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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

ECUADOR

PROJECT PAPER

GRADUATE MANAGEMENT PROGRAM

AID/LAC/P-336

Project Number:518-0035

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT DATA SHEET		1. TRANSACTION CODE A A = Add C = Change D = Delete	Amendment Number _____	DOCUMENT CODE 3
2. COUNTRY/ENTITY ECUADOR		3. PROJECT NUMBER 518-0035		
4. BUREAU/OFFICE LAC		5. PROJECT TITLE (maximum 40 characters) Graduate Management Program		

6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 01 31 92	7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4) A. Initial FY 86 B. Quarter 4 C. Final FY 91
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8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY 86			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						10,000
(Grant)	(3,500)	()	(3,500)	(9,189)	(811)	(10,000)
(Loan)	()	()	()	()	()	()
Other U.S.						
1. Host Country					4,273	4,273
2. Other Donor(s)						
TOTALS				9,189	5,084	14,273

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) EHR	629	631				3,500		10,000	
(2)									
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each) 620 700 840	11. SECONDARY PURPOSE CODE
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12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each) A. Code TNG B. Amount 10,000

13. PROJECT PURPOSE (maximum 480 characters)
To establish a high quality Graduate Management School in Ecuador.

14. SCHEDULED EVALUATIONS Interim MM YY MM YY Final MM YY 08 88 08 91	15. SOURCE/ORIGIN OF GOODS AND SERVICES <input checked="" type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify)
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16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

I concur in the proposed methods of implementation and financing for this project, as summarized in Annex II, Table 5.

Robert Clark 10/27/86
Robert Clark, Controller, USAID/E

17. APPROVED BY	Signature Gerald R. Wein <i>Gerald R. Wein</i>	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY
	Title Acting Mission Director USAID/Ecuador	
	Date Signed MM DD YY 07 28 86	

PROJECT AUTHORIZATION

Name of Country: Ecuador
Name of Project: Graduate Management Program
Number of Project: 518-0035

1. Pursuant to Section 105 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Graduate Management Program for Ecuador involving planned obligation of not to exceed Ten Million United States Dollars (US\$10,000,000) in grant funds ("Grant") over a five year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D./OYB allotment process, to help in financing foreign exchange and local currency costs for the Project. The planned life of the project is five (5) years and six months from the date of initial obligation.

2. The project ("Project") consists of assisting the Ecuadorean Private Foundation (FPE) in establishing a high quality graduate management school in Ecuador.

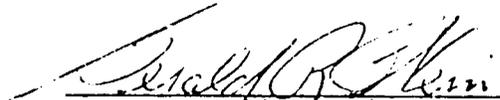
3. The Project agreement(s), which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. Regulations and Delegations of Authority, shall be subject to the following essential terms and Covenants and major conditions together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of Services

Commodities financed by A.I.D. under the Grant shall have their source and origin in Ecuador or in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping the suppliers of commodities or services financed under the Grant shall have Ecuador or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Grant shall be financed only on flag vessels of the United States, except as A.I.D. may otherwise agree in writing.

4. Waivers

A.I.D. nationality requirements are hereby waived to permit the procurement of evaluation services from suppliers whose nationality is included in A.I.D. Geographic Code 941 in the approximate amount of \$150,000.

 5/13/86
Gerald R. Wein
Acting Mission Director
USAID/Ecuador

CLEARANCES: O/DR:R Roeser SU
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ECUADOR GRADUATE MANAGEMENT PROGRAM

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* On file in LAC/DR

1. SUMMARY AND RECOMMENDATIONS.

A. Goal and Purpose Statement.

The project goal is to upgrade the quality and increase the quantity of managers for Ecuadorean private sector enterprises. The project purpose is to establish a high quality graduate management school in Ecuador.

B. Summary of the Development Problem.

One of the critical bottlenecks to the future economic development of Ecuador is the lack of well qualified and trained managers. The capacity to establish and expand efficient and profitable business enterprises which will generate economic and employment growth and which can compete in international markets is limited by the scarcity of qualified managers who can effectively apply modern management practices. A pre-feasibility study for a graduate management program in Ecuador (Annex XIV) estimated that an average of 2,700 newly trained managers would be required in the private sector each year. The demand for highly skilled graduate management degree holders is estimated to be more than 400 per year. However, the supply of qualified, trained managers is much less than the demand.

C. Summary Project Description.

To address the shortage of trained managers in Ecuador, the project will assist the Ecuadorean Private Foundation (FPE), which is composed of prominent Ecuadorean businessmen, to establish a high quality Graduate Management Institute (GMI). A Collaborative Assistance Contract has been awarded to a consortium of business schools composed of the University of Houston (the lead institution), the University of Indiana, Florida International University, and INCAE (the Instituto Centroamericano de Administración de Empresas). This consortium has carried out the major feasibility analyses for the project and will provide technical support to establish the new graduate management program.

At the end of the project there will be a fully functioning, financially viable Graduate Management Institute which: (1) is staffed by a core full time Ecuadorean faculty; (2) trains at least 75 Ecuadoreans per year to the Master's level in management; (3) contributes to improved management by providing executive management training to at least 400 Ecuadorean private and public sector managers per year; (4) has a fully developed academic program and curriculum which respond to the management needs of the Ecuadorean private sector and to the realities of the Ecuadorean environment; (5) has an efficient, functional administration which can maintain a high quality graduate management program while minimizing expenditures; (6) has an adequate physical plant with a technical resources center and computer facilities; and (7) has an endowment fund which will cover the projected post-project operating deficit.

The \$10 million dollar A.I.D. contribution will finance over the five and one half years of the project the long and short term technical assistance provided by the University of Houston Consortium, training of Ecuadorean students in the U.S., procurement of commodities including books and computer equipment, project evaluation costs, and the portion of the program's operating costs which cannot be covered through tuition and fees. The counterpart contribution will include the establishment of a \$2.5 million endowment fund, a permanent campus (land and buildings) valued at \$400,000, and a contribution toward the program's operating costs of approximately \$1.4 million derived from revenues generated from the Master's level and executive development programs.

TABLE I
Summary Financial Plan
(\$000s)

	A.I.D Grant	Counterpart	Total
Technical Assistance	6,130	--	6,130
Training	408	--	408
Operating Costs	2,111	1,373	3,484
Physical Plant	600	400	1,000
Evaluation	241	--	241
Endowment Fund	--	2,500	2,500
Contingencies	510	--	510
TOTAL	10,000	4,273	14,273

D. Summary Findings and Recommendation.

The Mission project review committee has reviewed the proposed project to establish a high quality Graduate Management Institute in Ecuador and has found it to be technically, financially, socially, economically, and administratively sound. The Committee has also determined that the Project is consistent with A.I.D.'s country development strategy and with the development objectives of Ecuador. It therefore recommends that the Project Paper be approved and that a \$10,000,000 grant project be authorized.

11. BACKGROUND AND JUSTIFICATION.

A. Statement of the Development Problem.

Since the early 1980s, Ecuador has been suffering a severe economic crisis. The symptoms of the crisis have included declining and negative economic growth rates, rising unemployment and widespread underemployment, chronic current account deficits, and unprecedented high rates of inflation.

The roots of the crisis are structural in nature and closely linked to the external sector. For more than a decade, Ecuador followed an import substitution industrialization (ISI) strategy and depended on the export of petroleum and, to a lesser extent, a few traditional agricultural crops for virtually all of its foreign exchange and a large share of its GDP. Petroleum exports also allowed the GOE to borrow heavily in international capital markets to finance expensive investment programs.

By 1982, the situation had almost completely reversed itself. Stagnating production and weakening world markets for Ecuador's few major traditional exports, including petroleum, had resulted in serious decreases in foreign exchange earnings at the same time that payments on the large foreign debt were rising steeply. Also, in the 1970s the new industries focused only on the internal market and a rapidly growing urban population helped encourage overvaluation of the exchange rate. One of the results of this is the serious balance of payments crisis that the GOE has been suffering. Without access to fresh international credits, the external sector became a drain on resources, aggregate demand and output dropped sharply, and the GOE had to resort to heavy borrowing from domestic capital markets in an attempt to keep afloat.

In May 1982, the GOE decreed the first devaluation in over a decade and set in motion an economic stabilization program. This program was reinforced by a June 1983 Stand-By Agreement with the IMF which was largely successful. With progress towards stabilization having been set in motion, attention has turned to the need for major structural adjustment to set the Ecuadorian economy on a more stable, long term growth path. The GOE will necessarily have to modify the policies such as an overvalued exchange rate, high levels of effective protection and domestic subsidies on products such as gasoline which distorted the economy during the years of petroleum-induced high economic growth. To earn foreign exchange and stimulate its economy, Ecuador will have to develop additional, non-traditional exports. Ecuadorian industry which has produced for the internal market will have to become more efficient to compete in the international market place and with imported goods.

The shift toward an export oriented economic development strategy which must occur if the Ecuadorian economy is to continue to grow will require not only macro-economic policy changes, a number of which have already been implemented, but also a significant institutional development effort to assure that the mechanisms required to implement this strategy are established and operational. One of the critical bottlenecks to the future economic development of Ecuador is the lack of well qualified and trained managers. The capacity to establish and expand efficient and profitable business enterprises which will generate the economic and employment growth that is so

necessary in Ecuador and which compete in international markets is severely limited by the scarcity of qualified managers who can apply modern management practices.

The existence of this managerial bottleneck is manifested in a number of ways. In many sectors (e.g., banking) the turnover of qualified managers is extremely rapid and salaries sometimes exceed U.S. salary scales. Many industrial concerns are managed by expatriates. In 1981 approximately 230 expatriate executives were estimated to have taken positions in Ecuador. The current financial crisis in Ecuador is particularly harmful because Ecuadorean business managers are not adequately prepared to manage enterprises during periods of economic fluctuation.

The demand for qualified managers far exceeds the supply of qualified managers. Consequently, many managerial positions are filled by persons who are not properly prepared for management. A pre-feasibility study for a graduate management program in Ecuador commissioned by USAID estimated that an average of 2,700 newly trained managers will be required in the private sector each year.¹ The market for highly skilled graduate management degree holders is estimated to be more than 400 per year, primarily in the areas of marketing, industrial relations, and finance. These figures do not reflect substantial additional public sector requirements for trained managers of 1,100 per year (replacement only) including almost 200 per year with graduate level training.

The supply of qualified managers is much less than the demand. Approximately 5,770 undergraduate degrees in management related areas (economics, administration and accounting) were awarded by Ecuadorean universities between 1971 and 1981. During the same time span less than 25 graduate degrees were awarded in the same subjects. In 1981 production of Ecuadorean managers was estimated at 616 undergraduate and 12 graduate managers trained in Ecuador and 41 undergraduate and 31 graduate managers trained abroad. Since that time the number of managers trained in Ecuador annually has not increased perceptibly while the number of graduates from foreign institutions has undoubtedly declined because of the deteriorating economic situation.

b. Project Rationale and Relation to Mission Strategy.

A.I.D. is assisting Ecuador to address a number of the major constraints to bringing about the structural change of its economy. A.I.D.'s macro-economic Policy Analysis Project is assisting the Government of Ecuador (GOE) to reformulate key economic policies which will help bring about economic restructuring. The Agricultural Sector Reorientation Project is helping to restructure the agricultural sector to rely more on the price mechanism and is strengthening private sector agricultural institutions. The Non-Traditional Exports Project is assisting Ecuadorean enterprise to develop foreign markets for non-traditional exports.

1. W. Kenforth, "A Pre-Feasibility Study for the Establishment of a Graduate School of Management in Ecuador", August, 1982, Chapter 4.

This project supports A.I.D.'s strategy of strengthening the human resource, financial, and representational bases of the Ecuadorean Private Sector. Specifically, the project will help alleviate a key constraint to the expansion and increased efficiency of the private productive sector. It will also support A.I.D.'s medium term strategy of promoting structural change in the Ecuadorean economy by targeting training in those sectors which are key to Ecuador's future development, eg., agribusiness, exports, and finance.

III. PROJECT DESCRIPTION.

A. Project Goal and Purpose.

The project goal is to upgrade the quality and increase the quantity of managers for Ecuadorean private sector enterprises. The project purpose is to establish a high quality graduate management school in Ecuador.

B. Project Outputs.

1. General Nature of the Graduate Management Institute.

The project will result in the development and implementation of a high quality Graduate Management Institute (GMI), or Instituto Post-Grado De Administracion de Empresas (IPAE), in Ecuador. This institution, when fully operational, should, at a minimum, produce approximately 75 to 80 masters level graduates per year. In addition, at least 400 persons per year will attend executive development seminars. Applied research activities will also be undertaken. The GMI's program will be designed to respond to the needs identified for an increased supply of well trained managers in areas such as banking, finance, international marketing, production management, and agribusiness. Although modern (U.S.) management techniques will be taught, the curriculum will be adapted to fit Ecuadorean needs and conditions. The project, as designed, will create an institution which will have a critical minimum mass to succeed on a long term basis. However, based on the experience of similar institutions in other Latin American countries, it is expected that the GMI will expand its scale and scope of operations after the project is completed.

The school will be located in Guayaquil which is the major center of Ecuador's commerce and industry. It will be implemented by a non-profit organization, the Fundacion Privada Ecuatoriana (FPE), which was established in 1984 with twenty-one founding members consisting of organizations and individual businessmen. This non-profit organization will have a membership which includes all segments of the Ecuadorean business community. The foundation will appoint the board of directors of the school, will undertake the local fund-raising effort, and will be financially responsible for the long-term viability of the school.

The school will be established with technical assistance from a consortium which includes three U.S. universities, the University of Houston (lead institution), the University of Indiana, and Florida International University, as well as INCAE. This U.S. university consortium was contracted competitively to carry out the final feasibility and design studies through the Collaborative Assistance Mode of Contracting. Upon signature of the Cooperative Agreement another contract will be negotiated with the Consortium for project implementation. The consortium will be responsible for developing and implementing the initial academic program. It will provide specialized administrative support to the school as well as a core teaching staff

including three to four full time professors and a number of visiting professors for a period of five and one-half years while a select group of Ecuadorians is being trained in the U.S. to the Ph.D. level over the same period. Those Ecuadorians who successfully complete the training, which will also be coordinated by the consortium, will replace the U.S. professors and will become the core staff for the school. In addition to the full time (tiempo completo) faculty, additional part time faculty and research staff will eventually be contracted.

2. Specific Project Outputs.

a. A Fully Developed Academic Program.

A key element in the eventual success of the school is the degree to which its program and curriculum respond to the management needs of the Ecuadorian private sector and to the realities of the Ecuadorian environment. The academic program will have three basic components, a 15 month full-time master's level program, an executive development program, and an applied research program. The full-time master's program will provide the fundamental base upon which the long-term quality and viability of the other two components must be based because it justifies the core staff of highly qualified faculty which is necessary to implement the other two components over the long term.

(1.) Master's Level Program. The 15 month master's level program is a relatively highly structured program composed of five trimesters which is designed to provide a curriculum which is generally equivalent in quality to that found in U.S. institutions but adapted to regional needs and, consequently, eliminating many U.S. courses which are specifically directed to the unique characteristics of the more complex business system in the U.S. The Master's level program will provide a fundamental core or foundation business curriculum in areas such as accounting, finance, marketing, organizational development, management, introduction to computers, macro-economics, data analysis, and managerial economics adapted to Ecuadorian needs. In addition, it will include a series of more applied functional and managerial courses specific to the Ecuadorian environment such as export marketing, entrepreneurship, agribusiness, business policy and environmental analysis. Elective courses are necessarily limited and will be provided only during the last trimester. In addition, the program will include training in English and other skills which, while not part of the core curriculum, need to be included. In addition to English language training, entering students will be given a brief 2-4 week refresher or leveling course which emphasizes basic math and analytical skills. Students will also be provided training in written case analysis.

(2.) Executive Development Programs. The Graduate Management Institute will also offer an Executive Development Program which will provide practical training which addresses the day-to-day concerns and knowledge requirements of businessmen (and public sector administrators) in Ecuador. The programs will target both top executives and mid-level managers. The programs will be conducted by the Institute's faculty; however,

initially some courses will be taught by visiting professors and/or be jointly sponsored by INCAE. The executive development courses will be offered not only at the Institute's Guayaquil facility but also in Quito, Cuenca, Manta and other cities, as part of the Institute's mission to serve as a national resource for Ecuador. A four tier executive development program is contemplated. Tier 1 will be short 1/2 day sessions with distinguished speakers, primarily from the U.S., which will be targeted toward top level executives and which will serve primarily to promote the Institute. Tier 2 will be practical one day workshops on topics such as the use of personal computers in business, the principles of cost-benefit analysis, personnel management, etc. which will be targeted for mid-level managers. Tier 3 will be 2-4 day sessions which focus on the latest developments in key areas of interest to top Ecuadorean executives such as strategic planning, international marketing, control, as well as timely topics such as developments in export finance, globalization of capital markets, etc. Tier 4 will be an on-going executive development program which will be offered at night or on weekends over a three month period and which will focus on traditional subjects such as marketing, finance, and management for mid-level managers. Upon successful completion of these programs, participants will receive certificates of specialization. The Institute will also offer specialized, contract programs to institutions such as the Central Bank.

(3.) Applied Research Program. As an adjunct to the master's and executive development programs, the Institute will carry out applied research on a contract basis for Ecuadorean private and public institutions as well as for international organizations. This research will constitute a small but important activity for the Institute. It will help enhance the Institute's prestige, keep participating faculty's research skills at a high level, and contribute to the production of new cases and other didactic materials. Research will be, as a rule, undertaken only when revenues derived from the research project can fully cover the direct costs of research.

b. A Functional Administration.

A key element in the successful operation of the school will be an efficient, functional administration which can maintain a quality academic program and assure selection of qualified students while minimizing operating expenditures. In order to facilitate the development of this administration, particular attention will be paid to the recruitment and training of three key Ecuadorean administrators: a rector, an academic director and a administrative director. The administration will receive direction from the Junta Directiva of the Board of Trustees of the institution. AID and the Consortium will assist the FPE to establish selection criteria for members of the Board and the Junta which will include achieving a balance between various sectors of the economy, geographic regions and persons with a knowledge and experience with post-graduate academic business programs. Technical assistance will be provided by the U.S. university to assure adequate on the job training of these individuals. If necessary, specialized training will also be provided for these individuals at U.S. or Latin American institutions.

c. Trained Faculty

Approximately ten Ecuadoreans (4 funded by this Project and six others supported by other AID sources), will be recruited and trained to the Ph.D. level during the Project in order to form a highly qualified faculty which will serve as the academic core around which the school will operate. Training will be provided in areas such as finance, marketing, accounting, management, organizational development, economics, and quantitative methods. Of these trainees it is expected that seven will complete their studies successfully and return to teach at the Institute. They will constitute a core Ecuadorean faculty for the GMI and will teach in the master's level and executive development programs as well as undertake applied research activities. These students will be trained to the doctoral rather than the master's level because of the better preparation for teaching and research which they will receive and because experience in similar schools in Latin America has demonstrated that there is a higher staff retention rate than when only M.B.A. training is provided. In order to assure that the participants do, in fact, teach in the GMI, they will be required to sign contracts which obligate them to teach at least two years for each year of training received or to repay the cost of the training.

d. Adequately Equipped Facilities.

In order to implement a quality graduate management program, an adequate physical plant with specialized equipment and facilities are required. The basic minimum specialized facilities which this project will support include a documentation center (library) with a minimum of 6,000 books, documents and periodicals, simultaneous translation equipment, and a computer center as well as space for at least two classrooms and offices.

C. Project Inputs.

a. Technical Assistance.

A major project input will be approximately 20 person-years of in-country long term technical assistance and 63 person-months of short term technical assistance which the University of Houston consortium will supply. The technical assistance will include a chief of party who will serve as the advisor to the school's administration and will organize and supervise the other technical assistance. A core faculty of three to four U.S. professors will also reside in Guayaquil and will constitute the Institute's long-term "permanent faculty". These professors will organize the academic program, develop the curriculum and teach courses while Ecuadoreans are being trained to assume these same responsibilities. The core staff will include professors of accounting, finance, marketing and management. In addition, the Consortium will provide a librarian for one person year in order to set up and begin operation of the documentation center.

In addition to these professors, approximately forty-five person-months of services of visiting professors will be provided to teach and/or develop specialized Master's level and executive development program courses for which the core faculty does not have the requisite expertise. This assistance would be provided by, for example, professors who would be in residence one quarter per year or who would be in country for two weeks to give executive development courses.

Specialized technical assistance requirements (18 person months) also exist for activities such as the organization of the documentation and computation centers as well as for a financial control systems expert. This expertise is required to assure that the major support services (library, computer center) function effectively and efficiently and that the financial management of the GMJ is fully developed and operational prior to the completion of A.I.D.'s assistance.

In addition, there will be requirements for a project manager (4.25 person years) and support staff (12.75 person years) located at the University of Houston. The University of Houston based staff will be full-time during the first three and one-half years of the project and will then be part-time.

Table II summarizes the technical assistance which will be provided.

TABLE II

Technical Assistance Requirements

	<u>person-years</u>	<u>person-months</u>
Chief-of-Party	5.5	
Long Term Faculty	13.5	
Visiting Professors		45
Librarian	1.0	
Specialized Short-Term Technical Assistance		18
Project Manager	4.25	
Support Staff	12.75	

TOTAL	37	63

Technical assistance costs amounting to approximately \$6.13 million will be financed with the A.I.D. grant.

b. Training

Approximately 16 person-years of training will be provided under the project. The major part of this training will be long-term Ph.D. level academic training for four future Ecuadorean faculty members. (Additional long-term training for six more future Ecuadorean faculty members

is being funded outside the project.) Areas for long-term training include banking and finance, accounting, international marketing, and economics. Additional short-term training will be provided to administrative and academic staff as required. Specialized training requirements include educational administration, financial control systems, library science, or computer center operations. Training will be coordinated by the U.S. consortium; however, training will be arranged at the most appropriate location. Some short term training may be provided by INCAE. Training costs will be approximately \$400,000 and will be financed with grant funds. However, additional training is already being financed by A.I.D. outside of the project budget. Six additional Ecuadoreans are being or will be trained to the doctoral level in subjects such as organizational development, production management and management information systems.

c. Specialized Instructional Equipment and Materials Costs.

The A.I.D. grant will finance specialized equipment cost as described below. The total contribution will amount to \$435,000.

(1.) Library Acquisitions. A capital expenditure will be required for the initial acquisition and cataloging of 1,000 books, documents and back copies of periodicals which are necessary to create the minimum collection for the documentation center. Acquisition and cataloging costs are expected to average \$40 per book or \$40,000 while a similar amount is budgeted for acquisition of documents and back copies of periodicals. Total investment for a minimum collection would be \$80,000. In addition, an annual recurring expenditure of \$50,000 per year is required to expand the collection by 1,000 volumes (to an eventual total of 10,000 volumes) and to maintain subscriptions to periodicals. This expenditure is included as an operating on-going cost.

(2.) Computer System. A relatively modest computer system will be financed with grant funds. The system will consist of 24 personal computers with 256K of memory and dual disk drives tied together with a 400 megabyte magazine drive (IBM 36 or similar), a tape backup system, and several different types of printers. This system is estimated to cost \$165,000 including basic software. (See Annex XV for a more detailed description of system requirements.)

(3.) Simultaneous Translation. A mobile simultaneous translation system, which will be necessary for some English speaking visiting professors to teach effectively is budgeted at \$25,000.

(4.) Class-room and office furniture and equipment. Basic class-room equipment is estimated to cost \$97,000 and furniture is budgeted at \$72,000. (Annex XV provides a detailed list of required equipment and furniture.)

d. Physical Plant.

As part of the feasibility studies carried out during project design, it was determined that a non-residential campus within the environs of Guayaquil would be the most feasible alternative from the stand point of cost. The physical facilities will be primarily provided through contributions of the Ecuadorian private sector. The FPE is committed to provide a "bare-walls" structure which then would be finished to specifications detailed in Annex XV. The total area to be provided is 1,600 square meters. It is estimated that the value of land and construction of minimal facilities will be \$400,000 (per Annex II). Of this amount, not more than \$100,000 of A.I.D. grant funds would be used for costs of finishing the facility. However, it is expected that much of the physical plant could be built with in-kind donations, e.g., land, architectural and construction services, and construction materials. The FPE has already received three written offers to donate a site for the school. However, the sites offered to date are not optimal and a determination may be made to initiate operations in rented facilities while the search for an appropriate site continues. An appropriate temporary site has been located and is ready for occupancy with minimal renovation. In the event that a temporary rented facility is necessary and that renovations may be required, these will be financed from grant funds at an estimated cost of \$65,000.

e. Operating Expenses.

