee, or

(f) to adopt a plan of merger or consolidation with any other corporation, or

(g) to authorize the distribution, sale, exchange, mortgage or other disposition of all or substantially all of the assets of the Corporation as a whole or substantially as a whole whether in a single transaction or in a series of related transactions, or

(h) to authorize the voluntary dissolution of the Corporation or revoking proceedings therefor.

All action taken by the Executive Committee shall be reported to the Board of Trustees at their meeting next succeeding such action. No revision or alteration by the Board of Trustees of any action of the Executive Committee shall prejudice the rights or acts of any third person.

The Executive Committee shall hold meetings at such times and places and upon such notice as it may from time to time determine. Special meetings of the Executive Committee may be called by the Chairman of the Board or by any two members of the Executive Committee. Unless otherwise determined by vote of a majority of the whole Board of Trustees, four members of the Executive Committee shall constitute a quorum.

Section 2. Audit Committee. The Board of Trustees, by vote of a majority of the Trustees at a meeting at which a quorum is present, shall annually designate three Trustees, none of whom is an officer or employee of the Corporation, to constitute the Audit Committee.

appointed, or if at any meeting the chairman is not present within five minutes after the time appointed for the holding of the meeting, the members present may choose one of their number to be chairman of the meeting. Questions arising at any meeting shall be determined by a majority of the votes of the members present and in the case of an equality of the votes, the chairman of the meeting shall have a second or casting vote. A committee may act notwithstanding a vacancy or vacancies in its membership provided a majority of the whole membership (or such lesser number, if any, as the committee may have fixed as a quorum) is present. A committee cannot sub-delegate its powers to one or more of its members unless authorized to do so by the Board of Trustees.

Section 7. Action Without a Meeting. Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, any action required or permitted to be taken at any meeting of the Board of Trustees or of any standing or special committee thereof may be taken without a meeting, if written consent thereto is signed by all members of the Board of Trustees or of such committee, as the case may be, and such written consent (which may consist of several counterparts signed separately by one or more members of the Board of Trustees or of such committee) is filed with the minutes of proceedings of the Board of Trustees or of such committee.

ARTICLE VI

Officers

Section 1. Number, Titles and Qualifications. The officers of the Corporation shall be a Chairman of the Board, a Treasurer, a Secretary and such other officers (including not more than two Vice Chairmen of the Board), agents and assistants as the Board of Trustees may from time to time appoint. Except as otherwise provided by law, the duties of any two offices may be discharged by the same person, but the Chairman of the Board shall not serve at the same time as Treasurer or Secretary. The Chairman of the Board, the Treasurer, the Secretary and each Vice Chairman of the Board shall be members of the Board of Trustees. No officer need be a member of the Corporation.

Section 2. Appointment and Terms of Office. The Chairman of the Board, the Treasurer, the Secretary and any Vice Chairman or Vice Chairmen of the Board shall be chosen by the Board of Trustees at its first meeting following each annual meeting of the members (or special meeting of the members in lieu of such annual meeting). The Chairman of the Board, the Treasurer and the Secretary each shall hold office until the first meeting of the Board of Trustees following the next annual meeting of the members or until his or her successor is chosen and qualifies or until his or her earlier resignation, death, removal or

disqualification. Any Vice Chairman of the Board shall hold office until the first meeting of the Board of Trustees following his or her appointment or until his or her earlier resignation, death, removal or disqualification. Other officers may be appointed by the Board of Trustees at any meeting who shall have such titles, exercise such powers and perform such duties and hold their offices for such terms as shall be determined by the Board of Trustees from time to time. All appointments of officers and other agents shall be made by vote of a majority of the whole Board of Trustees.

Section 3. Duties; Fidelity Bond. The duties and authority of each officer of the Corporation, other than as set forth in these By-laws, shall be prescribed, and may be varied from time to time, by the Board of Trustees or the Executive Committee. The Board of Trustees shall provide for such bond and fidelity insurance covering the officers of the Corporation and for the honest discharge of their duties as the Board of Trustees may determine. Such bonds or insurance may be in individual, schedule or blanket form and the premiums thereon shall be paid by the Corporation.