The operating expenses for a high quality graduate management school are substantial. During the first five years of operation of the GMI it is estimated that total operating expenses will amount to \$3,484,000. This figure includes all Ecuadorian professional and staff salaries as well as costs for curriculum development, translation, reproduction, promotion and other costs associated with both the Master's level and executive development programs. Revenues from tuition and fees which are initially minimal but grow rapidly during the project life will total \$1,373,000 or about 40 percent of operating costs. A.I.D. grant funds will finance the remaining operating costs to allow adequate time for the GMI to become financially self-supporting. Initially, operating expenses will be provided and managed through the contract with the University of Houston. However, during the second year of the project the GMI/FPE will have achieved the capability to directly manage its finances. AID/Quito will instruct the Regional Contracting Officer of its intent when, after the first year of the Project, funds for operating expenses shall go directly to the FPE/GMI. When suitable accounting and financial systems are in place the AID Controller will determine that the GMI has the capability to account for AID funds. As soon as this is accomplished AID will provide such funds to the GMI/FPE directly and in accordance with standard AID procedures. Until such time as the Controller makes his determination funds for operating expenses will be provided through the Houston contract.

f. Endowment Fund.

The FPE will raise \$2.5 million for an endowment fund by the PACD. This endowment fund, which will have a total value of \$2,675,000 including capitalized interest earnings, will finance the operating deficit which the institution is expected to have in the years subsequent to completion of the project and will provide a small amount of revenue to be used for capital improvements. The endowment fund will be established by the FPE in the name of the Board of Trustees of the GMI. It will be managed by a sub-committee of the Junta Directiva of the Board of Trustees. In order to allow the fund to maintain its value in dollar terms, the principal of the fund may be invested in the U.S. or in dollar denominated instruments.

Prior to subsequent project disbursements AID will review and approve in writing on a quarterly basis the FPE's progress in meeting its commitments to raise an Endowment Fund. AID's approval will be dependent upon evidence satisfactory to AID that substantial progress is being made by the FPE in providing for the long-term self-sufficiency of a high quality graduate management institution. FPE's failure to endow the GMI's Endowment Fund shall, at AID's discretion, constitute cause for termination of the Cooperative Agreement with the FPE.

IV. COST ESTIMATES, FINANCIAL PLAN, AND PROPOSED METHODS OF IMPLEMENTATION AND FINANCING.

A. Summary Cost Estimates.

The cost of this five and 1/2 year program is \$14,273,000 of which the A.I.D. grant will be \$10,000,000. The Graduate Management Institute will contribute \$1.4 million from tuition and fees and the Fundacion Privada Ecuatoriana will provide \$2.9 million. Table I contains a summary budget by project input and funding source. A.I.D. project funds will cover University of Houston Consortium technical assistance and overhead costs, training costs in the U.S. for Ecuadorean faculty, costs for specialized equipment and materials, minor construction costs, evaluation, and part of the initial operating costs of the Institute. Institute funds derived from tuition and fees will partially cover operating expenses. The FPE will cover the cost of the physical plant and the Endowment Fund. Although A.I.D. project funds cover both initial start-up and operating costs, the latter will be fully covered by the end of the project through revenues and funds provided through the endowment fund which will be established by the FPE.

TABLE III

Summary Financial Plan
(\$000s)

	A.I.D Grant	Counterpart	Total
Technical Assistance	6,130	--	6,130
Training	408	--	408
Operating Costs	2,111	1,373	3,484
Physical Plant	600	400	1,000
Evaluation	241	--	241
Endowment Fund	--	2,500	2,500
Contingencies	510	--	510
TOTAL	10,000	4,273	14,273

Detailed cost estimates are included in Annex II. Costs for technical assistance, training, and indirect costs of the University of Houston contract are derived from data contained in the financial feasibility

analysis carried out by the Consortium. Computer equipment costs are based on a preliminary quote obtained by the University of Houston. Ecuadorean salaries are based on estimates of prevailing salary levels obtained from Ecuadorean businessmen. Other operational costs are based on INCAE's experience.

b. Financial Plan.

Table IV provides a summary cash flow over the five and 1/2 year project life while Table V provides a similar analysis for the five years subsequent to proposed completion date for A.I.D. participation. All cost and revenue figures in Tables IV and V are in dollar terms adjusted by five percent a year to reflect the projected rate of inflation.

TABLE IV
SUMMARY CASH FLOW
(\$000s)

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
TOTAL EXPENDITURES	<u>1,200</u>	<u>1,824</u>	<u>2,066</u>	<u>2,222</u>	<u>1,987</u>	<u>1,559</u>
Technical Assistance*	405	1,203	1,311	1,134	1,084	591
Training	0	77	102	102	102	25
Operating Expenses	195	526	578	605	779	801
Evaluation	0	18	80	21	22	100
Capital expenditures	600	0	0	0	0	0
TOTAL REVENUES	<u>1,200</u>	<u>1,824</u>	<u>2,066</u>	<u>2,222</u>	<u>1,987</u>	<u>1,559</u>
Course Income	10	129	219	268	337	410
AID Grant (excludes contingencies)	1,190	1,695	1,847	1,954	1,650	1,149

* Includes indirect costs 1,232,000 for U. of Houston consortium.

It is evident from Table III that revenues generated from tuition and fees and from executive development programs are minimal during the first years of the project while project costs are high because of the initial costs of start-up, particularly the large line items for technical assistance and training.

Table IV projects the Institute's cash flow for the five years after project completion during which time it is assumed that costs and revenues are relatively constant in real terms. As expected Table IV shows that revenues generated by the master's and executive development programs do not cover the costs of operating the Institute's program. The operating deficit ranges between \$200,000 and \$250,000 per year if a high quality program is to be maintained continuously. If a small additional amount is included for capital expenditures (replacement of equipment and improvement of physical facilities), the amount which must be covered by the endowment (or additional financial contributions) will be in the range of \$250,000-\$300,000 per year between 1992 and 1996. This deficit will be covered by interest earned on an endowment fund which has a principal of \$2.5 million and by continued contributions to the fund (not shown in the Table).

TABLE V

(\$000s)

	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
TOTAL					
EXPENDITURES	<u>835</u>	<u>892</u>	<u>935</u>	<u>985</u>	<u>1,036</u>
Technical					
Assistance	35	37	39	42	45
Training	28	58	60	63	67
Operating					
expenses	737	760	797	838	879
Capital					
expenditures	35	37	39	42	45
TOTAL					
REVENUES	<u>835</u>	<u>892</u>	<u>935</u>	<u>985</u>	<u>1,036</u>
Course					
Income	583	641	673	707	742
Endowment	252	251	262	278	294

C. Proposed Methods of Implementation and Financing.

Established A.I.D. disbursement procedures will be followed. All disbursements will be made using direct payment procedures and be based on the submission of vouchers with supporting documentation. At least for the first two years of the project all payments will be made through a Contract with the University of Houston which will be responsible as the lead university of the consortium for handling all financial arrangements. The University of Houston

contract will cover payments for technical assistance, participant training, operating expenses and commodity procurement. Project evaluations envisioned for this project will be carried out through A.I.D. direct contracts with outside contractors for an estimated cost of \$241,000.

As part of the institutional development effort of the GMI, direct payments may be made to the Graduate Management Institute/FPI beginning in year two of the project if the GMI has demonstrated that its financial management and control capacity has developed sufficiently to permit it to handle A.I.D. funds directly.

V. PROJECT ANALYSES.

A. Technical Analysis.

This section focuses on the justification for selecting the proposed model of graduate management education, on the technical viability of establishing a Graduate Management Institute, and on the demand for the training to be offered by the Institute.

1. Technical justification for selection of the proposed training model.

A number of possible alternatives for the provision of management training were analyzed in the pre-feasibility study¹. These were:

(1) To expand existing short-term management training seminars and short courses; (2) to expand and improve management training programs in existing institutions; (3) to expand and improve public sector management training programs; (4) to utilize existing programs in neighboring countries; and (5) to create a new graduate school of management.

The expansion of short-term management training seminars, while useful for up-grading the skill levels of existing managers would not increase the supply of managers. Seminars are an effective vehicle for providing specific knowledge to practicing managers and as such they play an important role in management education. However, by their nature, seminars are not designed to provide career preparation. Thus, a seminar program alone is incapable of providing the continuing new supply of qualified managers which is required.

Expansion of management training programs in existing institutions is not feasible. Most programs offer only undergraduate training which in the Ecuadorean context does not produce managerial candidates. Existing graduate programs are very limited in scope. A private part-time program sponsored by the Instituto Superior de Administracion (ISEA) is moribund. The Escuela Politecnica Nacional in Quito has a small program which it is trying to expand and improve; but it is a part-time program with a part-time faculty. The Escuela Politecnica del Litoral (ESPOL) recently initiated a program which has a quantitative, engineering focused curriculum, primarily oriented to port management. The Universidad Laica and the Universidad Catolica de Guayaquil have discussed the possibility of implementing graduate management programs but have not done so. These programs are constrained by their placement within a university system which is unable to offer quality education because of a large number of adverse structural factors and by their own organizational structure

¹ See Annex XIV, William Kenforth, A Prefeasibility Study for the establishment of a Graduate School of Management in Ecuador, Chapter 6, "Alternatives for Meeting Management Needs."

(part-time faculty, part-time students, and part-time administration). While there are some advantages evident in being associated with an existing university, eg. access to existing physical facilities, libraries and infrastructure and formal recognition for degrees, the disadvantages are substantial. Existing programs have no faculty with doctoral degrees, physical facilities are generally inadequate, administrative resources to manage a program are deficient, and substantial changes in operating procedures, including selective admission, participative instruction and competitive faculty salaries, are unlikely to be feasible. Other disadvantages would include an inability to develop a unique identity, separate from the university, for the program, an inability to be isolated from political activities, and possible difficulties in allocating sufficient resources to the program in institutions which are extremely deficient in their access to resources.

Public sector training, which is already supported by an A.I.D. project, would not address the substantial requirements for new managers in the private sector.

Training abroad is limited by foreign exchange constraints, by language requirements (in some cases) and by an increased likelihood that the participants will seek employment outside Ecuador. Most training institutions in neighboring countries (Peru, Colombia, Venezuela) operate at virtually full capacity with students from their own countries. INCAE, which is the largest single trainer of Ecuadorean MBAs, traditionally has restricted Ecuadorean enrollment to around 10-12 per year (out of about 20 of 40 Ecuadorean applicants per year who are qualified for admission). Qualified applicants from Ecuador who are admitted but do not attend generally do not do so because of family or financial problems associated with the relatively high cost of attending INCAE.

The alternative of creating a graduate management program which would permit the substantial changes in curriculum, procedures and practices which are necessary to provide quality management training and which would respond to the needs for private sector development as well as obtain support from the business community is the most appropriate alternative for providing the type of management training required for Ecuadorean development during the 1980's.

2. Technical Viability of Establishing a Graduate Management Institute.

A.I.D. has a significant amount of experience in financing graduate management schools. In Latin America, A.I.D., during the 1960's, financed the successful establishment of two institutions, INCAE (Instituto Centroamericano de Administracion de Empresas) and ESAN (Escuela Superior de Administracion de Negocios), which are both now very well respected and can serve as models for the Ecuadorean school. The pre-feasibility study has analyzed the past and present situation of these two schools in detail and has presented a series of conclusions and recommendations related to program design for a new school based on the analysis of these schools. Critical

factors in the success of these schools which relate to the organization, academic program and financial aspects have been identified in the pre-feasibility study. Factors related to the organization of the school include: careful study and planning before starting operations, linkages with the private and public sectors, isolation from political activities, operating flexibility, personal commitment by key individuals, and an initial link with a respected "sister" academic institution. Important elements related to the academic program include: high quality standards, extensive adaptation to local conditions, training of local faculty, and interaction with the international academic community. Important financial characteristics of the schools include: the need to supplement tuition revenues, the inability of earned income to cover operating deficits, the continuing need for financial support from the private sector, the need to avoid loans and debt during the start-up period, substantial foreign currency costs during startup, the need for financial assistance for students, and a requirement for skilled and qualified administrators to manage the relatively complex financial activities of a graduate management school.

In addition A.I.D. has financed similar endeavors elsewhere. In Latin America it financed EAFIT (Escuela de Administracion, Finanzas y Tecnología) in Medellín, Colombia, and was a minor donor to IESA (Instituto de Estudios Superiores de Administracion) in Caracas, Venezuela.¹ (EAFIT began as an undergraduate institution but has since added a master's program and is in the process of establishing a doctoral program.)

A review of history and the current status of these programs shows that the use of the proposed technical assistance model is technically viable and that a permanent, high quality graduate level institution can be established in a Latin American environment but that there are key factors, as identified above, which must be carefully monitored during project design and implementation.

3. The Demand for the Type of Educational Program being Proposed.

The pre-feasibility study (Annex XIV) presented ample evidence that there is a need and an effective demand for the type of well trained managers which would be produced by a Graduate Management Institute. This section summarizes the analysis of the demand for this training by potential candidates for a Master's program contained in Annex XII and provides evidence that there is adequate demand for executive development programs.

The demand parameters for the academic program have been established through a sample survey administered to more than 600 Ecuadoreans in positions where it had been determined they would be potentially eligible for and interested in graduate management training. The types of Ecuadoreans surveyed include recent university graduates and professors of economy and administration, engineers, managers of firms, and persons who have applied for post-graduate training abroad. Based on this survey and estimates of the total universe of these categories, it is projected (at a 90 percent confidence level) that approximately 1650 Ecuadoreans, on an annualized basis,

or more than 57% of the target group, are interested in postgraduate training in management. Those who would be willing to attend are primarily between 25 and 32 years of age and are married but with two or less children. Primary areas of interest are finance, marketing, project evaluation, and banking. A large majority, 65%, prefer a full-time Master's program while 25% prefer an advanced management program and 10% prefer seminars. Using an estimated program cost of \$3,750 for tuition and fees, only 57% would be able to cover part of the cost with some financial support, 29% would need full financial support, and 14% would be able to cover the course with their own resources. The survey data thus show that there is clearly sufficient demand for a Master's level program provided that financial support in the form of loans or scholarships can be provided.

The demand for executive development programs appears to be strong. Of the four proposed executive development tiers the 2-4 day seminars on specialized topics (Tier 3) and the specialized certificate programs (Tier 4) will account for a very large percentage of the total executive development effort. In 1983 INCAE designated a representative in Ecuador and initiated a program for executives similar to the proposed Tier 3 program. In 1983-4 fourteen programs were held with 433 students in various cities in Ecuador. In 1984-5, 21 programs with 786 students were carried out. This market has a clearly established effective demand. During the first nine months of INCAE's 1985-6 fiscal year, 14 programs with 499 participants were carried out. There is no similar Ecuadorean data available for Tier 4 programs. However, ESAN, IESA, and EAFIT all have successful programs of this nature.

B. Financial Analysis.

1. Post-Project Financial Viability of the GMI.

A key factor in the long-term success of the GMI will be its ability to cover costs without employing extreme cost cutting measures or over emphasizing short-term revenue generating seminars which would negatively affect the quality of its main programs. An analysis of the the costs and revenues of the GMI for the second five years of its operation shows that the revenues generated by the GMI are not likely to be sufficient to cover the costs of a high quality program. A best estimate analysis shows that an endowment of approximately \$2.675 would be required to assure the long term financial viability of the GMI. This would generate about \$250,000 a year to be applied to operating expenses and toward modest capital improvements. A series of sensitivity analyses with varying assumptions is contained in Annex 11, Financial Analysis Annex. Under the most conservative revenue estimates and a cost structure which would assure a high quality academic program, an endowment fund of \$3.7 million would be required. With a more optimistic assumption about revenues and a "barebones" cost structure which would maintain salary levels but would reduce other operating costs, the GMI would be able to operate with a small endowment. Thus, a commitment by the Fundacion Privada Ecuatoriana to raise \$2.5 million for an endowment provides a sufficient degree of confidence that the GMI will be financially viable after the project ends. Nevertheless, a concerted effort will be made to

develop an effective cost control system during the first five years of the GMI's operation so that a system to exercise very careful control over expenditures is fully operational after the project ends. With this approach to financial control, all new programs and research activities proposed for implementation will have to cover their direct costs and contribute to the GMI's overhead. Also, the estimated size of the endowment assumes that no further fund raising will take place after the project ends. As a practical matter, it is reasonable to expect that, if the project is successful, i.e. if a high quality graduate management institute is operational, then continued contributions from fund raising may be expected, provided that fund raising efforts continue.

2. Sources of Ecuadorean Support for the GMI.

The current membership of the FPE is primarily composed of representatives of major commercial, industrial and banking enterprises located in Guayaquil. At present 21 firms and businessmen are members of the FPE. Prior to initial obligation of A.I.D. funds, the FPE, as part of its fund-raising effort, will make a concerted effort to expand its membership to include enterprises located in Quito, Cuenca, and Manta as well as in Guayaquil. The FPE's specific commitment to A.I.D. in this regard is to increase the level of commitments to the endowment fund (over a five year period) to \$1,000,000 and obtain commitments for 10 scholarships prior to obligation. The FPE will also pledge to continue to carry out fund-raising efforts in Ecuador and the U.S. in order to obtain an additional \$1.5 million in pledges during the first 24 months of project implementation. AID has sought from the FPE a commitment to broaden its institutional base so that it more fully represents various sectors of the economy and the principal geographic regions of Ecuador. On March 26, 1986 the FPE committed itself in letter to AID "to a balance of regional interests within (its) membership so that the GMI will serve as a national project... (and) by the end of 1987 at least 40% of the total members will be from areas other than the coast". Annex XI contains a fund raising plan for the GMI together with a comprehensive list of possible additional sources of financial support for an endowment fund.

In addition to the Endowment Fund, the FPE has pledged to provide a permanent physical plant for the GMI. The estimated cost of land and unfinished buildings is estimated to be \$400,000. Although two parcels of land have already been donated to serve as a permanent site for the GMI, neither is optimally located and the FPE will make additional efforts to obtain an appropriate site for the campus. Members of the FPE who are involved in the construction industry are expected to contribute construction materials and services for the permanent campus.

The GMI will also actively pursue opportunities for contracted programs with private enterprise and public sector institutions which will serve as sources of income. An immediate possibility is to provide training to Central Bank employees. ESAN, IESA, and INCAE have all had a number of contracted programs. INCAE recently completed a specialized training program with the Central Bank of Ecuador.

3. Sources of Student Support.

The FPE will also be responsible for obtaining scholarships, company sponsorships, and banking sector commitments for a student loan program for the Master's level program. FPE members will work closely with the GMI's administrative director and registrar to structure these programs. Tuition scholarships, which will be made available to academically qualified lower income students, will be provided by member enterprises of the FPE. Ten scholarships will be made available during the first year, and it is expected that at least 20 scholarships per year will be made available in subsequent years.

A number of firms have also indicated that they would be interested in sponsoring their own academically qualified employees to attend the Master's program. Based on current expressions of interest, an average of 25-35 company sponsorships are likely once the program is operational.

A final source of support for the GMI will be student loan programs established by Ecuadorian banks. Because of the expected returns to the individuals attending the GMI's Master's level program, loans, rather than scholarships are the preferred source of student support. To date at least three banks, Banco del Pacifico, La Previsora, and Banco de la Produccion, have expressed a willingness to fund student loans. Each loan program would be designed and administered by the bank. Loans would be at commercial rates of interest with a grace period of up to 24 months during which time interest would be capitalized. In addition, the Instituto Ecuatoriano de Credito Educativo can make loans for students who will attend the GMI; however, students receiving these loans are likely to require additional sources of support to attend the GMI. A student loan program sponsored by private banks is preferred to one operated by the GMI. Administration of a student loan program would represent a significant burden on the GMI. Also, programs administered by the banking system are expected to have a much better recovery rate than one administered directly by the GMI.

4. Further A.I.D. support.

The project has been designed so that when A.I.D. support is completed after five and 1/2 years the GMI will be fully operational and self-sufficient. Nevertheless, as was pointed out in the PID for this project, the average gestation period for an institution of this type to become fully self-sufficient appears to be between eight and ten years. For both INCAE and ESAN financial and technical support continued for a period of more than ten years while support to EAPIT terminated after seven years. Project progress will be carefully monitored and, if warranted, additional A.I.D. financial support to consolidate the program and phase out A.I.D.'s role may be considered.

C. Economic Analysis Summary.

1. Economic Returns to Education.

Recent studies have shown that in most developing countries the returns to higher education are greater than returns to many alternative investments. A recent study by Psacharopoulos found that returns to higher education, averaging 14.9 percent, were higher than returns to irrigation, hydroelectric, and highway projects, averaging 12.8 percent, in nine of eleven countries studied. (see Annex III, Economic Analysis.) There is only one ex post study on the returns to graduate management education of the type proposed for Ecuador which has an adequate methodological approach. This is a study of the Indian Institute of Management at Amhedabad carried out by Hill et al. in 1973. That study found that net private benefits to the student from completing the graduate course were about 26 percent. The social returns were about 15 percent.

2. Cost-Benefit Analysis of the Proposed Project.

Using the methodology employed by Hill, a benefit cost analysis has been carried out using a number of alternative assumptions and estimates of the variables. The best estimate, based on estimated salary levels of prospective students and on the projected salary level for graduates obtained from interviews in Ecuador with managers and educators, indicates that the private return to the Master's program student would exceed 50 percent over a thirty year work-span. A sensitivity analysis was performed, assuming tuition and other costs including foregone earnings were 20 percent higher than the best estimate and that projected earnings were 20 percent lower. Under this scenario the rate of return to the individual would still be 40 percent.

The social cost-benefit analysis is carried out by aggregating the projected extra earnings of the students and including the full costs of the education provided, including those operating and start-up costs not covered by tuition and fees. Using the best estimate assumptions, the social rate of return is 20 percent assuming a thirty year period of analysis. If all costs are raised by ten percent and benefits are decreased by 10 percent, the rate of return drops to 17.7 percent. While the economic analysis assumes that eventually 90 students per year will graduate from the Master's program, the rate of return is relatively insensitive to a reduction in the number of students who graduate. A reduction to 75 students results in a drop in the best estimate rate of return of one percent. Further sensitivity analyses are included in Annex III. Under varying sets of assumptions about benefit streams, class size, and initial graduation of students internal rates of return vary from 3.2 percent to 21.2 percent with most sets of assumptions yielding an IRR of between 17.5 percent and 21.2 percent.

D. Administrative Feasibility.

This section describes the nature of the proposed administrative arrangements in summary form, including the responsibilities of the Fundacion Privada Ecuatoriana, The Graduate Management Institute, the University of Houston Consortium and A.I.D. The Mission considers INCAE to be a valuable resource for establishing an independent Graduate Management School in Ecuador given its experience as a Latin American management center. Therefore, AID will work with the Consortium so that it can draw upon this resource as appropriate and also with INCAE to integrate it into the project. A detailed description of the administrative arrangements is contained in Annex IV. It also discusses the viability of such arrangements and identifies factors which will have to be monitored during implementation to assure that the Graduate Management Institute is an administratively self-sufficient and fully operational organization at the completion of the project.

1. Proposed Administrative Arrangements.

The proposed administrative structure is geared to the creation of an Ecuadorean managed, independent, privately funded program of high quality while at the same time assuring that the inputs from A.I.D., the FPE, and the University of Houston consortium are fully and effectively integrated. A.I.D. expects to sign a cooperative agreement with the FPE to establish a direct relationship between A.I.D. and the FPE and to permit A.I.D. the substantial involvement it requires to assure the relation of a viable high quality graduate management institute. A.I.D. will negotiate a follow-on contract with the University of Houston Consortium under the collaborative assistance mode of contracting. The Consortium will have responsibility for implementing all project activities.

In order to create an overall governance and policy making mechanism for the GMI, the FPE will create a Board of Directors for the GMI comprised largely of Ecuadorean members of the FPE but also including representatives of the Ecuadorean and international academic community. Total membership of this Board of Directors will be approximately 30. Because of the large size of the Board, practical management oversight will be vested in a five member Junta Directiva appointed by the Board. The Junta will establish private sector advisory committees for agribusiness, marketing, etc. to advise on program content and to assist in placing students. The Junta Directiva will: evaluate and approve strategic decisions made by the University of Houston chief-of-party/GMI administration; approve the GMI's annual budget; be responsible for assuring that fund raising activities are carried out; advise the GMI administration on the needs of the Ecuadorean business communities; assist in selecting the Rector; manage the GMI's Endowment Fund; and monitor the progress of the project.

Initially, the principal administrator of the GMI will be the University of Houston chief-of-party. However his responsibilities will be shared by the Ecuadorean rector who will assume more responsibility according to a time-phased plan which will be annually reviewed and modified, as needed.

2. Feasibility Issues Related to the Proposed Administrative Structure.

The most critical element in the administrative arrangements is the interaction between the Consortium, the Foundation and AID. For successful management of the project there must be a clear understanding of the contributions of each entity in the collaborative assistance mode and well defined assignments of responsibilities among the various actors. In addition there must be a joint understanding of the manner in which responsibility for the GMP will shift increasingly to the hands of Ecuadoreans, as the Consortium phases out its role in the project. This element of the project has been discussed among representatives of the Foundation, the University of Houston Consortium and AID. In order to assure that there is a successful transition to Ecuadorean management of the GMI, the administrative responsibilities of the various parties as well as a time-phased transition plan will be included in the project description contained in the Cooperative Agreement to be signed between A.I.D. and the FPE and in the University of Houston consortium contract. The adequacy of the administrative arrangements and the time phased plan will be assessed annually as part of the joint annual project review.

E. Social Soundness Analysis Summary.

This section summarizes the social soundness analysis which is attached as Annex V.

1. Project beneficiaries.

The primary beneficiaries of the project will be the students who complete the Master's level program and businessmen, enterprise managers, and mid-level employees who attend the executive development seminars. For these individuals the GMI program will provide learning opportunities which are largely currently unavailable in Ecuador. The knowledge acquired from these programs will result in access to better employment opportunities and higher income levels for the participants. Indirectly, the national economy will benefit through increased economic and employment growth.

2. Social feasibility.

There are a number of social feasibility concerns related to this project. These include the potential access of lower and middle-income groups and women to training provided by the GMI; the socio-cultural acceptability of the proposed curriculum and teaching methodology; the relevance of trained managers within a socio-cultural milieu in which firm management has historically been maintained within a relatively closed, generally family-based, group; integration of the GMI into the formal Ecuadorean educational system; and, the impact of regionalism on the feasibility of the GMI's Master's program.

a. Access by lower and middle income groups and women.

In the demand study carried out for the project (See Annex XII), a strong interest in additional management training was manifested by potential eligible candidates for training at the lower end of the income scale. According to this study, fifteen percent of the target group have incomes of \$200 a month or less, 40 percent (cumulative) have incomes of less than \$300 a month, and 70 percent (cumulative) have incomes of less than \$500 a month. Of those surveyed, 29 percent stated that they would need full financial assistance to attend the GMI's Masters level program, 57 percent indicated that they would need partial assistance and only 14 percent stated that they could afford to pay full tuition for the school. While the project can benefit groups with incomes lower than expected, an adequate mechanism for providing scholarships, company sponsorships, and/or student loans must be in place prior to recruitment of students since this factor will be critical to the social and financial feasibility of the GMI. In addition to tuition and fees, scholarships and/or loans should make some provision for a modest living stipend particularly for those students whose families do not live in Guayaquil.

Unfortunately, the demand study which was carried out did not distinguish between male and female interviewees. Thus, it is not possible to estimate the percentage of the GMI's target who might be women. Nevertheless, based on evidence from programs in neighboring Latin American countries, it should be expected that women may comprise a fairly significant minority of the students enrolled in the program. Under current socio-economic conditions, it is likely that only unmarried women or married women who do not have children will attend the full time Master's program. There is likely to be some interest among married women, working women and women who have their own businesses in the executive development programs which lead to certificates of specialization in specific business fields. The INCAE office in Quito has advised the Mission that women often request information but that, at the present, only one Ecuadorean woman is enrolled at INCAE.

In order to encourage broad representation from relatively lower income groups and women, the GMI will establish a clearly articulated policy of non-discrimination and will be expected to assure that adequate programs are in place to provide maximum access to these groups. At this time, the first non-project funded participant, who is expected to join the GMI faculty at the conclusion of her studies, is a woman.

b. The socio-cultural feasibility of the proposed curriculum and teaching methodology.

The traditional teaching methodology used in Ecuadorean higher education is the lecture system. Research skills are rarely developed within this system. Course content is more theoretical than practical. In many cases there is very little consistency between what is taught and what can be applied in real world situations. There is very little experience using groups to carry out research. Ecuadorean universities are part time. Both

students and teachers generally have other jobs. The GMI proposes a radically different approach to learning which involves full-time participation by both teachers and students using an interactive teaching methodology in which active student participation is required and which relies to a significant degree on the use of cases and other materials drawn from the Ecuadorean reality. The demand study carried out for the project showed that there is a very great dissatisfaction with the teaching methodology currently used in Ecuador and an interest in active student involvement in the learning process. Thus, the proposed methodology which relies heavily on teacher-student interaction appears to be acceptable to potential students provided that the course material is relevant to the Ecuadorean context.

Although there is also a high degree of willingness to embark on a full time program, the majority (60 percent) of those interviewed preferred to combine work and study, i.e., attend school part time.

The key to converting students to full time appears to be the availability of financial support. A large majority of employers would be unwilling to give their employees leave with pay to attend the GMI's Master's program for fifteen months. Students who take leave to enroll in the Master's program will often be risk takers who are willing to use their own resources or go into debt in the expectation of a significantly higher income level upon completion of the program. Also, some people who are currently employed do not have the undergraduate degree required for entrance to the Master's level program, but do have the practical experience and motivation to successfully pursue high level part-time studies. Thus, it appears that considerable attention should be given to the part-time executive development programs which lead to certificates of specialization in order to open up access to all eligible and interested persons.

c. Relevance of trained managers within the Ecuadorean business milieu.

While there is ample evidence of traditional family-owned business organizations in Ecuador, the rapid economic growth associated with the oil boom of the 1970's allowed new firms to be established by entrepreneurs not closely tied to the traditional groups. Some enterprises which have relied on modern management practices have been especially successful, for example, the Banco del Pacifico in the banking sector and the Agrarios Ltd. in the agroindustrial sector. Even in those enterprises associated with traditional groups, modern management techniques are now being applied and those enterprises need trained managers even when control of the company remains closed.

d. Integration into the Ecuadorean educational system.

An assessment of the GMI's relations with other Ecuadorean educational systems (Annex XIII) and the pre-feasibility study for the GMI show that the structure of the GMI, as proposed, is not compatible with existing institutions in the Ecuadorean educational system. Integration

within an on-going program is not feasible and creation of a GMI as a completely autonomous entity within an existing university would be difficult to achieve. However, without such a relationship, the GMI will not be legally able to grant degrees under current Ecuadorian law which effectively forecloses the possibility of creating new degree granting institutions.*

The same problem has been faced in the past by ESAN and EAFIT which were unable to grant legally recognized degrees until several years after they began operations and currently by INCAE whose master's degree is not recognized in Ecuador. In fact, those Ecuadorians who enter public service are not recognized, in terms of salary, as possessors of Master's degrees. So that the GMI does not suffer from such limitation, the FPE will seek, as earlier as possible, legal recognition of the GMI as a valid degree-granting institution.

e. The impact of regionalism on the GMI's feasibility.

The historic regional differences between Quito (Sierra) and Guayaquil (Costa) will undoubtedly have an initial negative impact on the GMI's feasibility. Businessmen in Quito have indicated that they would not be willing to send their employees to Guayaquil for Master's level training (See Annex XII).

The degree to which they would be willing to financially support an institution in Guayaquil is also uncertain. While these regional differences have been somewhat mitigated by the growth of enterprises which have significant operations in both Quito and Guayaquil, the GMI will have to implement a well developed strategy to overcome remaining barriers to access imposed by regionalism. This strategy should include, at a minimum, a concerted level of effort in Quito in the area of executive development programs, especially those aimed at top management. In addition, a mutually advantageous relationship may be established with an existing graduate management program in Quito, eg. the Politechnic of Quito, which would provide positive exposure in Quito to the GMI's programs while benefiting the participating university. Also, once the Master's level program is successfully functioning, the GMI should mount a strong promotional effort in Quito which includes an extra "helping-hand" in such aspects as finding suitable living quarters and orientation for students and their families to live in Guayaquil.

F. Environmental Analysis.

No major environmental impact is expected from this project. A negative environmental determination has been approved and is included as Annex VI.

*The feasibility of granting a degree from a U.S. university was explored. While possible, this alternative would substantially increase the time and cost of a Master's level program.

VI. IMPLEMENTATION PLAN.

A. General Implementation Planning.

The University of Houston Consortium has prepared a detailed time-phased implementation plan for the first eighteen months of the project which is included as Annex VII. The implementation plan has been developed using a PERT methodology in which a series of critical paths, required to develop and initiate the GMI, are identified. These items include staffing, site preparation, student recruitment, endowment fund development, and curriculum development. These items are then broken out into a series of subtasks which must be accomplished.

B. Technical Assistance Plan.

The technical assistance needs are described in Section III.C.1. of the Project Paper. All technical assistance will be provided under a direct A.I.D. contract with the University of Houston consortium. Because the Collaborative Assistance Mode has been employed, the Chief-of-Party and the University of Houston project manager are already fully involved in project design and pre-implementation. The first full-time U.S. professor is currently being identified and selected. The selection process for the second and third professors will begin as soon as the project implementation contract is signed with the University of Houston consortium. Short-term technical assistance will be obtained from members of the University of Houston consortium, including IAC/IE. Visiting professors will be recruited from among members of the consortium, other U.S. universities, and from Latin American institutions according to the specific requirements of the GMI and the availability of qualified professionals. The Mission Director is authorized by redelegation of Authorities No. 40.11 and Handbook 1B, 5B 4c (2) to waive source, origin and nationality requirements from Code 000 to 941 for individual transactions the value of which does not exceed \$5,000,000. In order to allow procurement of technical assistance services from Latin American educational institutions, nationality waivers from 000 to 941 will be obtained from the Mission Director as such transactions are identified during Project implementation. The Project Authorization shall contain one such waiver, to allow for the procurement of evaluation services in the amount of approximately US\$150,000 from suppliers whose nationality is included in A.I.D. Geographic Code 941 (see IV.E. Evaluation Plan, below).

C. Training Plan.

All long and short term participant training will be arranged by the University of Houston consortium. Under the project, four Ecuadoreans will be selected for doctoral training in business subjects. In addition at least six other long term participants, financed through other mechanisms, will receive doctoral level training. With the exception of one participant who will be completing her doctoral studies in organizational development at Yale in 1987, all participants will be identified and preliminarily selected by the University of Houston. Doctoral training will be done primarily at the University of Houston and the University of Indiana which will make special

efforts to work with the Ecuadorean students to assure that they complete their studies in the minimum time possible. To date more than sixty Ecuadoreans have been interviewed and at least six are qualified for doctoral level training. The majority of eligible students (5 of 6) have Master's degrees from U.S. universities, primarily in engineering subjects. Ecuadoreans will be trained in finance, control, accounting, marketing, organizational development, and economics as well as in other areas according to the needs of the Institute and aptitudes of the participants. Initial training will focus on those subjects which are found to be the most difficult (finance, accounting) and those which are most culture specific (organizational development). At least four students will be sent for training in the first or second semester of the 1986-87 calendar year. By the 1987-88 calendar year seven students will be enrolled in doctoral programs and one student will have completed her Ph.D and be teaching in the Institute.

In addition to the long term academic training which will be provided, short term training in educational administration, financial control, library management, and the management of computer systems will be provided to appropriate faculty and staff of the Graduate Management Institute. This training will be specifically tailored to the needs of the staff of the GMI. While some of this training may be carried out in the U.S., much of it will be carried out at INCAE or other Latin American institutions such as IESA and ESSA.

D. Commodity Procurement Plan.

A relatively small amount of commodities will be procured with project funds. Preliminary equipment lists have been prepared. (See Annex XV). All grant-financed commodity procurement will be carried out by the University of Houston. Upon arrival of the U. of H. Chief of Party in Guayaquil, the procurement list will be reviewed with the administrative director of the GMI to determine what items may be procured locally (or be obtained as donations by the FPE). All commodity procurement should be initiated within 90 days of the arrival of the Chief-of-Party in Guayaquil. Local procurement will be the responsibility of the GMI's administrative director assisted, as necessary, by the U. of Houston Chief-of-Party. U.S. procurement will be done through the University of Houston's procurement office following A.I.D. procurement regulations. Major items which must be imported include library materials and computer equipment. The technical advice of INCAE, which is now in the process of building a new library collection at its San Jose campus, will be considered in the development of the GMI's core library. As part of the feasibility analysis for the project, an IBM 36 (or similar) with up to 24 networked PCs has been identified as the most appropriate alternative for the GMI to meet its computational needs. The basis for selecting IBM equipment is the access to adequate, reliable in-country repair and maintenance.

E. Evaluation Plan.

In order to assure that the objectives of the project are being achieved in a timely and cost-effective way, periodic evaluations will be carried out. Several evaluative mechanisms will be used. The Consortium and the Junta Directiva will jointly issue an annual progress report which will be submitted to A.I.D. at the end of each year of the project. This report will provide information on the level of outputs achieved by the GMI in such areas as enrollment, number of graduates, courses taught, fund raising, etc. It will also discuss adjustments or modifications which may be made in the project and will serve as the basis for an annual joint review of the project by the Junta, the consortium and A.I.D. In addition, outside experts will also evaluate the project. On an annual basis, a team of experts selected, for example, by the American Assembly of Collegiate Schools of Business (AACSB), the accrediting institution for U.S. business schools, or by the Consejo Latinoamericano de Escuelas de Administracion (CLADEA), will assess the quality and effectiveness of the Institute's programs, the efficiency of the administration, and the overall financial condition of the Institute. In addition, there will be two in-depth evaluations, during the third and sixth years of the project. In order to begin to establish baseline data for the evaluations, the GMI/FPE will establish a functioning alumni organization to track graduates throughout their careers. This organization will also facilitate fund raising by allowing the FPE to target graduates of the GMI. Both evaluation designs will assess how successful the Project has been in addressing the development problem described in this Project Paper. The first in-depth evaluation will examine the extent to which the project is achieving its objectives. It will measure, in addition to the quality of the academic program, aspects such as:

--the perceived benefits, including better jobs and salary increases, which have accrued to those individuals who have participated in the Master's level program and a sample of the individuals who have participated in the executive development program;

--the degree of access to the master's program by eligible middle and lower income individuals through scholarships and loan programs;

--a detailed evaluation of the status of the FPE's fund-raising effort;

--an assessment of the progress of the participant training activity;

--adequacy of the physical facilities and equipment; and,

--the progress toward an efficient, functional Ecuadorean administration.

Based on the findings of this evaluation, adjustments will be made in the implementation of the project. The second evaluation will measure the same elements as the mid-term evaluation but as they measure the end of project status. This evaluation will be used to determine whether A.I.D. might appropriately fund additional, follow-on activities that may be necessary to achieve the project purpose.

VII. A.I.D. MONITORING PLAN.

Project Monitoring will be the responsibility of USAID's General Development Office. In order to assure that there is adequate monitoring capacity, USAID intends to hire an OE-funded individual, preferably with an education background, to serve as assistant GDO. This person will assume direct monitoring responsibility for the project but will be supported by representatives of the Project Development Office and the Controller's Office. The Assistant GDO will be responsible for assuring that adequate communications with the University of Houston's Chief of Party and the GMI's Executive Board are maintained and that implementation problems are identified and resolved in a timely fashion. He will also: (1) take the lead in assuring that necessary A.I.D. approvals are obtained in a timely fashion, (2) have primary responsibility for reviewing the University of Houston's annual workplan and assuring that it is provided in time to be reviewed as part of the annual evaluation of this project; and (3) review Contractor's quarterly reports and prepare the semi-annual project status report. USAID representatives, including the Mission Director, will also take part in annual project reviews together with members of the GMI's the Executive Board and the Deans of the University of Houston consortium.

VIII. CONDITIONS AND COVENANTS.

The major condition to be fulfilled prior to implementation of the project is the requirement for the commitment of funds by enterprises and businessmen to the FPE for the Endowment Fund in the amount of \$1,000,000.

Because of the nature of the project, i.e., a cooperative agreement with the Fundacion Privada Ecuatoriana under which a direct contract with the University of Houston consortium using the Collaborative Assistance Contracting mode will be executed, conditions precedent to the disbursement of A.I.D. funds are not appropriate because they would jeopardize the on-going work of the University of Houston consortium. Nevertheless, there are a number of actions to be carried out by the FPE which are sufficiently important enough to include as covenants in the Cooperative Agreement. These include: a commitment to carry out a fundraising campaign to raise an additional \$1.5 million (\$300,000 each year for the first five years of the project); a commitment to recruit additional members of the foundation from major Ecuadorean cities other than Guayaquil as pledged in the FPE letter to AID of March 26, 1986; a commitment to provide a building for the GMI on an appropriate site within Guayaquil; a commitment to create a Board of Trustees for the GMI; a commitment to structure the endowment fund so that it is dedicated solely to the GMI and that its investments may be in dollar denominated financial instruments; a commitment to have an annual audit performed by an outside auditor for the GMI; a commitment to organize a student loan fund in one or more Ecuadorean banks which will be accessible to students with modest resources; a commitment that admission to the GMI is based strictly on academic qualifications without discrimination on the basis of origin, sex or income level; and a commitment to use its best efforts to obtain for the GMI such legal capacity as is necessary so that the GMI can grant recognized degrees.

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AIDAC
 F.O. 12356: N/A
 TAGS:
 SUBJECT: GUIDANCE CABLE -- GRADUATE MANAGEMENT SCHOOL
 -----PID

1. THE DAEC APPROVED THE SUBJECT PID ON DECEMBER 17, 1982. THE MAJOR ISSUES DISCUSSED WERE EFFECTIVE DEMAND AND FINANCIAL FEASIBILITY, PARTICULARLY THE LEVEL OF FINANCIAL COMMITMENT FROM THE PRIVATE SECTOR.
2. WITH REGARD TO THE FIRST ISSUE, IT WAS AGREED THAT THE PRE-FEASIBILITY STUDY HAD DEMONSTRATED ADEQUATE EFFECTIVE DEMAND BY EMPLOYEES FOR GRADUATES OF A NEW GRADUATE MANAGEMENT PROGRAM, AND THAT THE FEASIBILITY STUDY WILL HAVE TO DEMONSTRATE ADEQUATE EFFECTIVE ENROLLMENT DEMAND BY QUALIFIED ECUADORIAN COLLEGE GRADUATES. THE NECESSARY ANALYSIS WOULD PRESUMABLY INCLUDE A SAMPLE SURVEY OF POTENTIAL ENROLLEES THAT WOULD DETERMINE SENSITIVITY TO THE RENTLESS OF THE SCHOOL, ITS LOCATION, INSTITUTIONAL LEASAGE, THE TYPE OF DEGREE OR CERTIFICATE TO BE OFFERED AND TUITION AMOUNTS.
3. WITH REGARD TO FINANCIAL FEASIBILITY, THE PP SHOULD INCLUDE PROJECTIONS FOR AT LEAST A TEN YEAR PERIOD, BASED ON VARIOUS SCENARIOS THE MISSION SEES POTENTIALLY DEVELOPING. THESE PROJECTIONS SHOULD EXPLICITLY ADDRESS THE LIKELY FINANCIAL REQUIREMENTS FOR ADDITIONAL TECHNICAL ASSISTANCE AND PROGRAM EXPANSION SUBSEQUENT TO TERMINATION OF THE FIVE YEAR A.I.D. PROJECT. THE PROSPECTS FOR OTHER DONOR FINANCING AND THE AVAILABILITY OF STUDENT SCHOLARSHIPS FROM OTHER SOURCES SHOULD BE EXAMINED AND DISCUSSED IN THE PP. ALTHOUGH IT WAS NOT MENTIONED IN THE PID, THE DAEC DISCUSSED THE FACT THAT THE GRADUATE MANAGEMENT PROGRAM SHOULD ALSO CARRY OUT REVENUE GENERATING RESEARCH AND CONSULTING ACTIVITIES. THE PP SHOULD INCLUDE AN ANALYSIS OF DEMAND AND REVENUE GENERATION PROJECTIONS FOR THESE ACTIVITIES, AS WELL AS A DISCUSSION OF HOW THESE ACTIVITIES WOULD RELATE TO THE EDUCATIONAL PROGRAM.
4. WITH REGARD TO DETERMINING THE DEGREE OF FINANCIAL COMMITMENT FROM THE PRIVATE SECTOR, IT IS RECOMMENDED THAT REALISTIC COST PROJECTIONS BE PROVIDED TO THE PRIVATE SECTOR AS SOON AS POSSIBLE TO AVOID ANY SERIOUS MISUNDERSTANDING THAT COULD RESULT FROM RELEASING SIGNIFICANTLY HIGHER COST ESTIMATES AFTER PLEDGES HAD BEEN OBTAINED ON THE BASIS OF LOWER PROJECTIONS.
5. AS THE MISSION RECOGNIZED IN THE PID, THERE ARE STILL SERIOUS FEASIBILITY ISSUES TO BE RESOLVED AND EXPERIENCE INDICATES THAT INSTITUTIONS SUCH AS THAT BEING PROPOSED USUALLY REQUIRE TEN YEARS OR SO TO BECOME SELF-SUFFICIENT. FOR THESE REASONS, THE DAEC CONCLUDED THAT THE PP SHOULD BE SUBMITTED TO AID/W FOR APPROVAL AND PROJECT AUTHORIZATION.
6. WITH REGARD TO THE PROPOSED BLANKET WAIVER TO OBTAIN TECHNICAL ASSISTANCE FROM CODE 241 COUNTRIES, IT WAS NOTED THAT EACH INDIVIDUAL CASE SHOULD BE JUSTIFIED AND JUDGED ON ITS MERITS IN ACCORDANCE WITH AGENCY

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PROCUREMENT POLICY, AND THAT IT IS UNLIKELY THAT ANY INDIVIDUAL CONTRACT WOULD EXCEED THE MISSION DIRECTOR'S WAIVER AUTHORITY. IT SHOULD BE KEPT IN MIND, HOWEVER, THAT AGENCY POLICY FOR PROCUREMENT OF GRANT-FINANCED SERVICES FROM THE UNITED STATES ORIGINATED IN SECTION 504(A) OF THE FAA AND SUBSEQUENT PRESIDENTIAL DETERMINATIONS MADE IN THE EARLY 1950'S. THUS, DEVIATIONS FROM AID'S NATIONALITY POLICY SHOULD NOT BE MADE LIGHTLY, AND THE CRITERIA SET FORTH IN CHAPTER 5 OF HANDBOOK 1B SHOULD BE ADHERED TO CLOSELY.

7. DAEC SUPPORTS MISSION'S PLAN TO PROCEED WITH COLLABORATIVE ASSISTANCE MODE FOR CONTRACTING PROJECT DEVELOPMENT AND IMPLEMENTATION T.A. DAM
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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN ADD TO FUNDING DATA FOR THE P-R REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 86 to FY 92
Total U.S. Funding \$10,000,000
Date Prepared July 20, 1986

Project Title & Number: Ecuador Graduate Management Program, 518-0035

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>To upgrade the quality and increase the quantity of managers for Ecuadorean private sector enterprises.</p>	<p>Measures of Goal Achievement: (A-2)</p> <p>Ecuadorean private enterprises are supporting the GMI, hiring its graduates, sending employees to executive development programs and contracting with the GMI to carry out applied research.</p>	<p>(A-3)</p> <p>Evaluation</p>	<p>Assumptions for achieving goal targets: (A-4)</p> <p>The GMI can become a legitimate Ecuadorean educational institution.</p> <p>A program can be implemented which responds to the needs of the Ecuadorean business environment.</p> <p>Ecuadoreans accept a full-time 15 month program and the interactive teaching methods proposed.</p>

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project
From FY 86 to FY 92
Total U.S. Funding \$10,000,000
Date Prepared: July 20, 1986

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Title & Number: Ecuador Graduate Management Program, 518-0035

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>(Purpose: (B-1))</p> <p>establish a high quality graduate management school Ecuador.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>1. Full time core Ecuadorean faculty in place.</p> <p>2. There is a fully developed academic program and curriculum which responds to the realities of the Ecuadorean environment.</p> <p>3. The school has an efficient, functional administration which can maintain a high quality graduate management program while minimizing expenditures.</p> <p>4. There exists an adequate physical plant with a technical resource center and computer facilities.</p> <p>5. The Applied Research Program is functioning.</p> <p>6. The Executive Development Program is functioning.</p>	<p>(B-3)</p> <p>1. Evaluation.</p> <p>2. Evaluation and GMI records.</p> <p>3. Evaluation, financial records of the GMI.</p> <p>4. Evaluation.</p> <p>5. Evaluation.</p> <p>6. Evaluation.</p>	<p>Assumptions for achieving purpose: (B-4)</p> <p>1. An adequate demand in Ecuador exists for the GMI's programs.</p> <p>2. It is possible to adapt educational materials from the U.S. and from other institutions in the region.</p> <p>3. Qualified people can be found and retained.</p> <p>4. The FPE has the capability to identify a suitable site.</p> <p>5. There is a demand for Applied Research and willingness to pay for it.</p> <p>6. Demand for these courses and willingness to pay exists.</p>

ANNEX I, B
Page 2 of 6

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY 86 to FY 92
Total U.S. Funding: \$10,000,000
Date Prepared: July 20, 1986

Ecuador Graduate Management Program, 518-0035

PAGE 2

Project Title & Number:

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>(continuation)</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>7. An endowment fund sufficient to cover the projected operating deficit is institutionalized.</p>	<p>(B-3)</p> <p>7. Dollar value of the funds accounts.</p>	<p>Assumptions for achieving purpose: (B-4)</p> <p>7. FPE able to meet its commitments.</p>

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

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GPO 1986-0-211-100

Project Title & Number: Ecuador Graduate Management Program, 518-0035

Life of Project:
From FY 86 to FY 92
Total U.S. Funding \$10,000,000
Date Prepared: July 20, 1986

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
1. A fully developed Academic Program.	a. 15 month course of study resulting in a master degree.	a. Evaluation and GMI records.	a. Capacity of University of Houston Consortium to establish this program, a sufficient demand for the program, availability of scholarships and student loans.
.. Master's Level Program	- 75 graduates per year by end of year five.		
2. Executive Development Program	- 1/2 day sessions, one day workshops, 2-4 day sessions, and contract programs are being provided on a continuing basis to at least 400 managers.		
3. Applied Research Program	- Private sector contracts with the institute to carry out applied research. - New Ecuadorean cases produced as a result of applied research.		
4. A functional administration.	b. Full-time rector, administrative and academic director, a registrar, a document center and an accounting department are in place.	b. Evaluation and University of Houston records.	b. Ability to recruit and retain qualified individuals.
5. Trained faculty.	c. Ten Ecuadoreans will receive PhDs and be full-time faculty members.	c. Evaluation and progress reports.	c. Participants complete studies on time and meet their commitments to work at the GMI.
1. Adequately equipped facilities.	d. School will be established in a permanent site.	d. Receiving and inspecting reports, evaluations and periodic reports.	d. Facilities established and equipment installed on a timely basis.