Section 4. The Chairman of the Board. The Chairman of the Board shall be the chief executive officer of the Corporation and shall supervise the carrying out of policies adopted or approved by the Board of Trustees and when present shall preside at all meetings of the Board of Trustees and of the members. He or she shall perform such duties as may be imposed upon him or her by these By-Laws, the Board of Trustees and the Executive Committee. The Chairman of the Board shall be, ex officio, a member of the Executive Committee and of each committee appointed pursuant to Section 3 of Article V of these By-Laws. A vacancy in the office of Chairman of the Board shall be filled promptly by the Board of Trustees.

Section 5. The Vice Chairman of the Board. Each Vice Chairman of the Board shall have such powers and duties as may be vested in him or her by the Board of Trustees or these By-Laws. In the absence or inability to act of the Chairman of the Board, the Vice Chairman of the Board if any and available, or if two Vice Chairmen of the Board are then in office, the one of them who is available, or if both are available, one of them chosen by lot, shall preside at meetings of the members, of the Board of Trustees and of the Executive Committee and shall have and exercise thereat all the powers and duties of the Chairman of the Board.

Section 6. The Treasurer. The Treasurer is the principal financial officer of the Corporation. Subject to the control of the Board of Trustees and the Executive Committee, the Treasurer has custody and control over those investment funds and securities directly held by the Corporation. The Treasurer has

authority, in connection with the normal business of the Corporation, to sign or endorse negotiable instruments, powers of attorney, contracts, leases and other documents.

The Director, Controller, Business Manager and other senior administrative officers of the School shall inform the Treasurer concerning the activities and financial affairs of the School so that the Treasurer can understand the financial status of the School and analyze future operational results of the School. Based on the information thus received, the Treasurer shall inform the Board of Trustees and the Executive Committee on the financial status of the School and shall make recommendations to the Board of Trustees and the Executive Committee concerning the financial policies of the School. The Treasurer shall not, however, have any operational responsibility at the School or participate in operational decisions at the School, and he or she shall not have responsibility for disbursing funds by the School, maintaining the School's accounts, supervising the business administration of the School, or approving current expenditures by the School.

The Treasurer may delegate his or her responsibility for custody and control over funds and securities of the Corporation to such other officers of the Corporation as are appointed by the Corporation for this purpose, or with the approval of the Board of Trustees, to qualified fund managers or custodians. The Treasurer shall receive from such agents a full accounting of their stewardship.

The Board of Trustees may constitute one or more standing or special committees to assist the Board of Trustees on financial matters. These committees, of which the Treasurer may or may not be a member, shall report directly to the Board on their specific area of responsibility. The Treasurer, by virtue of his or her office, is excluded from membership on the Audit Committee. The Treasurer, when reporting to the Board of Trustees should evaluate decisions of such committees as they affect the overall welfare of the Corporation.

Section 7. The Secretary. The Secretary shall be the principal recording officer of the Corporation. He or she shall be, ex officio, the Secretary of the Board of Trustees and of the Executive Committee. He or she shall attend and record all votes and proceedings of the members of the Corporation, the Board of Trustees, the Executive Committee and of each committee appointed by the Board of Trustees which shall not have appointed any other person to serve as its secretary. Except as otherwise ordered by the Board of Trustees or the Executive Committee, the Secretary shall affix and attest the seal of the Corporation upon all contracts and documents executed under such seal. The Secretary shall have charge of the minute books and such other corporate records, books and papers as the Board of Trustees or the

Executive Committee may order to be kept in his or her custody or under his or her control. As required by law, these By-Laws, or by the Board of Trustees or the Executive Committee, the Secretary shall give or cause to be given notice to the members of the Corporation of each annual and special meeting and to the Trustees of each meeting of the Board of Trustees except the first meeting after their election in each year. The Secretary shall perform such other duties as may be imposed upon him or her by law, these By-Laws, the Board of Trustees or the Executive Committee. A vacancy in the office of Secretary shall be filled promptly by the Board of Trustees.