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY 86 to FY 92
Total U.S. Funding: \$10,000,000
Date Prepared: July 20, 1986

Project Title & Number: Ecuador Graduate Management Program, 518-0035

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1) (continuation)	Magnitude of Outputs: (C-2) - Documentation center with 6,000 publications is organized. - Simultaneous translation equipment operational. - Computer center is operational.	(C-3)	Assumptions for achieving outputs: (C-4)

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Title & Number: Ecuador Graduate Management Program, 518-0035

Life of Project:
From FY 86 to FY 92
Total U.S. Funding \$10,000,000
Date Prepared: July 20, 1986

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Implementation (D-2)	Target (Type and Quantity) (\$000s)	Total		
(D-1) Inputs: Technical assistance LT TA 28 person-years ST TA 63 person-months Home office support of 17 person-years.	a.	AID Counter-Grant part Tech. 6,130	-	6,130	(D-3) 1. USAID records 2. University of Houston records 3. GMI records 4. FPE records (D-4) Assumptions for providing inputs: 1. All funds available on a timely basis. 2. No unexpected problems in meeting the covenants of the Cooperative agreement.
Training 16 person years of LT Phd training for four faculty members and specialized ST training.	b.	Train. 408	-	408	
Operating Expenses Physical Plant, Equipment and materials	c.	Oper. 1,211	1,373	3,484	
Library Acquisitions Computer System Simultaneous Translation Furniture and equipment	d.	Physic. 600	400	1,000	
Evaluations	e.	Eval. 241	-	241	
Endowment Fund	f.	Endow. -	2,500	2,500	
		Contin- 510	-	510	
		gencies			
		10,000	4,273	14,273	

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5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481 (h) (1); FY 1986 Continuing Resolution Sec. 527. Has it been determined or certified to the Congress by the President that the Government of the recipient country has failed to take adequate measures or steps to prevent narcotic and psychotropic drugs or other controlled substances (as listed in the schedules in section 202 of the Comprehensive Drug Abuse and Prevention Control Act of 1971) which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents, or from entering the United States unlawfully?

2. FAA Sec. 481 (H) (4). Has the President determined that the recipient country has not taken adequate steps to prevent (a) the processing, in whole or in part, in such country of narcotic and

It has not been so determined. The GOE has an active narcotics program supported by the USG.

The President has not made such a determination.

psychotropic drugs or other controlled substances, (b) the transportation through such country of narcotic and psychotropic drugs or other controlled substances, and (c) the use of such country as a refuge for illegal drug traffickers?

3. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor of any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government? No such case is known

4. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No

5. FAA Sec. 620(a), 620(f), 620D; FY 1986 Continuing Resolution Sec.512. Is recipient country a communist country? If so, has the President determined that assistance to the country is important to the national interests of the United States? Will assistance be No

provided to Angola, Cambodia, Cuba, Iraq, Syria, Vietnam, Libya, or South Yemen? Will assistance be provided to Afghanistan without a certification?

6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No
7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? Ecuador signed an OPIC Agreement in November 1984
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? No
- (b) If so, has any deduction required by the Fishermen's Protective Act been made? N/A
9. FAA Sec. 620(g); FY 1986 Continuing Resolution Sec. 518. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? No
- (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill (or continuing resolution) appropriates funds? No

N/A

10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment?

(Reference may be made to the annual "Taking into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No

12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.)

Payment status is current

13. FAA Sec. 620A. Has the government of the recipient country aided or abetted, by

No

- granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism?
14. ISLCA of 1985 Sec. 522(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e) (2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures? No
15. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No
16. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a nonnuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) No (to both questions)
17. FAA Sec 670. If the country is a non-nuclear weapon state, No

has it, on or after August 8, 1985, exported illegally (or attempted to export illegally) from the United States any material, equipment, or technology which would contribute significantly to the ability of such country to manufacture a nuclear explosive device?

18. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

Yes (to first question)

Yes taken into account by the Administrator at the time of approval of Agency OYB (to second question)

19. FY 1986 Continuing Resolution Sec. 541. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No. Abortion is illegal in Ecuador (to first question)

No. Involuntary sterilization is illegal in Ecuador (to second question)

No (to third question)

20. FY 1986 Continuing Resolution. Is the assistance being made available to any organization or program which as been determined as supporting or participating in the management of a program of coercive abortion on involuntary sterilization? If assistance is from the population functional account, are any of the funds to be made available to family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services? No (to first question)
No. A full range of family planning methods and services is available (to second question)
21. FY 1986 Continuing Resolution. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States? No
22. FY 1986 Continuing Resolution Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? No

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAM Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized

The Department of State has not determined that Ecuador is a violator of human rights

human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

2. Economic Support Fund Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can the country make such significant improvements in its human rights record that furnishing such assistance is in the national interest?

No such determination has been made

5C(2) PROJECT CHECKLIST

A. GENERAL CRITERIA FOR PROJECT

1. FY 1986 Continuing Resolution Sec. 524; FAA Sec. 634A.
Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project. A Congressional Notification has been submitted

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
 - (a) Detailed financial and implementation plans are included in the PP.
 - (b) Reasonably firm cost estimates are presented in the PP.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? No such action is required

4. FAA Sec. 611(b); FY 1986 Continuing Resolution Sec. 501. If for water or water-related land resource construction, has project met the principals, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962 et seq.)? (See AID Handbook 3 for new guidelines.) N/A

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed The Mission Director's Section 611(e) certification is included in the Project Paper and the AA/LAC has taken into consideration Ecuador's

- \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- capability to maintain and utilize the project.
- No, project activities are not appropriate for a regional project
- By establishing a high quality graduate management school, the project will encourage the flow of international trade and foster private initiatives and cooperation.
- The project will finance technical services provided by US consultants.

9. FAA Sec. 612(b), 636(h); FY 1986 Continuing Resolution Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. Host country contribution, including in-kind support are estimated at 30% of total project costs.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No
11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes
12. FY 1986 Continuing Resolution Section 522. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? N/A
13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does the project or program take into consideration the problem of the destruction of tropical forests? Yes, an IEE has been carried out for this project and a negative determination was made.
No

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14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)? N/A
15. FY 1986 Continuing Resolution Sec. 533. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution? N/A
16. ISDCA OF 1985 SEC. 310. For development assistance projects, how much of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, and private and voluntary organization which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? None

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

- a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to

The project will help insure wide participation of the poor by increasing employment opportunities and by targeting disadvantaged students with scholarships and a student loan program

economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

Yes, the project will establish a graduate management school and will support executive development seminars which will improve the quality and increase the quantity of trained Ecuadoreans to manage private enterprises.

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller,

N/A

cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

- d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? Yes
- e. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth? Yes
- f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes

- g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Management training is a high priority of the people of Ecuador. The program is designed to establish a school where ecuadorean managerial practices will be incorporated into the curriculum.

2. Development Assistance Project Criteria (Loans Only)

- a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest. N/A
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan? N/A

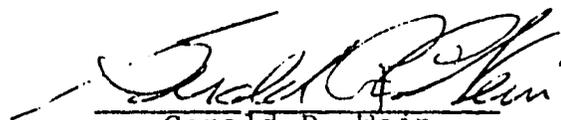
3. Economic Support Fund Project Criteria

- a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the maximum extent feasible, is this assistance consistent with the policy direction, purposes, and programs of part I of the FAA? N/A

- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? N/A
- c. ISLCA of 1985 Sec. 207 Will ESF funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons of the Treaty for the Prohibition of the Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States? N/A
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

CERTIFICATION PURSUANT TO SECTION 611(e) OF THE
FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Gerald Wein, Acting Director of the Agency for International Development in Ecuador, having taken into consideration among other factors, the maintenance and utilization of projects in Ecuador previously financed or assisted by the United States, do hereby certify that in my judgement Ecuador has the technical capability and the physical, financial, and human resources to utilize and maintain effectively the proposed grant of Ten Million United States dollars (US\$10'000,000.00) from the Government of the United States of America to the Fundación Privada Ecuatoriana for the Graduate Management School Program.


Gerald R. Wein
Acting Director, USAID/Ecuador

July 28, 1986

Financial Tables

1. Summary Financial Plan
2. Schedule of Disbursements
3. Procurement Plan
4. Counterpart Contribution
5. Methods of Implementation and Financing

TABLE 1
Summary Financial Plan
(\$000s)

	A.I.D. Grant	Counterpart	Total
Technical Assistance	6,130	--	6,130
Training	408	--	408
Operating Costs	2,111	1,373	3,484
Physical Plant	600	400	1,000
Evaluation	241	--	241
Endowment Fund	--	2,500	2,500
Contingencies	510	--	510
TOTAL	10,000	4,273	14,273

TABLE 2
Schedule of Disbursements
(US\$000s)

<u>Sources</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>TOTAL</u>
A.I.D. Grant	1,250	1,800	1,900	2,100	1,750	1,200	10,000
Counterpart	<u>825</u>	<u>544</u>	<u>634</u>	<u>683</u>	<u>752</u>	<u>835</u>	<u>4,273</u>
TOTAL	2,075	2,344	2,534	2,783	2,502	2,035	14,273

TABLE 3

Procurement Plan
A.I.D. Funds
(US\$000s)

<u>Items</u>	<u>Grant</u>
Library Acquisitions	80,000
Computer System	165,000
Simultaneous Translation Equipment	25,000
Classroom Equipment	72,000
Furniture	93,000
Construction Costs	100,000
Rental of temporary facility	<u>65,000</u>
TOTAL	\$600,000

TABLE 4
Counterpart Contribution
(US\$000s)

	<u>Items</u>	<u>Amount</u>
	Revenue from GMI courses	1,373
	In-kind contribution	400
	Endowment funds	<u>2,500</u>
TOTAL		<u>\$4,273</u>

TABLE 5

Methods of Implementation
and Financing

<u>Method of Implementation</u>	<u>Method of Financing</u>	<u>Approximate Amount</u>
A.I.D. Direct Cooperative Agreement OP. Expenses	Direct Payment	1,343
A.I.D. Direct Contract	Direct Payment	
TA.	Direct Payment	6,130
Training	Direct Payment	408
Commodities	Direct Payment	600
O.P. Expenses	Direct Payment	768
Project Evaluations	Direct Payment	241
Contingencies	Direct Payment	510

(3316G)

Economic Feasibility Study for
the Ecuador Graduate Management Program

Prepared by
the University of Houston, Indiana
University and Florida International University

January 27, 1986

REI No. ROD/LAC-85-002

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6.6

Executive Summary

This study of the economic feasibility of the Ecuadorean Graduate Management Program concludes that the project would provide substantial return on investment to both the individual student and Ecuadorean society as a whole. Building on the work of Dr. William Renforth in the prefeasibility study completed in 1982 this paper reviews and updates the literature on education and economic development. Although this literature is not Ecuador specific, and does not deal with business education per se, it concludes that investment in education provides returns to development that are equal to or exceed the returns from alternative projects. Furthermore, these studies refute the fear that educational expansion will lead to a problem of unemployed graduates.

This paper also provides a cost benefit analysis of the proposed project in Ecuador. The primary conclusion on costs and benefits to the student is that the program would yield a return on investment to the individual student in excess of fifty percent. Even using extremely conservative assumptions, the estimated rate of return is nearly twelve percent. The social cost benefit analysis based on very cautious assumptions yielded a return rate of twenty percent, which considerably exceeds the World Bank standard of twelve percent. Furthermore such factors as targeting the program

to those sections of the Ecuadorean economy that have potentially the highest return should increase the social returns of the project.

In terms of foreign exchange savings, this analysis concludes that the savings will probably not be substantial. This is due to the fact that the declining value of the sucre has lead to a decrease in the number of Ecuadoreans studying, reversing a trend that was identified in the 1982 prefeasibility study. The study also concludes that funding of this project would be preferable to direct assistance to existing programs and would itself benefit those programs. It also concludes that the project will pay dividends long after AID investment in the project comes to an end.

INTRODUCTION

The prefeasibility study completed in 1982 examined the economic justification for investment in graduate level management training in developing countries. This report brings that study up to date and, as far as possible, makes it "Ecuador specific." Following the outline of the earlier study, this report will consider in order:

- I. Macro-economic Relationships Between Education and Economic Growth
- II. The Role of Management Education in Economic Development
- III. A Cost-benefit Analysis of the Proposed Project
- IV. Foreign Exchange Savings from Substitution of Local for Foreign Purchases of Educational Services.
- V. Alternatives to the Proposed Project

I. Macro-economic Relationships Between Education and Economic Growth

Since Gary Becker's book Human Capital (1964) much literature has appeared examining investment in people. The same conceptual tools used to investigate investment in physical capital have been applied to investment in human capital. Education has been viewed as a primary mechanism for increasing the capital embodied in human beings. Traditionally, economists had focused on savings and investment in physical capital as the mainspring of economic development. Harbison and Myers (1964) found a correlation between high rates of economic growth and high rates of expenditure on education. During the past two decades a number of articles and books have been published reporting the results of attempts to quantify the costs and benefits of education in developing countries. Irvin Sobel's 1978 article, "The Human Capital Revolution in Economic Development, " and George Psacharopoulos's 1980 World Bank document, Higher Education in Developing Countries: A Cost-Benefit Analysis, have reviewed much of this literature. William Renforth used these and many other sources in his 1982 prefeasibility study of the Ecuador project. Renforth concluded that education is a necessary, but not sufficient, condition for economic development, contributing not only to

the efficiency aspects of development but also facilitating change in prevailing sociopolitical conditions.

Since Renforth's prefeasibility study was completed, three significant new articles have appeared. Psacharopoulos (1982) looks specifically at the value of higher education in developing countries using, along with World Bank and other sources the wealth of data collected and analyzed by Bikas Sanyal and his co-workers at the International Institute for Educational Planning. That institute has conducted a number of in-depth studies in developing countries, but unfortunately, not in Ecuador. Psacharopoulos concludes that returns to higher education in nine of eleven developing countries were greater than returns to irrigation, hydroelectric, and highway projects (the average being 14.9 percent compared with 12.8 percent, respectively). He also examined the differential returns to specific subjects within higher education, concluding from the data on twelve developing countries that (p. 156):

In most cases, the returns to different subjects are of the same (if not higher) order of magnitude as the returns to alternative projects. Second, it is sometimes the case that general subjects such as humanities and economics are financially more profitable than technical subjects like engineering and agriculture. This is because the higher cost of the latter subjects outweighs their apparent higher benefits.

Unfortunately, Psacharopoulos's subject categories did

not include business management. His results, however, demonstrate the importance of considering both costs and benefits in evaluating project proposals.

Psacharopoulos (Fall 1985) has just published another article entitled "Returns to Education: A Further International Update and Implications". In this latest piece Psacharopoulos used data and research findings from over sixty countries, but not from Ecuador. He says: "The new cross-country evidence confirms and reinforces earlier patterns, namely the returns are highest in primary education, the general curricula, the education of women and in the lowest per capita income countries."

His latest results indicate underinvestment in all levels of education in developing countries. In both the 1960s and the 1970s returns to human capital exceeded returns to physical capital in developing countries whereas the reverse was true in advanced countries. (Psacharopoulos, 1985, p. 14). He finds that primary schooling remains the "number one priority for investment," but on the secondary and university levels he again finds that the extra costs of vocational and technical education reduce its attractiveness relative to the general curricula. His data on returns to investment in selected university faculties did not include business management, but he finds the highest average rate of return in economics.

Psacharopoulos draws other conclusions of some relevance to this project. He finds relative stability over time, which he explains by the fact that the demand for educated manpower has kept pace with the supply. He says the fears that further educational expansion will lead to unemployed graduates are unfounded. This latest paper draws two important methodological conclusions. One is that earlier studies using incremental earnings to measure social benefits of education have severely underestimated the true social profitability of education because civil service pay scales have a flattening effect on incremental earnings. He considers the private sector earnings data to be a better measure. The limited information available on Ecuador bears out this finding. Public service pay scales in Ecuador allow much less differential for education beyond a first university degree than that indicated by interviews with managers with MBAs working in the private sector.

Psacharopoulos concludes his most recent paper with a reference to a 1984 article by Haveman and Wolfe, which deals with externalities not captured by market data. He concluded that considering such externalities would strengthen his own conclusions. Haveman and Wolfe (1984) criticize the traditional approach of estimating the benefits of additional schooling with estimates of earnings differences resulting from additional education. They say (p. 379) that the

standard rate of return estimates yield biased results and that: "A full accounting must consider all of schooling's effects, positive and negative, and not simply those recorded in a single market." After surveying the literature that provides some information on some twenty types of effects of education other than on earnings, they estimated dollar values. Their estimate (p. 401) "suggests that the annual value of incremental schooling reported in standard human capital estimates may capture only about one-half of the total value of an additional year of schooling." Haveman and Wolfe were dealing with education generally, considering specifically neither developing countries nor management programs. Their contribution to research methods in this field may be extremely significant by focusing attention on a broader range of benefits and costs of educational projects.

II. The Role of Management Education in Development

As the prefeasibility study pointed out, a number of writers and organizations have stressed the significance of management in economic development. The General Conference of UNESCO (1978) saw a need to integrate management education into all development efforts in order to train individuals to manage technology, capital, services, and administration in every sector of the economy. The World Bank's 1980 Education Sector Policy Paper stressed the role of management education in facilitating change in prevailing sociopolitical conditions by providing the leadership to make both private and public organizations more adaptive to environmental pressures and more responsive to social needs. H. Myint (1967) and R. L. Tandon (1968) stressed the necessity of managerial capacity to avoid bottlenecks to economic growth. Stifel, Black and Coleman (1977), in a Rockefeller Foundation survey found a "management crisis" in less developed countries and concluded that more conventionally educated personnel would not solve the problem. What is needed is innovations in the education of managers.

III. A Cost-Benefit Analysis of the Proposed Project

The prefeasibility study carefully reviewed the cost-benefit literature on economics and business management programs. That review will not be repeated here. Instead an analysis is presented of the costs and benefits of the proposed project in Ecuador. The only cost-benefit analysis of a specific graduate management program reported in the literature is the 1973 study by Hill, Haynes, and Baumgartel of the Indian Institute of Management at Ahmedabad. The methods used therein will be the model for the following analysis, with some modifications made necessary by limitations in the data available. The Ahmedabad project was begun in 1962/63 and began to graduate students in the 1965/66 academic year. Thus much actual data was available in 1972 on costs and earnings of graduates. In spite of that fact much of the data needed for a cost-benefit analysis had to be estimated by the authors. They presented their results as illustrative of their method rather than as a definitive evaluation of that Ford Foundation-Harvard University assisted project.

With a proposed project such as the one in Ecuador all of the data must be estimated on the basis of very fragmentary past data on related variables and forecasts of future events. Following the pattern of Hill, the results of calculations made with alternative estimates and assumptions

about the numbers are presented. This analysis considers two crucial areas:

1. Private Costs and Benefits to the Student
2. Social Cost Benefit Analysis

1. Private Costs and Benefits to the Student

Each student makes an investment in his graduate management education from which he expects an adequate return. Return on investment can be calculated with the standard formula:

$$V = \sum_{n=1}^w \frac{(R-C)}{(1+i)^n}$$

where V = present value

R = extra earnings attributable to the program

C = the student's costs attributable to the program

i = rate of return or discount rate

n = the time period in which returns and costs occur

w = number of time periods in a working life

With this model we must estimate R and C for each time period from the student's entrance into the program until he ceases to work at retirement. Having estimated that stream of future net benefits (R-C) we can either select an appropriate discount rate (i) and calculate the discounted present value (V) of the activity, or we can set V equal to zero and calculate the rate of return (i). We will do both,

using a number of alternative assumptions and estimates of the variables.

From interviews in Ecuador with a number of managers and educators it is possible to estimate the earnings after a first degree of the sort of person most likely to be attracted to and accepted by the proposed graduate management program. We can also estimate on the basis of those interviews the beginning and future earnings of such a person after graduating from the program. The difference between the two salary levels is treated as R , the return attributable to the program. Our estimate of the student's earnings without the program enters into the calculation also as a measure of the cost of not working during the fifteen month period in which he is a full-time student. In addition, we must estimate the amount of tuition and fees. We ignore living costs on the assumption that they are likely to be the same whether or not the person is a student.

In all of these calculations, we have assumed that inflation and exchange rate fluctuations affect costs and benefits equally and can be neglected. The numbers are based on estimates made in October, 1985. We will present first the results of calculations based on our best estimates, and then show the effects of modifying the various assumptions. The reader should keep in mind that no hard data are available on what will happen in the future. Therefore, we

are presenting a sensitivity analysis that gives insight into the consequences of errors of various sorts in the estimates. Our best estimate of the earnings of a prospective student who already has a first degree and two or three years experience is 50,000 sucres per month. Since earnings accrue at the end of the month, we have foregone earnings of two months in the first quarter or 100000 sucres, foregone earnings of 150000 sucres in quarters 2, 3, 4, & 5, and also 50000 sucres in quarter number 6 during which he is working for one month before being paid. Assuming 350000 sucres tuition and fees paid at the beginning of quarter number one, the cost stream in thousands of sucres is as follows:

Quarter	1	2	3	4	5	6	7	8	125
Costs	-450	-150	-150	-150	-150	-50	0	0		0

Our best estimate of the earnings of the student after completion of the program is 80000 sucres per month, moving up within two years to 130000 sucres per month. Multiplying monthly earnings by 3 and subtracting what could have been earned without the program we get R equal to 90000 in quarter 6, growing to 240000 in quarter 14. The monetary value of the program to the student as measured by these extra earnings begins in the sixth quarter and continues for an assumed 30 year working lifespan. The stream of costs,

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benefits, and net benefits (R - C) appears as follows:

Quarter	1	2	3	4	5	6	7	8
Extra Earnings	0	0	0	0	0	90	110	130
Costs	-450	-150	-150	-150	-150	40	0	0
Net Benefits	-450	-150	-150	-150	-150	40	110	130
Quarter	9	10	11	12	13	14	15..125	
Extra Earnings	150	170	190	210	225	240	240	240
Costs	0	0	0	0	0	0	0	0
Net Benefits	150	170	190	210	225	240	240	240

Setting this stream of net benefits equal to zero and solving for i , the internal rate of return, we get an annual rate of 54.67 percent.

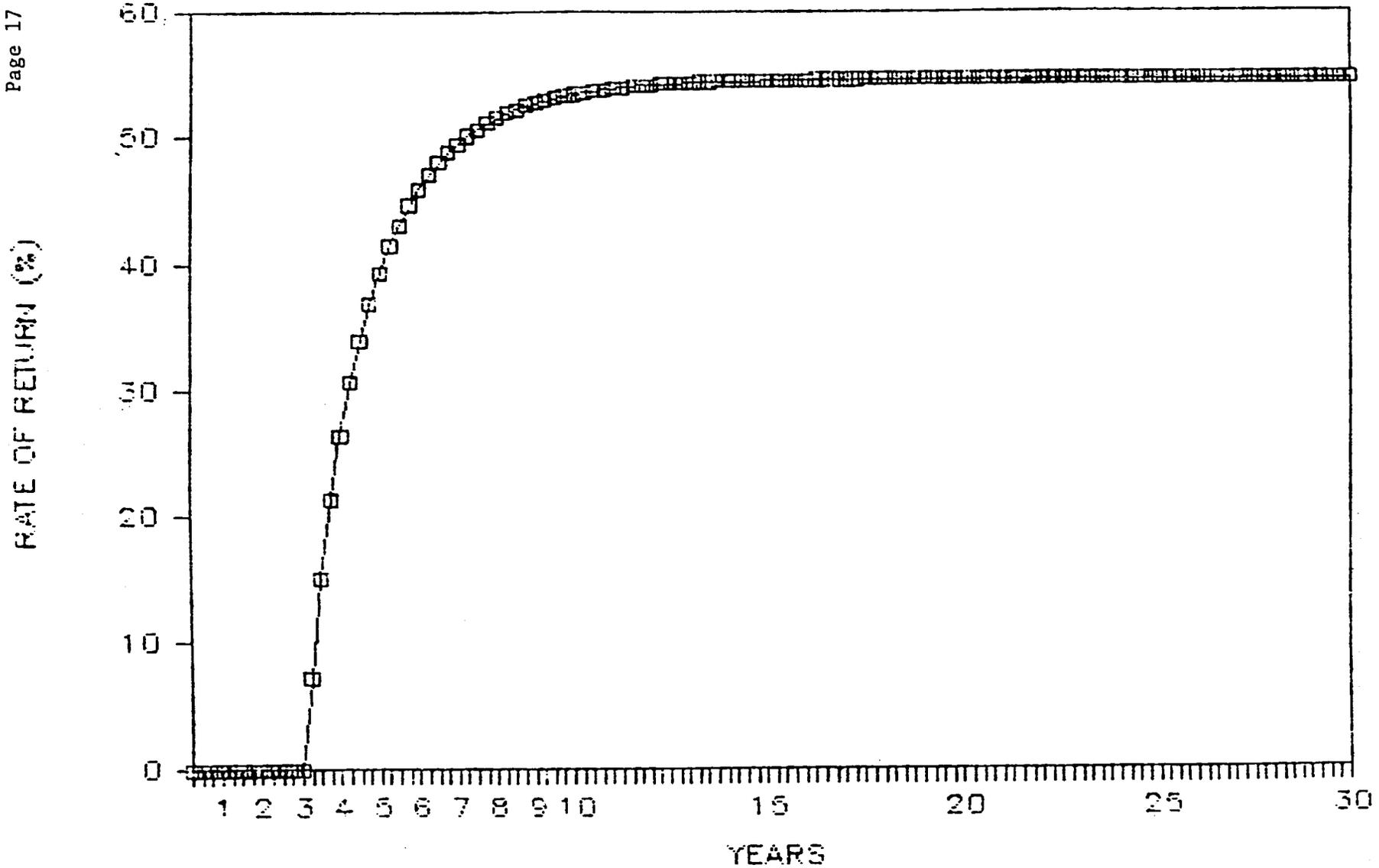
Now let us consider some alternative assumptions. Suppose that w , the working lifespan is not 30 years but only 10 years (that is 40 quarters beyond graduation). The rate of return is 53.97 percent. Benefits far in the future have very little effect on the calculation. If the graduate is able to earn the estimated extra earnings for only five years (that is, through quarter 25), his rate of return on his investment is 47.03 percent. At quarter 17, just three years after completion of the program his earnings would have amounted to a 30.7 percent rate of return.

Figure 1

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PRIVATE COST/BENEFIT ANALYSIS

ALTERNATIVE TIME HORIZONS



If we assume a value for i , we can solve for the discounted present value of the net benefit stream. An appropriate value for this discount rate is the cost of borrowing the money needed to pay the costs incurred before the returns come in. Or, alternatively, we could use the opportunity cost foregone by not investing in some other project such as an MBA from abroad. In October, 1985, the Banco del Pacifico was actually lending money at a rate below the inflation rate, so that the real rate of interest was negative. Credit was being rationed, however, and a particular student might not be able to borrow as much as he needs to cover foregone earnings and tuition for the 15-month period. If he did so, however, at a 10 percent real rate, the value of the program to him would be 6,674,000 sucres. At 5 percent, the present value would be 12,479,000 sucres, and at 20 percent it would be 2,609,000 sucres, assuming the returns continue for thirty years. If we assuming a working lifespan of only 10 years, then the present value is 3,838,000 sucres at 10 percent, 5,441,000 sucres at 5 percent, and 1,965,000 sucres at a 20 percent discount rate.

In order to show the sensitivity of the rate of return to errors in these estimates of costs and extra earnings we have recalculated using both tuition and foregone earnings costs that are 20 percent higher along with extra earnings after graduation that are 20 percent lower. With these new

assumptions and a 30-year working lifespan, the rate of return drops to 40.25 percent from 54.67 percent. With 10 years of extra earning, the rate of return is 38.82 instead of 53.97 percent. With only five years of extra earnings the rate is 29.73 instead of 47.03 percent, and with only three years, the rate is 11.96 instead of 30.7 percent.

To test the sensitivity of the student's rate of return to the cost of tuition and fees, we have used the original earnings assumptions but doubled tuition and fees from 350000 sucres to 700000 sucres. The result shows a rate of return of 43.32 percent for a 30-year working lifespan compared with 54.67 percent. For a 10-year span the return drops from 53.97 to 42.12 percent. For a five-year span it drops from 47.03 to 33.78 percent, and for three years, from 30.7 to 16.90 percent.

This private cost-benefit analysis indicates that entering and completing the proposed management training program would be a very good investment for the individual student. To avoid overstating the case, however, we have also done the calculation using the most pessimistic estimates of returns. Based on estimates from Quito on the earnings of potential students without the MBA and their extra earnings with graduate management training we get considerably lower, but still quite high rates of return. Rolf Stern, Coordinator of the Instituto de Postgrado

Programa de Gerencia Empresarial of the Escuela Politecnica Nacional estimated that a person with a first degree and some experience earns about 32500 sucres per month (compared with the Guayaquil-based best estimate of 50000). He estimated that a newly graduated MBA earns no more than an experienced one-degree person, but that with experience the MBA would earn about 52000 sucres per month (compared with the 130000 estimate used above). Using these much more pessimistic estimates of earnings, and earnings differentials, we still get a rate of return of 17.32 percent over a 30-year working lifespan and 11.95 percent for a 10-year span.

It seems clear that the proposed program would be a very good investment for the student even under most pessimistic assumptions about the extra earnings resulting from it. One should keep in mind, of course, that the prospective student runs some risk in making a decision to leave his job and become a full-time student for 15 months. If he fails to complete the program, he may be worse off than if he had not entered. It is therefore important to screen applicants adequately in order to avoid taking in students who are unlikely to be able to graduate.

We should also recognize that such calculations of the monetary value of the program may underestimate the benefits to the student. Management education, like all education, is a consumer good in and of itself as well as an investment in

human capital. The program can be expected to enhance the life of the graduate in his role as a family member and citizen as well as his role as an employee. No attempt is made to quantify these intangible benefits.

The benefits a student receives could be obtained by going abroad for an MBA degree. In order to do so, however, he must incur considerably greater costs. The fact that some Ecuadoreans do incur such costs is itself an indication that they consider the return on such investment to be adequate. We have made a calculation of the rate of return on an American MBA using the same best estimate benefit stream used above but substituting the costs of going to Indiana University for the degree. Costs vary considerably from school to school, with such private schools as Harvard, Wharton, and Stanford costing much more and some other state universities perhaps costing less. The program at Indiana requires two academic years. My calculation assumes that the student arrives just in time for the Fall semester and leaves just after the end of the Spring semester the following year. The cost stream is thus spread over seven quarters and includes tuition, fees and supplies, room and board, and personal expenses as estimated in the Indiana University MBA program brochure although we have used only three-fourths of the living expenses on the assumption that something but not as much, would be spent whether or not the program were

undertaken. For a single student the rate of return is only 17.96 percent. The return to a student attending INCAE, ESAN, or ISEA, would be somewhere in between that from the U.S. and Ecuador, because the costs are likely to fall between those extremes. The proposed program is thus a much better investment for the student, even with double the tuition proposed, than going abroad, assuming that the U.S. program and the proposed Ecuadorean program yield the same differential earnings stream. A successful Ecuadorean program, by being more Ecuador specific, might yield higher returns, or it might fail to come up to U.S. standards. The proposed program curriculum will be targeted to agroindustry, nontraditional exports, and small business, and, therefore, may turn out graduates more highly valued than those of U.S. programs. On the other hand, until the graduates of the new program demonstrate their value to employers, the U.S.A. MBA may command a "prestige" premium.

2. Social Cost-Benefit Analysis

The value of the proposed management program to Ecuadorean society can be examined with the same theoretical model used above. We must include, however, the full costs of the program which will not be fully covered by student tuition. The extra earnings each student earns because of the programs can be aggregated as one indicator of the benefits to society. In a perfectly competitive ideal market

economy with perfect information and no uncertainty, economic theory teaches that each worker is paid the value to the employer of the marginal worker. The employer reaps the consumer's surplus that results from the downward sloping demand curve for managers as Hill, Haynes and Baumgartel point out (pp. 146-149). Even without imperfections in the market systems that Haveman and Wolfe rely on, we can expect the social returns to be greater than the sum of the private returns of all the graduates. The social costs are likewise greater but these can be captured much better in a cost-benefit analysis.

We have used the cost estimates of the financial plan, the sum of the private returns to the graduates, plus an estimate of the value to society of executive programs to calculate a lower limit for the social rate of return of the proposed project. If the assumptions hold, we can have confidence that these estimates underestimate the benefits to society.

Several alternative assumptions are made about the number of students graduating, the private return per student, the start up time between the incurring of initial costs and the graduation of the first class, and the value of executive programs. Table 1 shows the social rate of return for several sets of assumptions, all of which are calculated to include costs and benefits from the initial expenditure

through thirty years. A few years either way in this time horizon have a negligible effect on the rate of return.

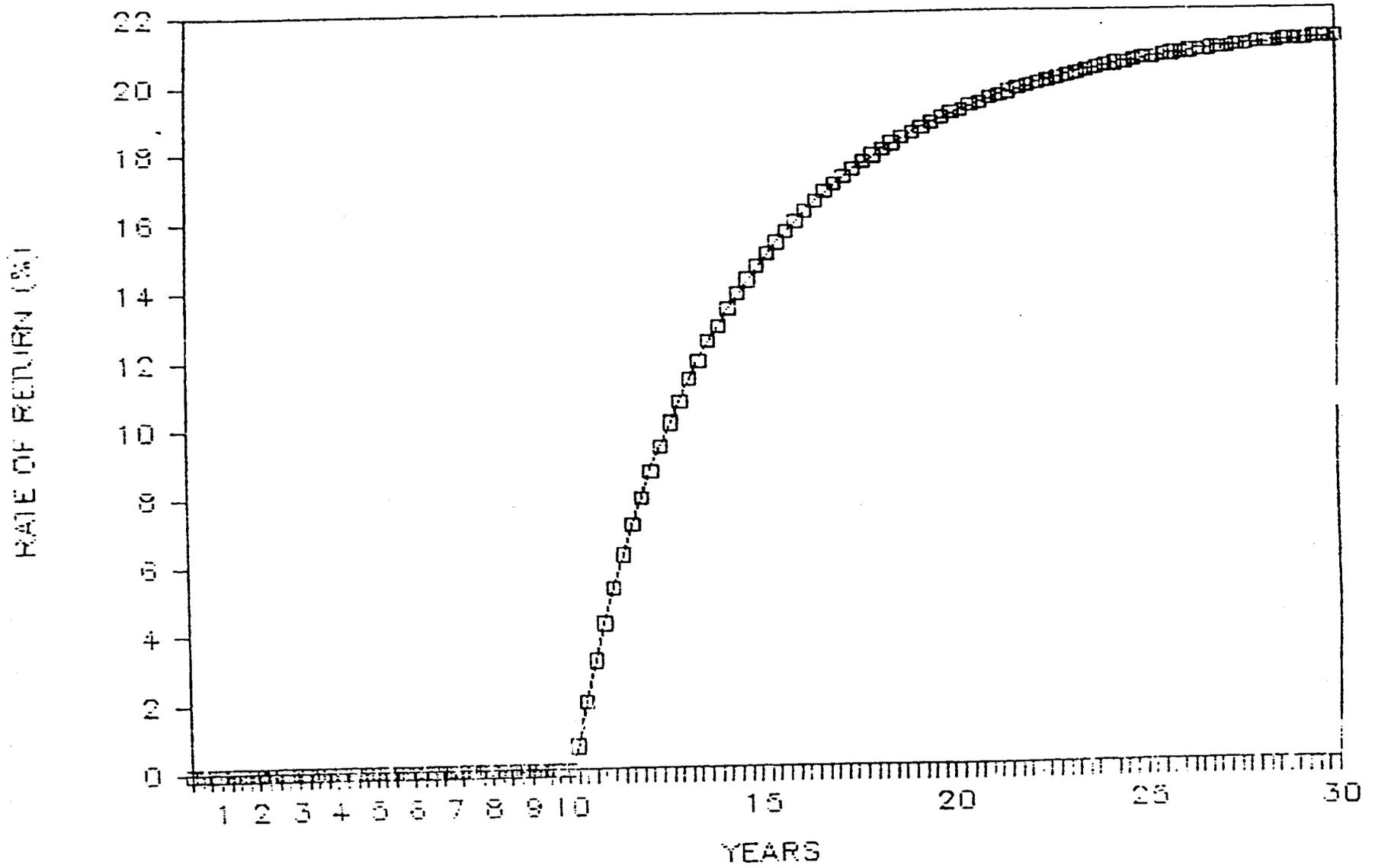
Assumption Set number one yields a 20.20 percent rate of return. This set is the best estimate. It is based on the individual student extra earnings stream used above as the best estimate. We are also assuming that the first class completes the program in the eighth quarter after costs are first incurred and begins to earn in the ninth quarter. The first graduating class contains 35 students and the number rises the second year to forty, then to 50, 60, 70, 80, 85, and 90, where it levels off indefinitely. The financial plan shows costs rising in real terms by five percent per year from 1991 through 1996. We assume that costs continue to rise, but at a two percent real rate to the end of the thirty year period. The value of executive programs to society is very difficult to measure. The quantity of such programs and the revenues expected are estimated in the financial plan, but to be conservative, the social cost-benefit analysis assumes the social value of these programs to be only 75 percent of the numbers assumed in the financial plan with no growth after 1996. With these rather cautious assumptions we still get a social rate of return of 20.2 percent for the proposed program.

Figure 2

SOCIAL COST/BENEFIT ANALYSIS

ALTERNATIVE TIME HORIZONS

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This 20.2 percent interval rate of return compares favorably with the 19.5 percent rate for the Quimiag-Penipe IRD project and 23.1 percent for the Salcedo IRD project. (Table III.4, page 5, Annex 1A, A.I.D. Project Analysis). This 20.2 percent rate of return is sufficiently larger than the World Bank's 12 percent rule of thumb that we can conclude that any small differences between Ecuador and other developing countries with respect to the appropriate social discount rate can be safely neglected.

Our sensitivity analysis is summarized in Table 1. Assumption Set 2 shows the effect of raising all costs by 10 percent for the whole thirty-year period while simultaneously reducing all benefits by 10 percent. The rate of return drops from 20.20 to 17.72 percent. In Set 3 we lower the estimated value of executive programs an additional amount by changing the base from 75 to 50 percent of the financial plan estimate and get a rate of return of 17.50 instead of 17.72 percent. The sensitivity of the rate of return to the change in assumption about the value of the executive programs is so small that all other calculations were made with this more conservative assumption.

A primary element in this analysis is the estimate of earnings differentials for individual graduates. Assumption Set 4 keeps the very conservative 50 percent assumption about executive programs and substitutes for our best estimate of

earnings the estimates obtained from Rolf Sterr in Quito that we also used above in the private cost-benefit analysis. With these very conservative earnings assumptions the rate of return remains positive, but drops from 17.50 to 4.35 percent. To get the "worst case" we go further in Set 5 and assume that the number of graduates levels off at 75 instead of 90, giving a rate of return of only 3.64 percent. The effect of leveling off the graduating class at 75 is also shown by comparing Set 6 with Set 7. Using the original best estimate of earnings but the 50 percent assumption about executive programs we get a rate of return of 19.94 percent with the graduating class size leveling off at 90, and 19.14 percent with it leveling off at 75. This small difference can be attributed to the fact that the increased class size affects the aggregate earnings stream far in the future. Increased initial class size would undoubtedly have a greater effect.

We have assumed throughout that the likelihood of "reverse brain drain" is slight -- that is, that all graduates remain in Ecuador. Assumption set 7 can also be interpreted as a test of the effect of the loss to other countries of some graduates, leaving the number remaining in Ecuador leveling out at 75 even though 90 are graduated.

TABLE 1: SENSITIVITY ANALYSIS OF THE SOCIAL RATE OF RETURN

ASSUMPTIONS	SET #	1	2	3	4	5	6	7	8	9	10	11
NET BENEFIT STREAM	1 "BEST ESTIMATE"	X					X	X	X	X	X	
	2 "QUITO ESTIMATE"				X	X						
	3 "COSTS DOWN 10%											X
	4 COSTS UP 10% AND ALL BENEFITS DOWN 10%		X	X								
VALUE OF EXECUTIVE PROGRAMS:	1 75% OF FINANCIAL PLAN ESTIMATES	X	X									
	2 50% OF FINANCIAL PLAN ESTIMATES			X	X	X	X	X	X	X	X	X
GRADUATING CLASS SIZE LEVELS OUT AT:	1 90 STUDENTS	X	X	X	X		X		X	X	X	X
	2 75 STUDENTS					X		X				
QUARTER WHEN FIRST CLASS GRADUATES	1 #6								X			
	2 #8	X	X	X	X	X	X	X				X
30 YEAR INTERNAL RATE OF RETURN: %	3 #12										X	
	4 #16											
		20.20	17.72	17.50	4.35	3.16	19.94	19.14	21.20	17.81	16.03	21.22

That much brain drain would be negligible so long as it occurs in the later years. If a large portion of the early graduates (during the first six years) were to leave Ecuador then the return could be significantly less than the 19.14 percent, but that seems very unlikely. The demand for MBA's in Ecuador right now exceeds supply and the early graduates won't need to go abroad to find employment. If a "brain drain" should occur in later years, the effect can be seen to be very small by comparing Assumption set 7 with set 6.

Assumption Sets 8, 9, & 10 vary the start-up time for the program. Again comparing with Set 6, we can see that graduating the first class two quarters sooner (Set 8) would raise the rate of return from 19.94 to 21.20 percent--a significant improvement. On the other hand a delay of one year (Set 9) drops it from 19.94 to 17.81 percent and a two year delay drops the rate of return to 16.03 percent. Therefore, once program costs begin to occur it is very important to proceed as quickly as possible to graduate the first class.

After the foregoing calculations were made, the financial plan was revised downward. Assumption Set eleven was calculated to test the effect of a ten percent reduction in all of the costs of the program. Except for the cost reductions, the assumptions are the same as Assumption Set six. Instead of 19.94 percent, the rate of return for a

thirty year time horizon is 21.22 percent. Figure 2 above shows the sensitivity of this rate of return to shortening of the time span over which the program is assumed to yield benefits. Table 2 shows the raw data used in this particular calculation. The cost data are from the original (October 1985) financial plan reduced by ten percent and converted into sucres. To make the cost and benefit data comparable, the dollar cost estimates were converted at 100 sucres to the dollar, which was the approximate exchange rate at the time for which the earnings estimates were made. Costs for the first five years are budget estimates. They are assumed to rise by five percent a year in years six through ten and two percent a year thereafter in real terms. The whole analysis implicitly assumes that inflation affects costs and benefits equally.

The sensitivity analysis is more significant than the absolute value of the rates of return. The Haveman and Wolfe conclusion that differential earnings from extra education greatly underestimate the true social value is probably even more true for a graduate management program in Ecuador. If the program is established and succeeds as planned, we can

Table 2

 SIX YEAR FORTY EIGHT MONTH ANALYSIS
 ECUADOR GRADUATE MANAGEMENT PROGRAM

QUARTER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PROGRAM COSTS	108913	108913	55502	55502	55502	55502	61592	61592	61592	61592	58190	58190	58190	58190	49403	49403
STUDENTS' EXTRA EARNINGS	0	0	0	0	0	0	0	0	3150	3850	4550	5250	9550	11050	12550	13875
EXECUTIVE PROGRAM REVENUE	0	0	0	1250	1250	1125	1125	1125	1125	1875	1875	1875	1875	1875	2500	2500
RETURNS	0	0	0	1250	1250	1125	1125	1125	4275	5725	6425	7125	11425	13550	15050	16375
INTERNAL RATE OF RETURN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QUARTER	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
PROGRAM COSTS	49403	49403	22753	22753	23032	23314	23600	23890	24183	24480	24780	25084	25392	25704	26019	26338
STUDENTS' EXTRA EARNINGS	19700	21500	23300	24900	31900	34100	36300	38250	46500	49100	51700	54000	63050	65950	68850	71400
EXECUTIVE PROGRAM REVENUE	2500	3063	3063	3063	3063	3216	3216	3216	3216	3376	3376	3376	3376	3545	3545	3545
RETURNS	22200	24563	26363	27963	34963	37316	39516	41466	49716	52476	55076	57376	66426	69495	72395	74945
INTERNAL RATE OF RETURN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QUARTER	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
PROGRAM COSTS	26661	26989	27320	27655	27994	28338	28685	29037	29181	29326	29472	29618	29765	29912	30061	30210
STUDENTS' EXTRA EARNINGS	81150	84250	87350	90075	100450	103750	107050	109950	120950	124450	127950	131025	142200	145800	149400	152550
EXECUTIVE PROGRAM REVENUE	3545	3722	3722	3722	3722	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
RETURNS	84695	87972	91072	93797	104172	107659	110959	113859	124859	128359	131859	134934	146109	149709	153509	156459
INTERNAL RATE OF RETURN	0	0	0	0	0	0	0	0	0.6758	1.959	3.131	4.201	5.251	6.212	7.095	7.906
QUARTER	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
PROGRAM COSTS	30360	30510	30662	30814	30967	31120	31274	31430	31585	31742	31900	32058	32217	32377	32537	32699
STUDENTS' EXTRA EARNINGS	163800	167400	171000	174150	185400	189000	192600	195750	207000	210600	214200	217350	228600	232200	235800	238950
EXECUTIVE PROGRAM REVENUE	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
RETURNS	167709	171309	174909	178059	189309	192909	196509	199659	210909	214509	218109	221259	232509	236109	239709	242859
INTERNAL RATE OF RETURN	8.698	9.428	10.1	10.72	11.33	11.89	12.41	12.89	13.36	13.79	14.2	14.58	14.94	15.28	15.6	15.9
QUARTER	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
PROGRAM COSTS	32861	33024	33188	33352	33518	33684	33851	34019	34188	34357	34528	34699	34871	35044	35218	35392
STUDENTS' EXTRA EARNINGS	250200	253800	257400	260550	271800	275400	279000	282150	293400	297000	300600	303750	315000	318600	322200	325350
EXECUTIVE PROGRAM REVENUE	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
RETURNS	254109	257709	261309	264459	275709	279309	282909	286059	297309	300909	304509	307659	318909	322509	326109	329259
INTERNAL RATE OF RETURN	16.19	16.46	16.72	16.95	17.19	17.4	17.61	17.8	17.98	18.16	18.32	18.48	18.63	18.77	18.9	19.03
QUARTER	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
PROGRAM COSTS	35568	35744	35922	36100	36279	36459	36640	36821	37004	37188	37372	37557	37744	37931	38119	38308
STUDENTS' EXTRA EARNINGS	336600	340200	343800	346950	358200	361800	365400	368550	379800	383400	387000	390150	401400	405000	408600	411750
EXECUTIVE PROGRAM REVENUE	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
RETURNS	340509	344109	347709	350859	362109	365709	369309	372459	383709	387309	390909	394059	405309	408909	412509	415659
INTERNAL RATE OF RETURN	19.15	19.26	19.37	19.48	19.58	19.67	19.76	19.84	19.93	20	20.08	20.15	20.21	20.28	20.34	20.4
QUARTER	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
PROGRAM COSTS	38498	38689	38881	39074	39268	39462	39658	39855	40052	40251	40451	40651	40853	41056	41259	41464
STUDENTS' EXTRA EARNINGS	423000	426600	430200	433350	444600	448200	451800	454950	466200	469800	473400	476550	487800	491400	495000	498150
EXECUTIVE PROGRAM REVENUE	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909	3909
RETURNS	426909	430509	434109	437259	448509	452109	455709	458859	470109	473709	477309	480459	491709	495309	498909	502059
INTERNAL RATE OF RETURN	20.45	20.51	20.56	20.6	20.65	20.69	20.74	20.78	20.81	20.85	20.89	20.92	20.95	20.98	21.01	21.04
QUARTER	113	114	115	116	117	118	119	120								
PROGRAM COSTS	41670	41876	42084	42293	42502	42713	42925	43138								
STUDENTS' EXTRA EARNINGS	509400	513000	516600	519750	531000	534600	538200	541350								
EXECUTIVE PROGRAM REVENUE	3909	3909	3909	3909	3909	3909	3909	3909								
RETURNS	513309	516909	520509	523659	534909	538509	542109	545259								
INTERNAL RATE OF RETURN	21.06	21.09	21.11	21.14	21.16	21.18	21.2	21.22								

expect a number of additional economic benefits to Ecuador not captured in the monetary values used in the calculations. Returns were limited to the value of executive programs and the differential in earnings attributable to the MBA program. Clearly the contribution of each student in the fifteen month program to society can be expected to be greater than the benefits to him personally. Likewise the short programs for executives are very likely to benefit both their firms and the overall economy by more than the fees charged for them. For both programs part of the uncaptured benefits accrue as consumer's surplus to employers and show up in the value of economic output of the firms. Additionally, however, we can expect an effect on the rate of economic development generally. The fact that the proposed program will be targeted to those sectors of the Ecuadorean economy that have potentially the highest returns, such as agroindustry, nontraditional exports, and small business, should increase the social returns from the project.