Section 8. Resignation. Any officer may resign at anytime by giving written notice to the Chairman of the Board or the Secretary. The resignation of any officer shall take effect upon its receipt or on any later date specified therein; and unless otherwise specified therein, the acceptance of such resignation shall not be required to make it effective.

Section 9. Vacancies. The Board of Trustees may fill any vacancy occurring in any office by reason of death, resignation or other cause and may, in its discretion, leave unfilled for such period as it may determine any offices other than those of the Chairman of the Board, the Treasurer and the Secretary.

Section 10. Delegation of Duties. Except as otherwise provided by law, in case of the absence or incapacity of any officer of the Corporation, or for any other reason that the Board of Trustees may deem sufficient, the Board of Trustees may delegate all or any of the powers and duties of such officer to any other officer or to any Trustee, provided that a majority of the entire Board of Trustees concurs therein.

Section 11. Remuneration of Officers of the Corporation. Officers of the Corporation shall not be remunerated for their services as such, but they shall be entitled to reimbursement for reasonable out-of-pocket expenses incurred in the performance of their duties for the Corporation.

ARTICLE VII

The School

Section 1. The Director. The Board of Trustees shall by a majority of the whole Board of Trustees appoint the Director of the School. The appointment shall be at the pleasure of the Board. The Director shall serve until his or her successor is chosen by the Board of Trustees or until his or her earlier resignation, death, removal of disqualification. The Board of Trustees shall fix the compensation of the Director. The Director shall have overall responsibility for the management and

of the Board and the Board of Trustees may determine in their absolute discretion.

Section 5. Execution of Instruments. All contracts, conveyances, promises or orders for the payment of money or other obligations authorized by the Board of Trustees to be executed or endorsed by an officer of the Corporation in its behalf shall be executed or endorsed by the Chairman of the Board or the Treasurer, except as the Board of Trustees or the Executive Committee may generally or in particular cases otherwise determine and except that checks drawn on any payroll or other special accounts may bear the facsimile signature, affixed thereto by a mechanical device, of such officer or agent as the Board of Trustees or the Executive Committee may authorize, and except also that bonds, notes, debentures or other evidences of indebtedness authenticated by a manual signature on behalf of a Trustee or an authenticating agent appointed by the Board of Trustees may bear such facsimile signature or signatures of such officer or officers of the Corporation as the Board of Trustees or the Executive Committee may authorize.

Section 6. Voting of Securities. Unless otherwise ordered by the Board of Trustees, the Chairman of the Board, the Treasurer and the Secretary, each acting alone, shall have authority on behalf of the Corporation (a) to attend and act and vote in person for the Corporation and as its duly appointed agent and attorney-in-fact, at any meeting of the holders of securities or creditors of any person (as hereinafter defined, any securities of which are owned or held with power to vote by the Corporation or any indebtedness of which is owed to the Corporation, (b) to appoint by an instrument in writing, a proxy or several proxies to attend and act and vote for the Corporation at any such meeting and (c) to execute and deliver in the name and behalf of the Corporation any consent or waiver by the Corporation as a security holder or creditor of any such person. As used in this Section, the word "person" includes a natural person, a corporation, a company, a partnership, a voluntary association, a proprietorship, a trust, an estate, a government (national, state, regional or local) or a department or agency thereof, and any other form of legal entity, corporate or unincorporate, however designated and wherever formed or existing. Each officer named in this Section and each person designated by any such officer as a proxy for this Corporation shall have and may exercise at any such meeting any and all rights and powers incident to the ownership of such securities or indebtedness which an owner would have if personally present.

Section 7. Issue of Debt Obligations. The Board of Trustees shall have the power to authorize and cause to be executed and issued at anytime or times bonds, notes, debentures or other obligations of the Corporation, secured or not secured, in such principal amounts and subject to such terms of repayment

and other conditions as may be fixed by vote of a majority of the whole Board of Trustees prior to the issue thereof.