Alvaro Guerrero, of the Banco del Pacifico, has pointed out that banks cannot open new branches as fast as they would like in the smaller cities and towns because of the critical shortage of branch managers. Juan Carlos Salame, who heads a large retail and wholesale trading company is unable to delegate as much as he would like to qualified middle managers and thus cannot undertake new lines of activity.

Ricardo Davila has pointed out a need for new enterprises to process agricultural products so that more value added can be contained in Ecuadorean exports. Eighty percent of the coffee and cocoa is exported unprocessed, for example, but Ecuador lacks entrepreneurial skills to find and penetrate world markets for agriculturally based manufactured goods.

We can expect a "multiplier effect" from the graduates of the program. Much can be taught by on the job training of the many managers who will graduate from the program. They will influence the performance of others not only by the example they set, but also by the work standards they will expect of subordinates.

The Institute itself will affect the economy in several ways. It can become an intellectual center for managerial leadership through informal relations between its faculty and the business community. Indeed it can stimulate fruitful intellectual interchange among managers. The research activities of a full-time faculty will both profit from and contribute to such intellectual interchange with substantial unquantifiable economic benefits to Ecuador. The library of the program can become an important reference source for the business community. It will afford on an economical scale the collection of current periodicals and reference works that the whole business community can make use of and contribute to. The function of the library should not be

limited to serving the needs of the students and faculty, but should with time become, like the libraries of U.S. business schools, a public resource.

In comparing the benefits of the proposed program with assistance to the existing business management programs, we should not treat these as alternatives. Indeed, one of the best ways to assist the existing programs may be to support this proposed program because its graduates will include potential faculty for other programs in Ecuador. At present most of the faculty of both undergraduate and post-graduate management programs are part-time teachers working full-time as managers. By increasing the pool of well educated managers in Ecuador, the quantity and quality of such part-time business teachers will be significantly increased. Both Rolf Stern's Politechnic Institute program in Quito and the ESPOL post-graduate management program in Guayaquil are attempting to find Ecuadoreans to send to the U.S. for doctoral study in business in order to build full-time faculties. The proposed program should produce several potential doctoral candidates each year. A steady supply is necessary because many qualified potential candidates will be attracted to management positions and many of those who do get a doctorate will change careers as opportunities in business and public service will be present for good business professors.

The alternative of sending Ecuadoreans to the United States for MBA degrees is considered below in the section on foreign exchange savings of the program. We turn now to consideration of ways in which our calculations of expected social rates of return may be in error in the other direction.

The primary quantifiable benefit to society is the sum of the benefits in increased earnings of the graduates. We assumed a beginning graduating class of 35, growing to 75 or 90 per year. Even if we are right about the value of the program to the individual, we cannot be sure that enough qualified individuals will choose to enter the program. The demand study discussed elsewhere indicates that many persons perceive the value of such a program, but financial aid may prove crucial to the achievement of a large enough class to realize the social benefits estimated above. If class size were to be achieved by lowering academic standards of admission and graduation, then the differential earnings for graduates may be much less than the estimates used above. It is essential, therefore, that the program be designed to produce graduates who are truly equivalent to graduates from foreign graduate management programs. Even such a program newly created in Ecuador will have to compete for students with foreign programs with established reputations. Price is obviously one determinant of effective demand. But non-price

competition is also important. On this point the role of English in the proposed program becomes crucially important to its economic feasibility. One of the advantages to the student, his employer, and society of sending people to the United States for MBA degrees is that they become bilingual managers. This program needs to produce bilingual managers as well. Many of the students who have the private means to forego work as an investment in education will choose to go to the United States because of uncertainty about the new program. One obstacle to going to the United States is the necessity of passing the TOEFL exam. Potential otherwise qualified students who cannot pass the English exam constitute a big market for the local program. By requiring a lesser standard of English, the new program can obtain an immediate competitive advantage over MBA programs in the United States, thus improving the chances of actually graduating the numbers of students assumed in the calculations of rates of return to society. Ideally, therefore, the proposed program must teach English so that students can be attracted who don't yet have enough English to get into a U.S. MBA program but upon graduation are adequately bilingual. This policy will enhance the economic feasibility of the proposal.

IV. Foreign Exchange Savings

Study abroad requires foreign currency and thus constitutes an import from the standpoint of the home country. Thus, the proposed management program can be viewed as an import substitution development project. In the 1982 prefeasibility study, Renforth reported a rising trend in the number of Ecuadoreans studying abroad and in those studying business abroad. That upward trend seems to have come to a halt as a result of the rapid decline in the value of the sucre relative to the dollar during the past three years. Complete data was unavailable then or now, but we have some useful indicators.

Renforth reported 12 Ecuadorean at INCAE in 1980-81. That number appears to have reached 13 in 1982-83 and to have dropped to 6 in 1983-84 and 7 in 1984-85. In October, 1985, however, there were 4 in the second year and 10 in the first year in Costa Rica and an additional 6 Ecuadoreans in Managua in a new one-year program in functional administration. The Quito office of INCAE reports that typically 40 Ecuadoreans request admission, 20 are accepted and 10 show up in Costa Rica. The other ten are unable to attend because of family or job problems or because of inability to finance the program.

Renforth reported a total of 1210 Ecuadoreans studying in United States colleges and universities in 1980-81, a

figure that had been steadily rising from only 710 in 1976-77. He estimated, but had no actual statistics on the number studying business. For 1983-84 the Institute of International Education reports a drop from that 1210 level to 1130 with a further drop to 1120 in 1984-85. A breakdown is available for 1983-84 showing 116 undergraduate and 18 graduate business students in U.S. colleges and universities. Fifteen of the graduate students were masters candidates. Two students at American University and one at New York University were not specified and may have been doctoral candidates. Given this decline in the number of Ecuadoreans studying abroad, the proposed program, rather than reducing the "imports" of educational services and thus saving foreign exchange is likely to enable more students to study in a high quality business program in spite of the devaluation of the sucre.

V. Alternatives to the Proposed Project

In addition to evaluating the project's potential returns to Ecuadorean society and individuals, as well as possible foreign exchange savings, it is important to consider its value relative to alternative means of improving management education. The alternatives to funding the proposed project include an infinite set of options about which we have very little basis for evaluation. Two specific alternatives would be to assist the ESPOL program in Guayaquil or the program of Rolf Stern at the Politecnica in Quito, or both. It is not possible to do a cost-benefit analysis on these alternatives without specific cost estimates. Benefits of these alternatives are also impossible to estimate without specific assumptions about the details of the hypothetical accomplishments. We can, however, discuss several factors that bear on this issue.

Foremost is the great difficulty of overcoming the deeply rooted cultural characteristics of the Ecuadorean higher educational system: the law requiring election of the rector, the political role of students, the demands for equity in faculty salaries across schools and disciplines, the part-time pattern of both students and faculty, the lack of strict class attendance and frequent examinations, for example. Much of the value of an American MBA program is in

the change it produces in the attitudes and work habits of students, rather than in the specific knowledge imparted.

An independent program can stand as a demonstration project. The change in student attitudes and work habits can be accomplished in isolation from the existing institutions. If this task were attempted within the university system, the whole system would have to be changed--a task we view as impossible to accomplish quickly, if at all, and certainly not without expenditure of much more A.I.D. funds than in the proposed free-standing project.

Secondly, the cooperation and assistance of the Guayaquil business community can reinforce attitudinal changes and is essential to success of the program in order to (1) raise funds, (2) place students, (3) recruit students of the right calibre, (4) provide research opportunities for faculty, and (5) provide case material that is Ecuador specific. Such cooperation would most likely not be forthcoming for a project of assistance to existing programs.

Thirdly, funding the proposed program is probably the best way to assist the existing programs. They will benefit (1) by the example set, (2) by an increased pool of MBAs to teach for them part-time, (3) by an increased pool of candidates for Ph.Ds abroad for full-time faculty, and (4) by research activities of faculty.

Investment by A.I.D. in the proposed program will continue to pay dividends long after the period of U.S. aid ends. The alternative of sending more Ecuadoreans to study in the U.S. would have to be continued indefinitely to yield the same benefits. The proposed program would not save a great deal of foreign exchange simply because so few Ecuadoreans are able to overcome the financial obstacles to going abroad in spite of the fact that the individual's return on that kind of investment is high. Yet the project remains the optimum means for improving management education in Ecuador not only through its own graduates, but also because of the beneficial effects it will have on existing programs in that country.

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ADMINISTRATIVE ANALYSIS

This Annex analyzes and discusses the following aspects of project implementation: (1) the basic responsibilities of the partners in the Collaborative Assistance Mode; (2) organizational structure for project administration; (3) organizational structure of the GMI during project implementation; (4) the transition plan to assure that the Graduate Management Institute will be a fully autonomous and self-supporting institution at the end the project; and (5) the post-project institutional structure of the GMI.

1. Basic Responsibilities of the partners in the Collaborative Assistance Mode:

University of Houston Consortium:

- Secure Chief of Party, Project Manager, Faculty and other U.S. personnel required for the GMP
- Assist in obtaining and setting up temporary site, library, computer system and translation facilities.
- Administer funds provided to Consortium by AID as well as any funds generated for the operating expenses of the GMP
- Administer the Academic Program of the GMI
- Train a sufficient number of Ecuadorean Ph.D. candidates to staff the GMI in its independent phase
- Prepare project evaluations in conjunction with the GMI's Junta Ejecutiva and AID/Quito

Fundación Privada Ecuatoriana/Board of Trustees/Junta Ejecutiva:

- Establish a separate endowment for the long term support of the GMI
- Carry out fund raising activities to achieve the goals for the endowment specified in the financial plan
- Provide a site for the permanent facility of the GMP
- Assist in identifying and recruiting faculty for the GMI

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USAID/Quito:

- Fund the project during the implementation phase in accordance with the specifications of the Financial Plan
- Participate in the annual reviews of the project
- Monitor project activities.
- Evaluate the progress of the project
- Provide technical guidance to the GMI, the FPE and the University of Houston Consortium

2. Organizational Structure for Project Administration

This subsection describes the organization of the administration of the project and the specific responsibilities of the various administrative elements and their interaction. The Project Administration Organizational Chart (Chart 1) graphically depicts the relation between the FPE, the Board of Trustees, A.I.D., and the University of Houston consortium.

Chart 1
Project Administration

Consortium - AID - Board of Trustees - Foundation

Junta Ejecutiva

P.I. Chief of Party - - - - - Rector

Academic
Director

Administrative
Director

Registrar

Faculty

Physical
Plant

Finances &
Accounting

Library

A.I.D. will serve not only as the principal financial supporter of the project during implementation but will also review, monitor and evaluate the performance of the Consortium and the Fundacion Privada Ecuatoriana in such critical areas as the GMI's administration, the quality of the Masters program and executive programs, financial integrity, fund raising efficiency and the impact of the Graduate Management Program on Ecuador's economic and social development.

The pivotal Ecuadorean institution in the development of the GMI is the Fundación Privada Ecuatoriana (FPE). Founded in 1983 the Fundación represents the Ecuadorean private sector and has played the leading role in promoting the project's development and in initial fund raising for the GMI.

During the project's implementation phase the FPE will be responsible for the creation of the GMI's Board of Trustees and the selection of its members. The FPE is also responsible for legally restructuring the current endowment fund to ensure the availability of monies to the future support of the GMI. During the implementation phase the FPE will continue fund raising for the new institution's endowment and will be responsible for assuring that the GMI has an adequate physical plant.

The Board of Trustees will serve as the governing body of the GMI. Its members will include current members of the FPE, as well as representatives of the private sector, the public sector, and the national and international academic communities. It is expected that the the Board of Trustees under these guidelines will come to number at least thirty. While this expanded group will be more representative of national interests and enhance the fund raising capabilities of the new school, it is also a number that is far too cumbersome for effective oversight of the institution's operations. Therefore, many of the functions traditionally vested in a Board of Trustees will be assigned to a Junta Ejecutiva, designated by the Board of Trustees. The other function of the Board under this plan then is to review and approve the major policy decisions of the Junta Ejecutiva on an annual basis.

The Junta Ejecutiva will consist of five members to be selected by the Board of Trustees. Those members should include four representatives of the Ecuadorean private and public sectors, and a representative of the international academic community. The members of the Junta will each assume specific areas of responsibility for the school's development including: fund raising, liason with the private sector,

institutional administration, academic programs and government relations. The Junta will establish private sector advisory committees for agribusiness marketing, etc. to advise on program content and to assist in placing students.

The specific responsibilities of the Junta are described below. It should be noted that in terms of the GMI's head administrator, the terms Chief of Party and Rector are used in tandem. This is because the Rector will be recruited and appointed during the implementation phase of the project, as soon as a suitable candidate is indentified. The Rector will learn the functions of his positions during implementation and gradually assume increasing responsibilities until by the end of the project he has assumed full responsibility for the administration of the GMI. This process is described in greater detail in the sections addressing the responsibilities of the Chief of Party and Rector.

The functions of the Junta Ejecutiva are as follows:

- Evaluates and approves strategic decisions by the Chief of Party/Rector
- Studies and approves the project's annual budget
- Is responsible for fund raising
- Advises the Chief of Party/Rector on the needs of the business and academic communities as well as the public sector which can be met by the new institution
- Assists in proposing and selecting the Rector
- Manages the institution's endowment
- Monitors the progress of the project

3. Organizational Structure of the GMI during Project Implementation

Initially the principal administrator of the GMI will be the Chief-of-Party with an Ecuadorean Rector pregressively assuming the responsibilities of this position. The responsibilities of the Chief of Party at the beginning of implementation are:

- Manages all AID contributed funds and any revenues generated by GMI
- Approves all major financial transactions including loans or fund transfers made by the GMI
- Reviews and submits the annual budget for approval by the Junta Ejecutiva
- Makes decisions on hiring and firing of faculty

- Directs development of the academic and executive programs
- Approves major changes in the academic program including curriculum, student admission and performance standards
- Formulates strategy and policies for the GMI,

The selection of the Rector is of vital importance to the long term success of the GMI. Certain criteria are essential to that selection process. Given the distinctive nature of the GMI, those criteria do not necessarily correspond to the academic credentials (such as a Ph.D. degree) of a Dean of a U.S. College of Business Administration. However, a set of criteria can be established which are appropriate for the individual who will fill this position. Candidates should possess a Masters Degree, although not necessarily in business. Preferentially, they should have at least twenty years management experience in business and know the Ecuadorean business environment. They must command the respect of their peers in the private sector. They should also have five years or more of at least part-time teaching experience in a university. In addition, they should be completely bilingual in Spanish and English.

Once an appropriate candidate has been selected, he will begin working with the Chief of Party in the development of the GMI. Based on the strengths of the new Rector including his extensive experience in the Ecuadorean business community, his first responsibility will involve relations with the private sector. This will include informing the community of the institution's development, encouraging companies to send their employees to the GMI, identifying specific needs of the business community in terms of executive programs and research, and of course, fund raising. At the same time, the Rector will begin familiarizing himself with the academic policies and procedures of the new institution. Subsequently, he will exercise supervise the activities of the Administrative Director for the operation of the GMI. In the latter stages of this process he will assume full managerial responsibility for the Administrative Director, the Academic Director, and finally full financial responsibility for the institution.

The middle management level of the institution will consist of two positions: the Academic Director and the Administrative Director. The role of Academic Director, whose responsibilities include the faculty, curriculum, and students will be filled by the Chief of Party until a suitable Ecuadorean candidate is prepared to assume those functions.

The Administrative Director, who will be an Ecuadorean, will be responsible for managing the physical plant, the staff, as well as the accounting and financial operations. This post is particularly critical in the early years of the GMI when a number of tasks will be undertaken for the first time, such as importing of equipment, hiring a full staff, site preparation, development and control of a budget, etc. Recruitment will take place as soon as possible after implementation begins. The position requires a manager with a proven record of success and complete familiarity with business practices, personnel procedures and financial operations in Ecuador. The long term responsibilities of the Administrative Director include hiring and management of the staff, administration of the physical plant, the library, reproduction services and the computer system, as well as financial management.

The faculty, in addition to its responsibilities for teaching, course development, advising students, and for the executive development programs, has an important role to play in the administration of the school. These responsibilities will be carried out in faculty meetings chaired by the Chief of Party/Rector. They include:

- curriculum design;
- student admissions and dismissals;
- grading systems
- standards for teaching
- issues relating to academic freedom

The faculty represents the most important means of establishing and maintaining levels of academic excellence which will carry on into the later period when the institution becomes an independent entity. Standards of excellence in teaching, academic objectivity and academic freedom must be put in practice by faculty members and conveyed to their Ecuadorean successors in the implementation phase.

The GMI's Registrar, will report directly to the Chief of Party/Rector and is responsible for processing student applications, admission standards, maintaining student records, verifying student eligibility for graduation and, in conjunction with a faculty member, developing and carrying out a marketing plan for selling the Masters program in Ecuador. In addition, the Registrar will be responsible for placement activities to assist those Master's level program graduates who do not have job commitments to find employment.

4. Transition Plan

Much of the structure discussed in subsection 2 above is dictated by the conclusions of the Technical Analysis, which concludes that a free standing institution is the optimum goal for the GMI. Creation of a Board of Trustees, a Rector, Academic and Administrative Directors and the tasks assigned to them closely parallel the organizational design of such institutions as INCAE and are similar to academic administrative structures in the United States. However, because the GMI, during the implementation phase, is being created with the technical assistance of the Consortium and the financial support of AID/Quito, alternative administrative structures for carrying out the project were considered. The first such option placed complete control of the institution in the hands of the Chief of Party, reporting directly to the Consortium, with the Board of Trustees serving in an advisory capacity to the Chief of Party. This plan was rejected on the grounds that it did not place sufficient control in the hands of Ecuadoreans and would not satisfactorily contribute to the institutional development of the GMI. It is essential that from the outset the GMP be an Ecuadorean project: not only in appearance, but in fact. The implementation phase must not only be utilized to create a high quality Masters level program, it must also provide the opportunity for Ecuadoreans to exercise increasing control over the program so that the transition to a free standing institution will be as smooth as possible.

The second alternative considered was the selection of an Ecuadorean Rector who would report directly to the Junta Ejecutiva/Board of Trustees and be advised by the Chief of Party. Although this alternative resolved the issue of Ecuadorean participation, it assumed the availability of an Ecuadorean prepared to assume full responsibilities as a top-level academic administrator and a Junta Ejecutiva, whose members are fully versed in the management of an academic institution of the type envisioned in the GMP. Neither of these assumptions are valid in the current Ecuadorean context. A further problem arose from concerns over the control of financial resources for which the consortium will have a contractual responsibility to USAID/Quito. What was clear from this version of the administrative plan was that Ecuadorean authority must be established but not in such a manner as to cause administrative chaos at the critical management level of the Chief of Party/Rector.

Based on these findings, the project review committee opted for the administrative structure described in subsection 2. This plan places complete control of the finances of the GMI as well as initial Academic and Administrative control in the hands of the Chief of Party who reports to the Junta Ejecutiva. Meanwhile, the Rector is responsible for external relations of the institution. Over the five year implementation phase, the Rector will progressively assume increased control of the institution. This process will occur in a series of phases. The sequencing of those phases is predicated upon the assumption that the Rector's strongest experience will be in business management. That progressive sequence would occur as follows:

- Year 1 - External relations for the GMP
- Year 2 - Oversight of Administrative Director's responsibilities for physical plant and staff
- Year 3 - Responsibility for the academic program
- Year 4 - Full financial responsibility for the institution
- Year 5 - Supervise Management of the institution
- End of
- Year 5 - Management of the endowment fund

Thus by the fifth year of implementation, the Rector will have assumed full control of the Institution with the Chief of Party's role reduced to that of an advisor with joint sign off responsibilities on only those funds still being expended by the Consortium. By the end of the fifth year, the Rector will have assumed the full responsibilities for administration of the GMI.

Another area of concern in terms of transition, is the period of overlap between U.S. faculty, and the new Ecuadorean faculty. The major problem is that most of the Ph.D. candidates will not begin their program until September 1986, and therefore would not return to Ecuador until the last quarter of 1990. For this reason the Chief of Party's term has been extended to five and one half years, and the beginning of the fourth professor's term has been delayed until 1989 to insure that at least two U.S. faculty members will have a full year to work with the new faculty. This process, which constitutes an important part of the transition, is detailed in Table 1.

While this phased transition should achieve the desired results of effective management during implementation and creation of a high quality free standing Ecuadorean academic

institution at the end of five years, consideration must also be given to an ongoing relationship between the GMI and the Consortium's member institutions in later years.

At the end of five years, the GMI will be serving as a center of excellence for graduate business training and research in Ecuador, but it must continue to strengthen its programs in succeeding years. Although it will be interacting with other business programs in Ecuador, such as ESPOL and the Politecnica in Quito, its role can be expected to be more of a contributor than a beneficiary in those interfaces. In the United States, colleges of business administration enhance their own programs through cooperative efforts with sister institutions both in the U.S. and other countries.

Table 1
GMI Staffing Chart
(in person years)

	1986	1987	1988	1989	1990	1991
Chief of Party	.5	1	1	1	1	1
Professor 1	.5	1	1	1	.5	
2		1	1	1	1	
3		.5				
4			.5	1	1	1
Rector	.5	1	1	1	1	1
Admin. Director	.5	1	1	1	1	1
Academic Director						1
Ecuadorean Faculty 1			1	1	1	1
2						1
3						1
4						1
5						1

Therefore, continued links with sister institutions in the United States would be of significant benefit to the GMI. As the technical advisors for creation of the new institution with a vested interest in its long term success, the members of the Consortium are logical choices for such a relationship. This does not exclude, of course, links with other institutions both in the United States and Latin America. The plan for such a relationship can be fully developed during the implementation phase. However, certain elements that should be included as a part of the plan are:

- An annual visit by the Deans of the Colleges of Business Administration of the Consortium to evaluate the program's development and suggest strategies for strengthening the program
- Continuation of agreements to train Ph.D's for the GMI
- Joint research projects
- Representation by the U.S. institutions on the Board of Trustees

These items and any additional cooperative ventures should be detailed in a formal agreement to be signed by the U.S. institutions and the GMI prior to the conclusion of the implementation phase.

5. Post-Project Organizational Structure of the GMI.

This section of the study describes the organizational structure of the GMI once it has become a free standing institution (see Organizational Chart 2). It bears a strong similarity to the organizational structure described in subsection 2 of this study, since the Project Administration structure is intentionally designed to evolve into the independent institution described here.

The purpose of the Fundacion Privada Ecuatoriana is broadly defined in its charter i.e. it does not exclude projects other than the school from its range of interests. Therefore, while it can continue to play a role in fund raising for the school and serving as a liaison with the business community those activities, especially fund raising, must be clearly defined as being conducted on behalf of the school. Furthermore, the principal responsibilities for fund raising and business community liaison will rest with the Board of Trustees, the Junta Ejecutiva and the Rector.

The Board of Trustees will continue to serve as the governing body of the GMI. Its membership should continue to include representatives of the national private and public sectors as well as the national and international academic communities. This latter characteristic can be achieved by appointing academics from sister institutions in the U.S. to the board. Again, as under implementation, the conventional responsibilities of a Board of Trustees, i.e. approval of budgets and strategic decisions of the Rector, and liaison with the business community will rest with the Junta Ejecutiva, with the Board providing an annual review of the Junta's performance.

The Junta Ejecutiva will represent the national private and public sectors as well as the national and international academic communities. To assure this broad representation, the Junta will be expanded to seven members with the following breakout: 4 Ecuadorean private sector

- 1 Ecuadorean public sector
- 1 Ecuadorean academic
- 1 U.S. academic

The Junta members will again be assigned individual responsibilities such as fund raising, liaison with the public and private sectors, institutional administration, review of academic programs, and relations with international organizations.

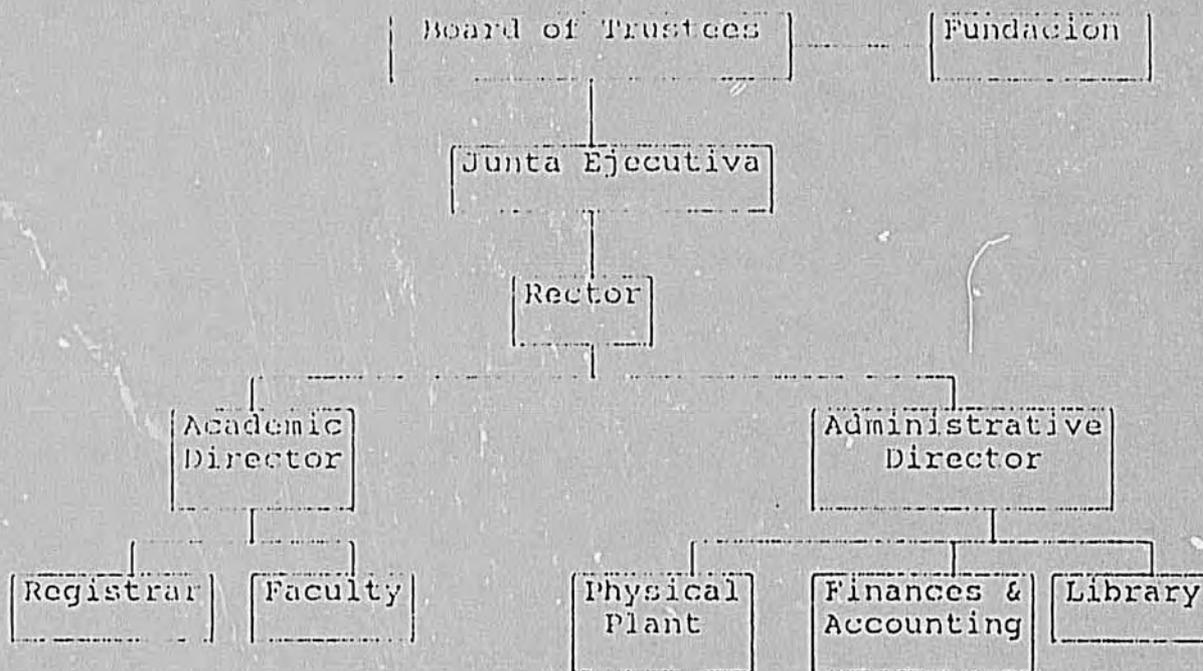
The Junta's functions are as follows:

- Evaluates and approves strategic decisions by the Rector
- Studies and approves the annual budget - Assists in fund raising
- Advises the Rector on the needs of the business and academic communities as well as the public sector which can be met by the school
- Selects the Rector with the advice of the school's faculty and administrators.

The responsibilities of the Rector are as follows:

- Manages fund raising and the endowment with the assistance of the Administrative Director
- Reviews and submits the annual budget for approval by the Junta Ejecutiva
- Makes final decisions on the hiring and firing of faculty
- Approves major changes in academic areas i.e. curriculum, student admission and performance standards etc.
- Formulates main strategies and policies of the school.

Chart 2
Institutional Administration



The responsibilities of the academic and the administrative directors as well as those of the faculty and the registrar would remain the same as those described in subsection 2 of this Annex.

SOCIAL SOUNDNESS ANALYSIS

I. Introduction

The goal of this project is to upgrade the quality and increase the quantity of managers for Ecuadorean private sector enterprises. The purpose of the project is to establish a high quality graduate management school in Ecuador. The social feasibility of this project will mainly rely on the compatibility of the school's educational system and objectives to the Ecuadorean society, and on the schools ability to address issues related to Ecuadorean socio-economic reality some of which are the subject of this analysis.

The number of universities and students has increased dramatically over the past four years in Ecuador.(1) At the same time, funds available to those universities from the national budget have not increased in relation to the increases in the number of students. This has resulted in a severe impact on the quality of higher education in Ecuador. Public universities are forced to pay low salaries and are thus unable to attract high quality teachers. Most teachers do not have a Masters or Doctoral degree and only devote part of their time to their academic responsibilities. The elimination of admission exams has not only contributed to the poor quality of the universities' students overall, but it has also brought about a population of students which the universities cannot absorb. There exists an enormous gap between the characteristics of present courses of study and the country's needs. This contributes to the poor performance of the productive sectors. The poor quality of university studies contributes to great frustrations for a large number of recently graduated students as to employment opportunities, better salaries, future promotions, etc.

In the case of private universities, the situation while severe is not as critical, since they rely less on the government budget. Educational levels are higher, teaching staffs are more satisfactory, student admissions are stricter, etc. Unfortunately, these universities concentrate on undergraduate programs, and most still do not have the capacity to introduce high quality graduate programs. There are two institutions which have graduate programs in areas related to administration, the Escuela Politécnica Nacional of Quito and the ESPOL (Escuela Politécnica del Litoral). However, their capacity to absorb students is extremely limited, their supply of

(1) In 1982 there were only 9 universities and 0.830 students. In 1985, there were 20 universities and 300,000 students. (Hoy, Economic Analysis, 23 de junio de 1986, p. 2A)

professionals is still far below the private sector demand (2) and they do not produce graduates with the required skills which the Ecuadorean private sector expects.

II. Project Beneficiaries

The principal beneficiaries of this project will be, the students who complete the Master's level program of the Graduate Management Institute (GMI) and the businessmen, enterprise managers, and mid-level managers who attend its executive development programs. For these individuals the GMI program will provide learning opportunities which are largely currently unavailable in Ecuador. As a result, the beneficiaries will have improved access to better employment opportunities, more responsible job positions within the private sector, and consequently higher salaries which will have a direct and positive impact on their income levels and well-being. Private sector enterprises which employ GMI trained managers will also directly benefit from this project. Indirectly, the national economy will benefit through increased economic and employment growth.

Two social issues directly related to the beneficiary group are how the student admission system will function and how the educational methodology of the school will fit with Ecuadorean culture and society. There are vast social, economic and cultural differences in expectations, opportunities, needs, economic possibilities and educational levels within the possible student population. Therefore, the GMI must establish admission criteria based on individual capacity and performance. In addition, in order to avoid a bias towards certain socio-economic groups, consideration will have to be taken into consideration as means of targeting disadvantaged groups and as means of designing appropriate educational methodologies. The school's admission system should provide equal opportunities to different Ecuadorean socio-economic groups. However, the academic background of most students will probably be uneven at best. Therefore, the program should create a one month leveling course prior to beginning the foundation courses. Because of the differences in quality of students who have graduated from both state universities and private ones a course is required which will assure that all students will possess certain minimum skills. Professionals who have been away from school for quite a while may need such a course to refresh their academic skills and allow them to better compete with recently graduated

(2) It has been estimated that more than 400 managers with post-graduate training in marketing, industrial relations and finance is needed annually by the private sector and almost 200 by the public one. Nevertheless, less than 50 ecuadorean graduate managers enter the market annually.

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students. This leveling course, will provide instruction in basic skills which will be required to complete the program and will equalize differences among students by bringing disadvantaged groups up to an adequate level.

III. Social Feasibility of Project

The social feasibility of this project will basically depend on how the project handles the following issues:

- a) access to the graduate management school;
- b) compatibility of the school's educational system with the Ecuadorean socio economic reality; and
- c) integration of school into the Ecuadorean educational system.

Due to the diversity of socio-economic and cultural conditions found within Ecuador the possibilities of access to this school will vary greatly from student to student. The principal socio-economic variables used to analyze this issue have been: income level, marital status, number of children or dependents, housing, and educational level (3).

A survey of the demand for graduate training in management done in Quito, Guayaquil and Cuenca shows that there is a large percentage of people of low income levels who are interested in participating in the program. Therefore, income level will be an important issue as to possibilities of access of certain social groups to this type of school. Of the survey group, approximately 30% stated that they could not afford the program, 55% said they could only pay part, and only 15% said they could afford to pay the school. Hence, approximately 80% of the potential student population would need financial assistance of some kind in order to be able to take part in this program. Married status also appears to affect participation. In the case of married people, over half stated that they would not be able to attend this school. Individuals with two or more children also felt restricted in their ability to participate in this project.

Clearly, attending a 15 month full time program means not only finding a way of paying for the school but also a means of supporting the family household during that period of time. As a result married students with family would not be able to attend the GMI unless the family household could rely on other sources of income. This would imply that participation and access to this program would be restricted to only high income level groups unless the project could provide financial assistance in some form.

(3) The SERAGUAY survey data has been used for this purpose.

The graduate management school program will only contribute to the social development of Ecuador if low-income student groups have access to the programs. This is possible, if appropriate mechanisms are established. Definitely, financial assistance is a key element. In the case of private sector enterprises, approximately 40% of the interviewed during the SERAGUAY survey said that they could finance part of the cost of sending employees to the GMI.

Hence, there will be a great need for scholarships and educational loans. In order for this program to be socially feasible, scholarships should not only cover the school fee, but also books and tuition, (especially for those who do not come from Guayaquil). In the case of those who are residents in Guayaquil, provision should be given in the case of low income student groups (especially those married and with children), for a living allowance. In this way the student would still be contributing financially to the household.

A student loan program will be able to reach more people than a scholarship program and if properly monitored should be able to maintain its value if it includes adequate repayment conditions. The economic analysis found that employment benefits were such that the graduate should be able to repay loans.

Another issue of importance deals with housing for the students who will eventually be coming from Quito, Cuenca and other cities. Since the school does not provide housing it may be difficult for students to find an adequate place to live or impossible to pay for decent housing. The school should aid students by providing and making available information on housing availability and prices.

Another aspect having to do with school participation is the cultural and geographic issue of regionalism. This has to do with the participation of highland students (especially from Quito). Regional biases have conditioned attitudes and beliefs and in this case could affect school the willingness of highland students to study in Guayaquil. It appears that traditional highland entrepreneurs may prefer students who have graduated from foreign schools rather than from an Ecuadorean institution and that potential students would not want to live in Guayaquil to attend a university which does not grant a recognized degree. Therefore, it is very possible that participation from Quito or other highland cities will be limited unless the school can specifically recruit from these areas or encourage students to participate in executive development courses held locally. Participation may become greater once the school becomes well known. One way the GMI can improve access for highland students and publicizing the school is by targeting the region with short term executive development programs.

Ecuador's educational system is characterized as having little active participation by the students and therefore impeding the development of their analytical and creative capacity. The principal methodology used is that of lectures. Research skills are hardly or poorly developed. Teaching is theoretical more than practical. In many cases there is very little problem solving. Ecuadorean universities are part time, which has permitted the student to assume simultaneously two different roles that of a "student" and that of an economically active individual. Teachers must also be "part time" in order to look for other income sources to compensate their low salaries.

In order for the graduate management school's system to be considered compatible to the actual Ecuadorean social reality, certain particularities of this system should be examined as possible social issues. One is the case of full time attendance. Full time attendance means changing habits and adapting new ones, it mean reorganizing an individual's way of life. Full-time schooling is a serious constraint for students who are employed because it means getting an employer's permission to miss work. In the SERAGUAY survey 80% of entrepreneurs said that they would not give permission and only 20% said that they would give leave with pay.

A preference for part-time studying strongly prevails in Ecuador. Therefore, at the beginning of the project there may be resistance to full time attendance unless the beneficiaries understand its advantages and see how they will benefit. The school should consider alternatives such as part time programs or specialized night courses if this remains a constraint.

The other most important aspects upon which compatibility will rely are the use of a socially feasible teaching methodology and a curriculum which is consistent with the Ecuadorean private sector needs. In the first case, the survey showed that as a general average, 50% preferred as a teaching method, the active participation of both teachers and students. The other half mentioned case studies and situation simulations. No one chose the lecture method which is characteristic of the present educational system. This means that there are favorable conditions for adopting new teaching methods.

Teaching in English may also become a serious social constraint. Most potential students are not able to work in English. The school's staff should not only be capable of teaching in Spanish but it should have a good knowledge not only of the Ecuadorean economic situation, but also of the socio-economic and cultural characteristics of the beneficiary groups with which they are dealing.

The use of simultaneous translation is not recommendable except for shorter executive development programs because it could lead to content distortion and misunderstandings. In the case of occasional seminars dictated by foreign visitors this type of material could be feasible due to their short duration. So far as texts, the use of English textbooks would represent a serious constraint due to their high cost. It would be recommendable to use Spanish language textbooks and when necessary English excerpts.

Programs and curriculum of the school should be carefully designed to respond to the Ecuadorean needs in management, otherwise coursework will not be compatible with the Ecuadorean socio-economic reality and the project objectives. The private sector in Ecuador as in many other Latin American countries is characterized by its enterprise diversity. In the case of Ecuador, there exists a large number of small scale enterprises and few large ones. The project should take this into account and adapt curriculum and program contents. Management training should use cases and training materials designed to address the specific needs of Ecuadorean private enterprises. Design and selection of the training material should be accomplished with the help of a representative of the private sector.

Another social issue which could affect the project's social feasibility has to do with the traditional family owned Ecuadorean businesses. Traditionally, extended family enterprises predominated both in the highlands and Guayaquil. Lately, with the expansion and economic growth of the Ecuadorean enterprise sector (especially in Guayaquil) and the need for more specialized skills, other forms of enterprise now exist. Nevertheless, the traditional forms of business still exist (especially in the highlands) and could represent a social barrier to management improvement and change. However even these firms have began to employ high quality managers. The issue remains and will have to be addressed by the project.

The analysis described Annex XIII studied the feasibility of integrating the proposed graduate management school into the present Ecuadorean educational system and determined that at present, it is not a feasible course of action. However, the analysis identified some possible feasible alternatives for the school in the future once it become established. One alternative mentioned was to obtain official government recognition, another would be affiliating the school with a local institution via a special "convenio". Another possibility which was studied but found to be not feasible or desirable, was to integrate the school into the American education system. As implementation progresses alternatives will have to be carefully studied. Much like INCAE, and initially ESAN, the graduate management school will not be recognized by either the Ecuadorean or the American educational systems.

This could mean that students will have difficulty in pursuing doctoral programs either here or abroad should they choose to do so. However, it should be noted that to this date INCAE's program remains unrecognized although it is a highly respected institution whose graduates are employed throughout Latin America, including Ecuador.

In spite of the lack of information concerning the potential and effective demand of women related to the post-graduate program in management, it can be assumed that there will exist interest in participating in this type of program. Over the last several years there has been an interesting increase of women's participation in business. Women are also increasingly studying administration, accounting and economics.

Nevertheless, effective participation of women in the graduate management schools program might be restricted. Most women in Ecuador are submitted to great socio-economic pressures due to their simultaneous social roles and obligations as housewife, wife, mother, provider, etc. This will limit their access not only to other productive type of activities but to higher education as well. Many women owned and operated businesses are not always managed by women professionals but rather by women whose skills are the result of daily empirical knowledge.

It is likely that the only women beneficiaries of the full-time program would be mostly single, non parent professional women with an undergraduate degree. In spite of these limitations, the school should seek to reach all business women through seminars or part time courses in order to provide equal opportunities to women in upgrading and improving their management skills.

An important issue for the project has to do with the lack of women in high level job positions. Women professionals have been discriminated as far as job positions and salaries compared to men. The school should be able through graduating a reasonable number of highly qualified women managers to contribute in time to changing certain attitudes concerning the professional business women.

(3313G)

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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

ANNEX VI
Page 1 of 1
LAC/DR-IEE-83-14

ENVIRONMENTAL THRESHOLD DECISION

Project Location : Ecuador

Project Title and Number : Graduate Management Program
(518-0035)

Funding : \$5.0 million Grant

Life of Project : FY 1984-1989

IEE Prepared By : Robert Jordan, USAID/Ecuador

Recommended Threshold Decision : Negative Determination

Bureau Threshold Decision : Concurrence with recommendation

Action : Copy to Paul Fritz, USAID/Ecuador
: Copy to Robert Jordan, USAID/Ecuador ✓
: Copy to Peter Orr, LAC/DR
: Copy to IEE file

James S. Hester Date 21 December 1982

James S. Hester
Chief Environmental Officer
Bureau for Latin America
and the Caribbean

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Detailed Time Phased Implementation Plan

Implementation Schedule

This section of the study outlines the timing and interconnection of a series of critical path items required to develop and initiate the Ecuadorean Graduate Management Program during the first eighteen months of the implementation phase of the project. By that time initial start-up will have been completed, the on-going academic cycle in operation and the transition to Ecuadorean responsibility for the Graduate Management Institute begun. Major activities which must be accomplished regularly are: on-going curriculum development, yearly financial planning, assessment, modification and implementation of the public relations/fund raising programs, yearly administrative planning, student recruitment and admission for the Masters and Executive Development Programs, and the monitoring of Ph.D. participants progress and eventual on-the-job training at the GMI. In addition, to the implementation activities discussed in this section are the evaluation and reporting requirements described in the following Section. These will include: annual progress reporting, quarterly contractor reports, annual outside evaluations of the program, and two in-depth evaluations. The critical path items identified for accomplishment in the first eighteen months include staffing, site preparation, student recruitment, endowment fund development, and curriculum development. Those items are then broken out into a series of subtasks which must be accomplished.

Several of these items deserve particular attention. First, it is essential that the Chief of Party be in place in Guayaquil in June 1986 to insure the prompt execution of the numerous activities (site development, student recruitment, public relations program, Ecuadorean staff hirings, etc.) which are essential to the successful initiation of the GMP. Second, since it is estimated that one year will be required before the first class begins, the public relations program, particularly the seminars conducted as a part of it, is critical to maintaining the image of the school before the public. This is particularly important for fund raising and student recruitment. Endowment fund goals are not detailed here, however, achievement of those goals in the first and succeeding years are critical to the long term success of the GMP, and must be closely monitored.

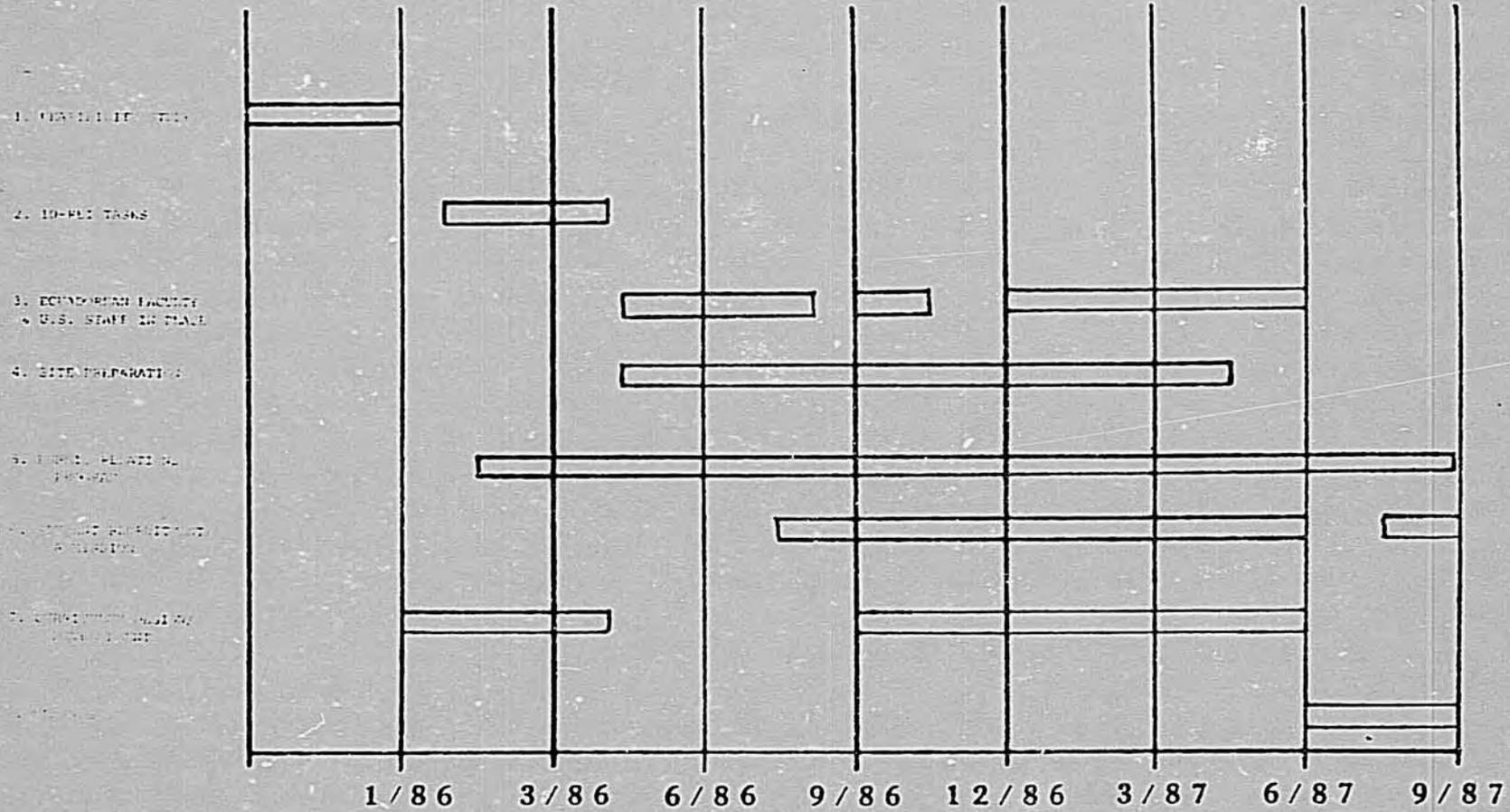
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The timing and interfacing of the implementation phase tasks are illustrated in a series of GANTT and PERT charts under the following headings:

1. General Project Development
2. Ten REI Tasks
3. U.S. & Ecuadorean Staff and Faculty
4. Site Preparation
5. Public Relations Program
6. Student Recruitment and Admission
7. Curriculum Development

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1. General Project Development