Section 8. Corporate Records. The original, or attested copies, of the Certificate of Incorporation, the By-Laws and records of all meetings of the incorporators and members of the Corporation, and records of the names and addresses of the members of the corporation shall be kept in the custody of the Secretary. They shall be available at all reasonable times for inspection by any member of the Corporation for any proper purpose.

Section 9. Conflict of Interest. No contract or other transaction of the Corporation shall, in the absence of fraud, be affected or invalidated by the fact that any Trustee or officer of the Corporation or any corporation, firm or association of which he or she may be a director, officer or member may be a party to or may have an interest, pecuniary or otherwise in, any such contract or other transaction, provided, that the nature and extent of his or her interest was disclosed to, or known by, the Board of Trustees before authorizing or ratifying any such contract or other transaction. Except in the case of any contract or other transaction between the Corporation and any other corporation, firm or association controlling the Corporation, any Trustee of the Corporation who is also a director, officer or member of any other corporation, firm or association with which the Corporation proposes to contract or to transact any business, or who has an interest, pecuniary or otherwise, in any such contract or other transaction, may not be counted in determining the existence of a quorum at any meeting of the Board of Trustees which shall authorize or ratify any such contract or transaction, and such Trustee shall not participate in the vote to authorize or ratify any such contract or transaction. Any such contract or transaction may be authorized or ratified by a majority of the Trustees at the time in office and qualified to vote thereon.

Section 10. Indemnification. The Corporation shall indemnify each Trustee and officer against all judgments, fines, settlement payments and expenses, including reasonable attorneys' fees, paid or incurred in connection with any claim, action, suit or proceeding, civil, criminal, administrative or investigative, to which he or she may be made a party or which he or she may be threatened by reason of his or her being or having been a Trustee or officer of the Corporation, or, at its request, a director, officer, stockholder or member of any other corporation, firm or association of which the Corporation is a stockholder or creditor and by which he or she is not so indemnified, or by reason of any action or omission by him or her in such capacity, whether or not he or she continues to be a Trustee or officer at the time of incurring such expenses or at the time the indemnification is made. No indemnification shall be made hereunder to any Trustee

or officer of the corporation (a) with respect to payments and expenses incurred in relation to matters as to which he or she shall be finally adjudged in such action, suit or proceeding not to have acted in good faith and in the reasonable belief that his or her action was in the best interests of the Corporation, or (b) which is prohibited by law. Any such determination shall be made by majority vote of the disinterested Trustees or, if they do not constitute a quorum, by a disinterested group of three persons chosen by them who, in either case, may rely conclusively upon the opinion of reputable legal counsel selected by or in the manner designated by the Board of Trustees. The foregoing right of indemnification shall not be exclusive of other rights to which any Trustee or officer of the Corporation may otherwise be entitled and shall inure to the benefit of the heirs and executors of such Trustee or officer and the administrators of his or her estate.

ARTICLE IX

Amendments

These By-Laws may be amended or repealed as a whole or in part (a) by resolution passed by a vote of a majority of the members of the Corporation at a meeting where the substance of the proposed amendment is stated in the notice of the meeting, or (b) by resolution passed by a vote of a majority of the whole Board of Trustees at the time in office, except that no amendment may be made by the Board of Trustees on matters reserved to the members of the Corporation by law or the Certificate of Incorporation or which changes any of the provisions of this Article IX or of Section 13 of Article III (relating to the removal of Trustees.) Notice of the substance of any amendment, addition or repeal of any By-Law effected by the Trustees shall be given to all members of the Corporation not later than the time when notice is given of the meeting of members of the Corporation next following such action by the Board of Trustees. Any change in these By-Laws effected by the Trustees may be amended or repealed by the members of the Corporation.

Certification of Drug Free Work-Place

2. CERTIFICATION REGARDING
DRUG-FREE WORKPLACE REQUIREMENTS

INSTRUCTION FOR CERTIFICATION

1. By signing this certification, the grantee is providing the certification set out below.
2. The certification set out below is a material representation fact upon which reliance was placed when the agency determined to award the grant. If it later determined that the grantee knowingly rendered a false certification, or otherwise violates the requirements of the Drug-free Workplace Act, the agency, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-free Workplace Act.
3. For grantees other than individuals, Alternate I applies.

ALTERNATE I

1. The grantee certifies that it will provide a drug-free workplace by:
 - a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
 - b. Establishing a drug-free awareness program to inform employees about—
 - i. the dangers of drug abuse in the workplace;
 - ii. the grantee's policy of maintaining a drug-free workplace;
 - iii. any available drug counseling, rehabilitation, and employee assistance programs; and
 - iv. the penalties that may be imposed upon the employees for drug abuse violations occurring in the workplace.
 - c. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph -a.-
 - d. Notifying the employee in the statement required by paragraph -a.- that, as a condition of employment under the grant, the employee will—
 - i. abide by the terms of the statement, and
 - ii. notify the employer of any criminal drug statute conviction for violation occurring in the workplace no later than five days after such conviction.
 - e. Notifying the agency within ten days after receiving notice under subparagraph -d.ii.- from an employee or otherwise receiving actual notice of such conviction.
 - f. Taking one of the following actions, within 30 days of receiving notice under subparagraph -d.ii.-, with respect to any employee who is so convicted—
 - i. taking appropriate personnel action against such an employee, up to and including termination, or
 - ii. requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purpose by Federal, State, or local health, law enforcement, or other appropriate agency.
 - g. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs -a.-, -b.-, -c.-, -e.-, and -f.-.
2. The grantee shall insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of performance:	<u>Pan American School of Agriculture (Zamorano)</u>	
street address:	<u>Valle del Zamorano</u>	<u>P. O. Box 93</u>
city, state, zip:	<u>Francisco Morazán, Honduras</u>	<u>Tegucigalpa, Honduras</u>
Country:	<u>Honduras</u>	<u>Honduras</u>

CERTIFIED BY: (type or print) Mr. Redmond James Hogan, Jr.
Exec. Sec., Board of Trustees
Of. of Ext. Rel. & Dr.

TITLE:

(signature)

June 28, 2001
(date)

active grant number (if applicable) ASILA 736, 753, 782

Certification Regarding Lobbying

4. CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: Pan American School of Agriculture (Zamorano)
street address: Valle del Zamorano P. O. Box 93
city, state, zip: Francisco Morazán, Honduras Tegucigalpa, Honduras

CERTIFIED BY: (type or print),

Mr. Redmond J. Hogan

TITLE:

Exec. Sec./Board of Trustees;
Of. of Ext. Rel. & Devl.

June 28, 2001

(signature)

(date)

active grant number (if applicable) ASHA : 736, 753, 782

Certification of 501(c)(3) Tax-Exempt Status

Department of the Treasury

Internal Revenue Service
Washington, DC 20224

Date:

In reply refer to:

12-24-70



ESCUELA AGRICOLA PAN-AMERICANA INC
140 FEDERAL STREET ROOM 1301
BOSTON, MASS

02110

Gentlemen:

Based on the information you recently submitted, we have classified you as an organization that is not a private foundation as defined in section 505(a) of the Internal Revenue Code.

Your classification is based on the assumption that your operations will be as stated in your notification. Any changes in your purposes, character, or method of operation must be reported to your District Director so he may consider the effect on your status.

Sincerely yours,

Chief, Rulings Section
Exempt Organizations Branch

Wm. F. Miller

Very truly yours,

I trust that the foregoing information will serve your purpose.

This ruling remains in effect as long as there are no changes in their character, purposes, or method of operation.

Internal Revenue Code of 1934.

Federal Income tax under Section 501(c)(3) of the

to the above organization, ruling that they were exempt from

letter was issued on March 1943

however, records in this office indicate that a determination

letter is not available.

Due to our records retention program, a copy of the original

an exemption letter for the above organization.

This is in reply to your recent letter, requesting a copy of

Gentlemen:

Boston, Massachusetts 02114

Science Park

Museum of Science

Essex Agricultural Experiment Station, 1

Feb. 28, 1974 AU:EO:RL

In reply refer to:

Internal Revenue Service

Official Register

Rev. Dec 1961