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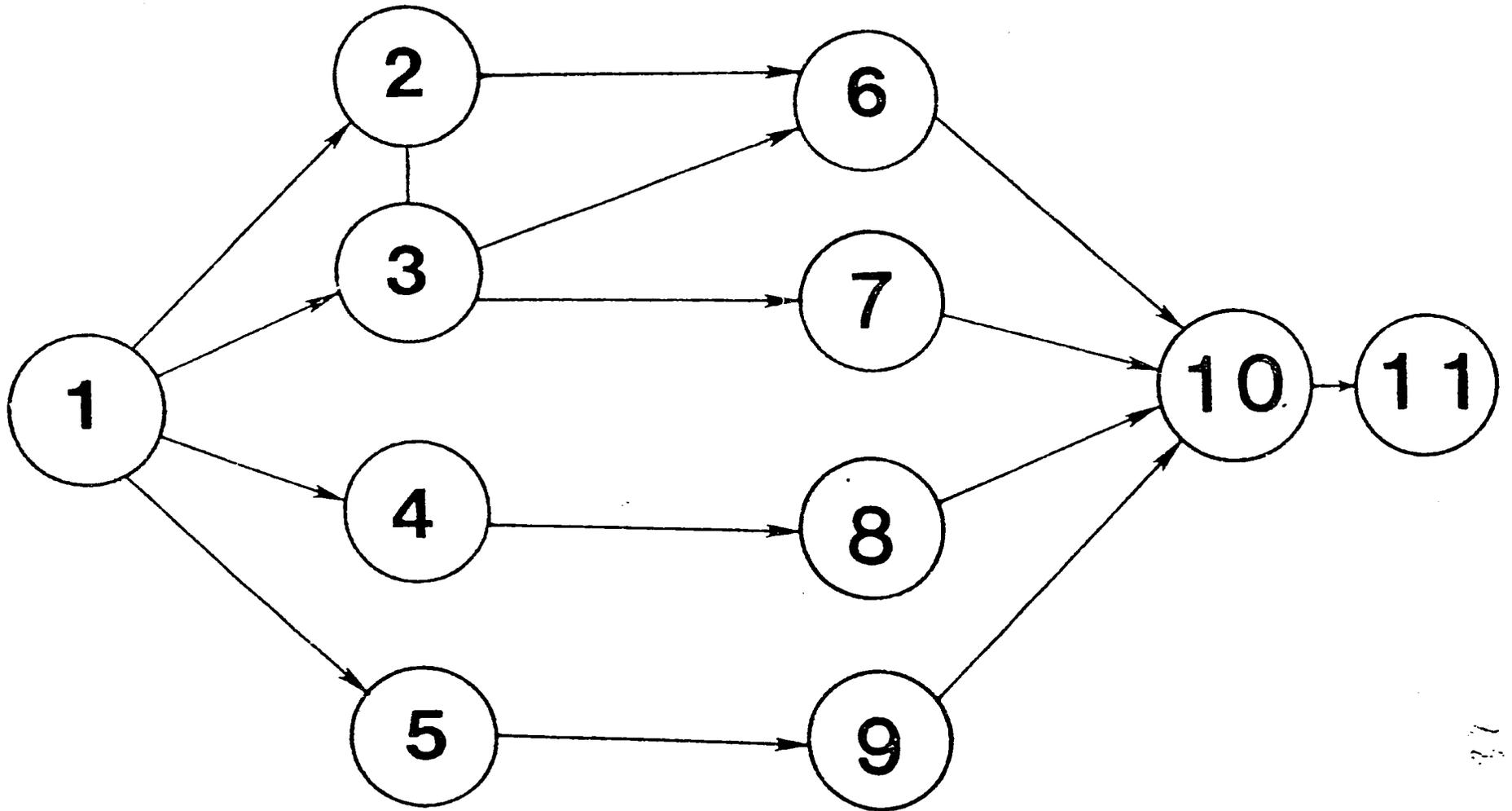
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The 10 REI Tasks - Pert

<u>No.</u>	<u>Description</u>
1.	U.S. AID Approval of addition to design contract.
2.	Curriculum design
3.	Selection/Translation of teaching material
4.	Detailed design of administrative structure
5.	Refine investment plan
6.	Formulate specifications for educational infrastructure
7.	Develop student selection criteria
8.	Develop policies for faculty and staff development
9.	Refine operating budget
10.	Develop endowment program and student loan program
11.	Develop placement program for graduates

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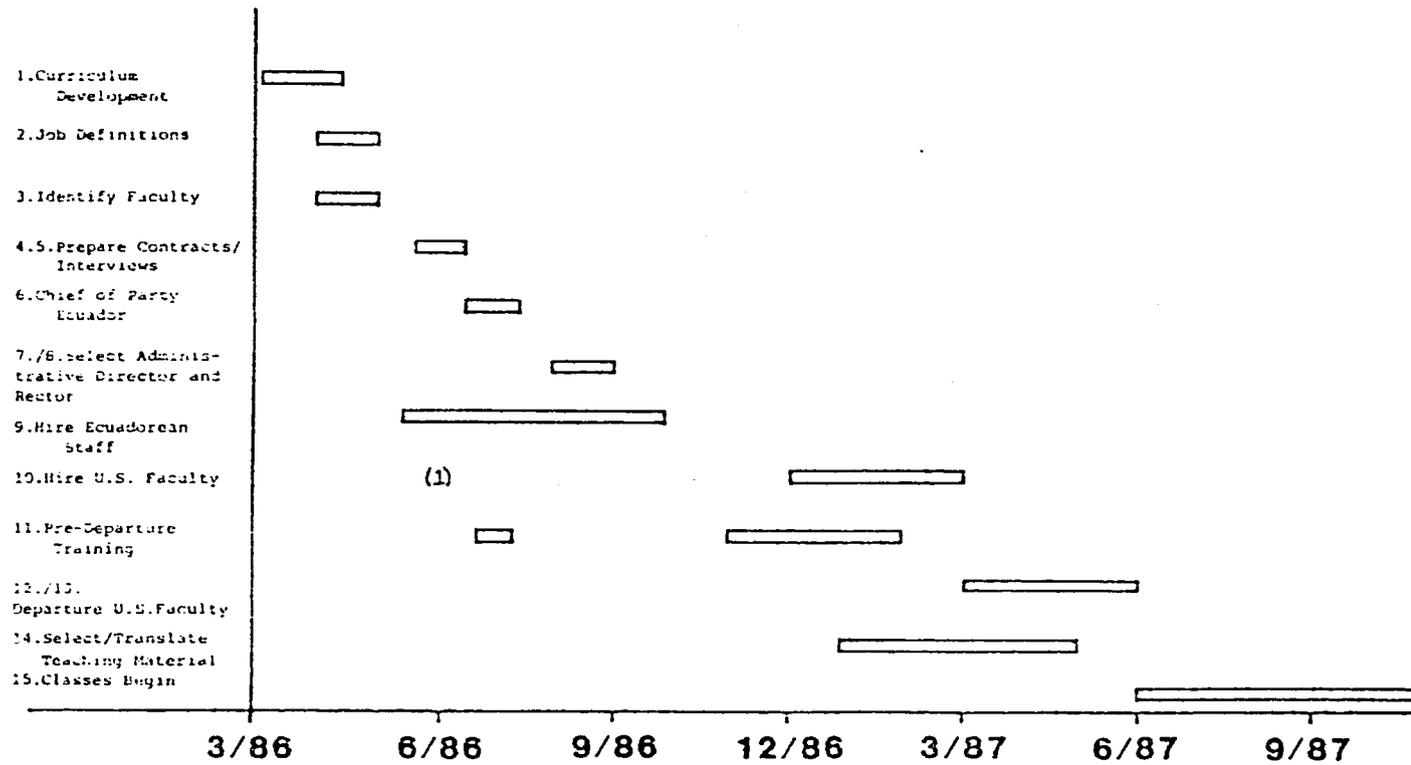
2. THE 10-REI TASKS PERT.



Faculty and Staff - Pert

- | <u>No.</u> | <u>Description</u> |
|------------|---|
| 1. | Develop curriculum |
| 2. | Job definition for faculty and staff |
| 3. | Identify faculty and staff required |
| 4. | Prepare contracts for hiring |
| 5. | Interview U.S. faculty |
| 6. | Chief of Party to Ecuador |
| 7. | Select Administrative Director |
| 8. | Begin search for Rector |
| 9. | Hire Ecuadorean staff |
| 10. | Hire U.S. faculty |
| 11. | Predeparture training |
| 12. | Departure of U.S. faculty to Ecuador |
| 13. | Post-departure assistance to U.S. faculty |
| 14. | Select and translate class materials |
| 15. | Classes begin |

3. Faculty and Staff - GANTT Chart



(1) One Member Starting in July '86

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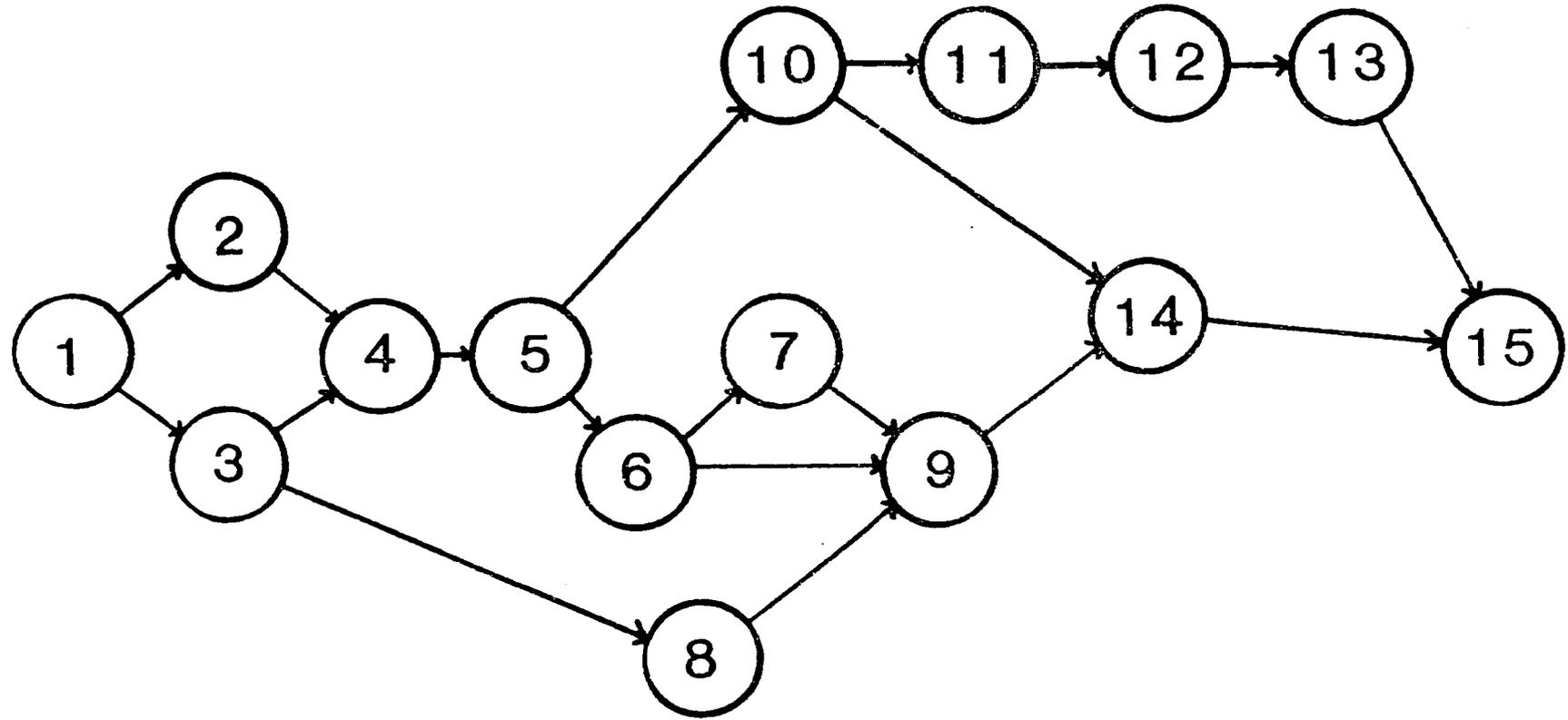
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Faculty and Staff - Pert Analysis

1. A final decision on the curriculum design will be reached before March '86
2. By April 15 '86 faculty requirements should be defined
3. Based on the requirements, by the end of May, a group of potential candidates should be listed
- 4/5. A contract will be prepared and interviewing started by May 30 '86
6. The Chief of Party will move to Guayaquil in June '86
7. An Administrative Director should be selected and hired by July 15 '86
8. The search for a Dean (Rector) will be initiated by July '86
9. The required Ecuadorean staff will be in place by Nov. '86
- 10/11. The U.S. faculty for the first year will be finally selected and hired by March, 1987. A predeparture program-including Spanish classes-will be given immediately after hiring
12. By May 30 '87 all U.S. faculty will be in place
13. There will be a post-departure assistance program for the U.S. faculty in Ecuador
14. By May 30 '87 all teaching material to be used will be translated and reproduced-ready for classes

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3a. Faculty and Staff - PERT



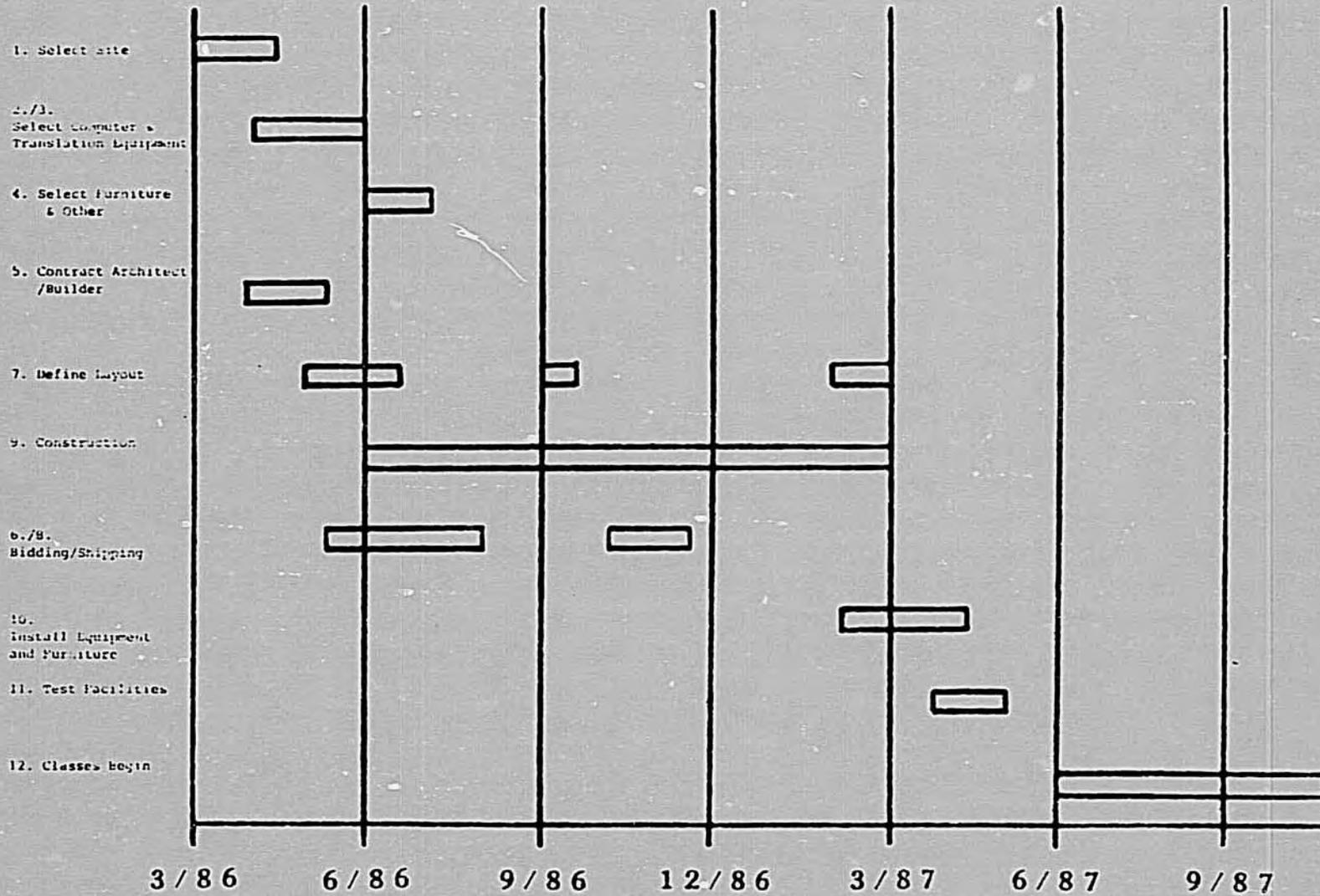
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Site Preparation - Pert .

- | <u>No.</u> | <u>Description</u> |
|------------|---|
| 1. | Select site |
| 2. | Select computer equipment |
| 3. | Select simultaneous translation equipment |
| 4. | Select furniture and other equipment |
| 5. | Hire architect |
| 6. | Independent bidding |
| 7. | Define layout |
| 8. | Order equipment/shipping |
| 9. | Start construction |
| 10. | Install equipment |
| 11. | Test facilities |
| 12. | Classes begin |

4. Site Preparation - GANTT Chart



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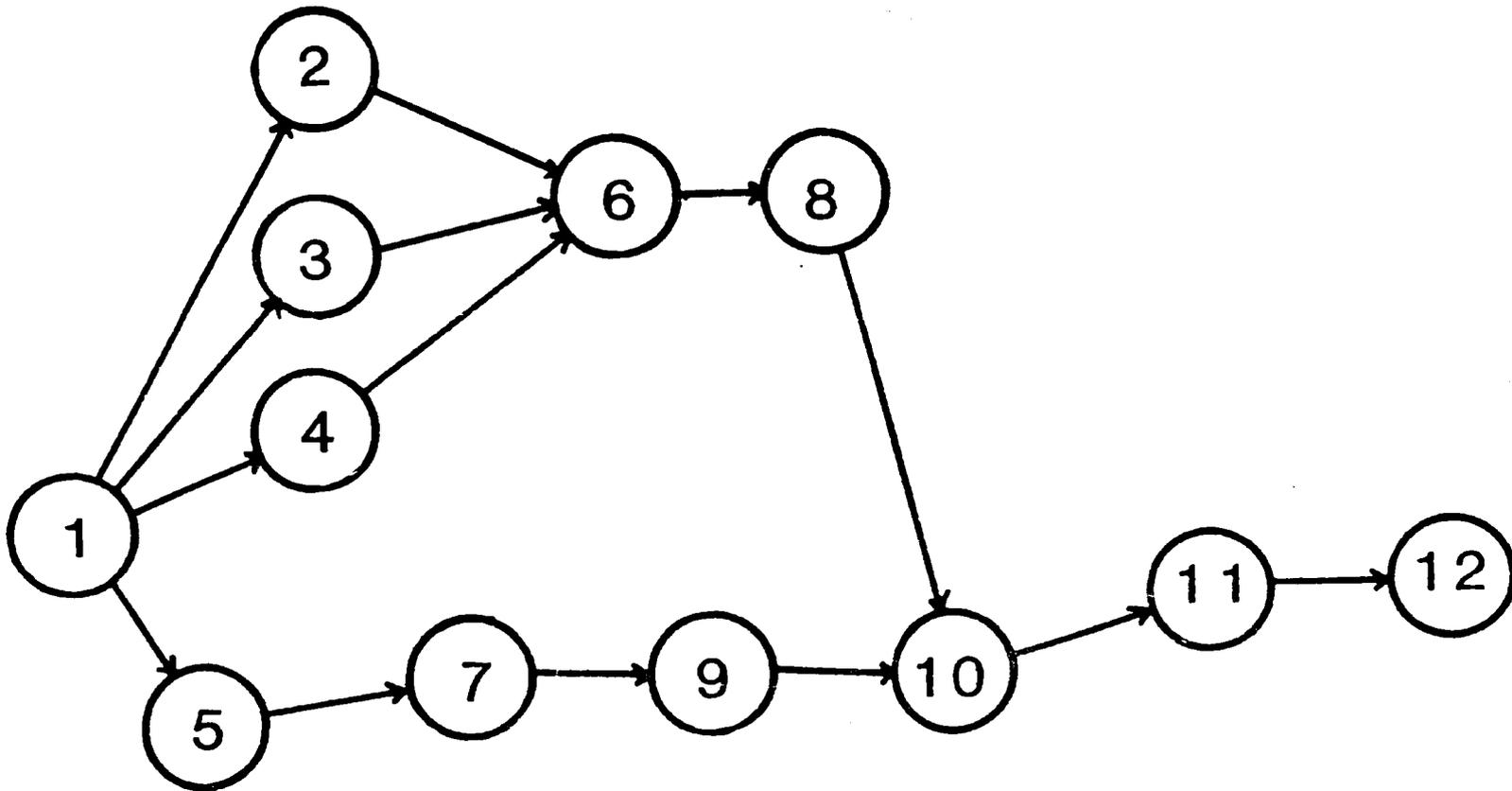
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Site Preparation - Pert Analysis

- | <u>No.</u> | <u>Description</u> |
|------------|---|
| 1. | Site selection should be finished by April 30, '86 |
| 2/3. | The computer and simultaneous translation equipment should be selected, put out for bids, and purchased before Oct. '86 |
| 4. | Furniture and other related equipment will be selected before July '86 |
| 5. | A local architect will be selected and hired by May '86. He would in turn identify and select builder |
| 6-8. | All equipment purchased in the U.S. will be in Ecuador by Nov. '86 in order to be in place by April 30 '86 |
| 9. | Remodeling and construction should be finished by March 30, '86 |
| 11. | All equipment will be tested two months before classes start |

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4a. Site Preparation - PERT

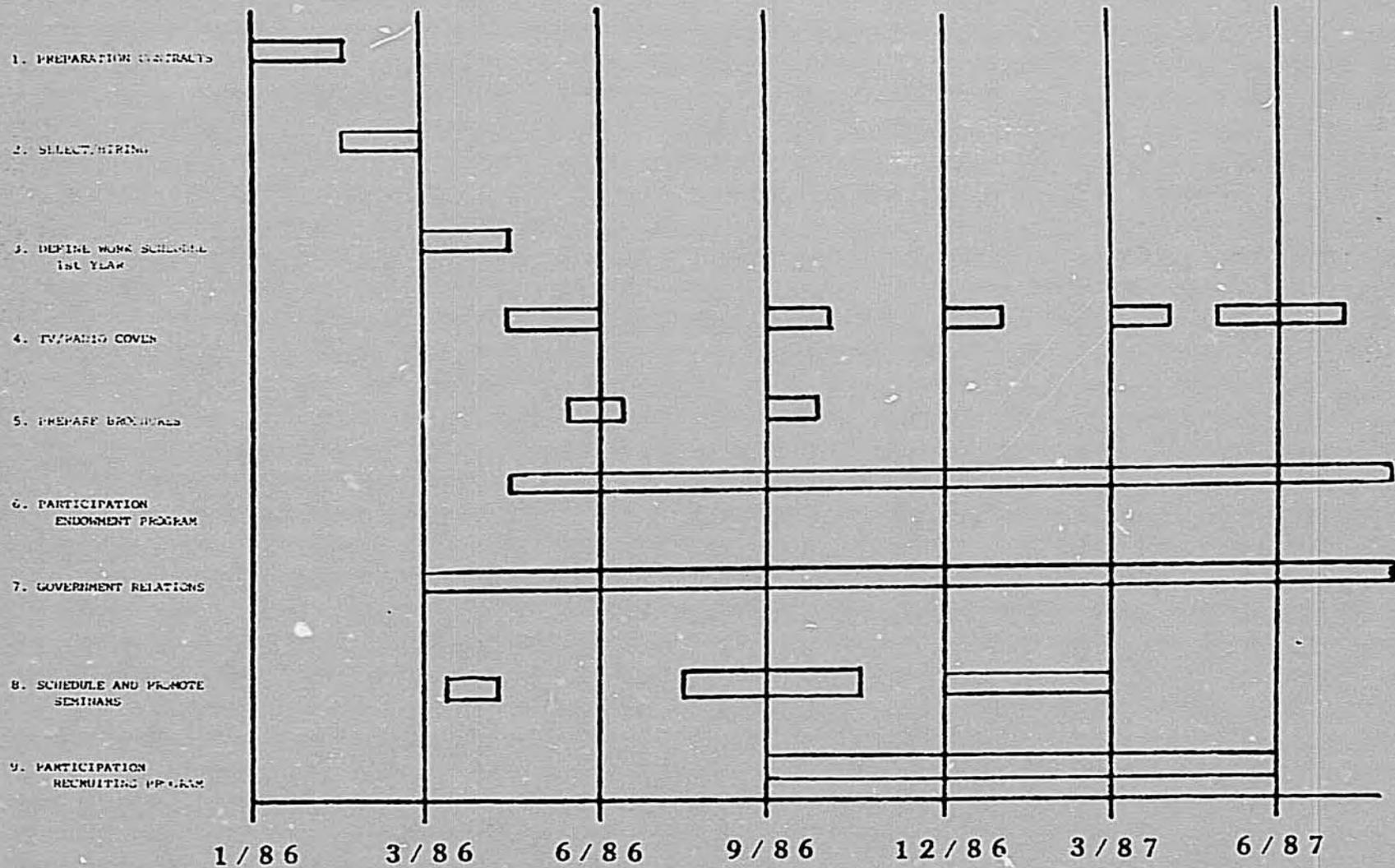


Public Relations Program - Pert

- | <u>No.</u> | <u>Description</u> |
|------------|--|
| 1. | Prepare employment contracts for Ecuadoreans |
| 2. | Selection and hiring of P.R. person |
| 3. | Design and plan work schedule for 1st year |
| 4. | Start TV and radio coverage |
| 5. | Schedule seminars |
| 6. | Assist in endowment fund activities |
| 7. | Assist in developing proper government relations |
| 8. | Participate in the promotion of seminars |
| 9. | Participate in the student recruiting program |
| 10. | Classes begin |

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5. Public Relations Program - GANTT Chart

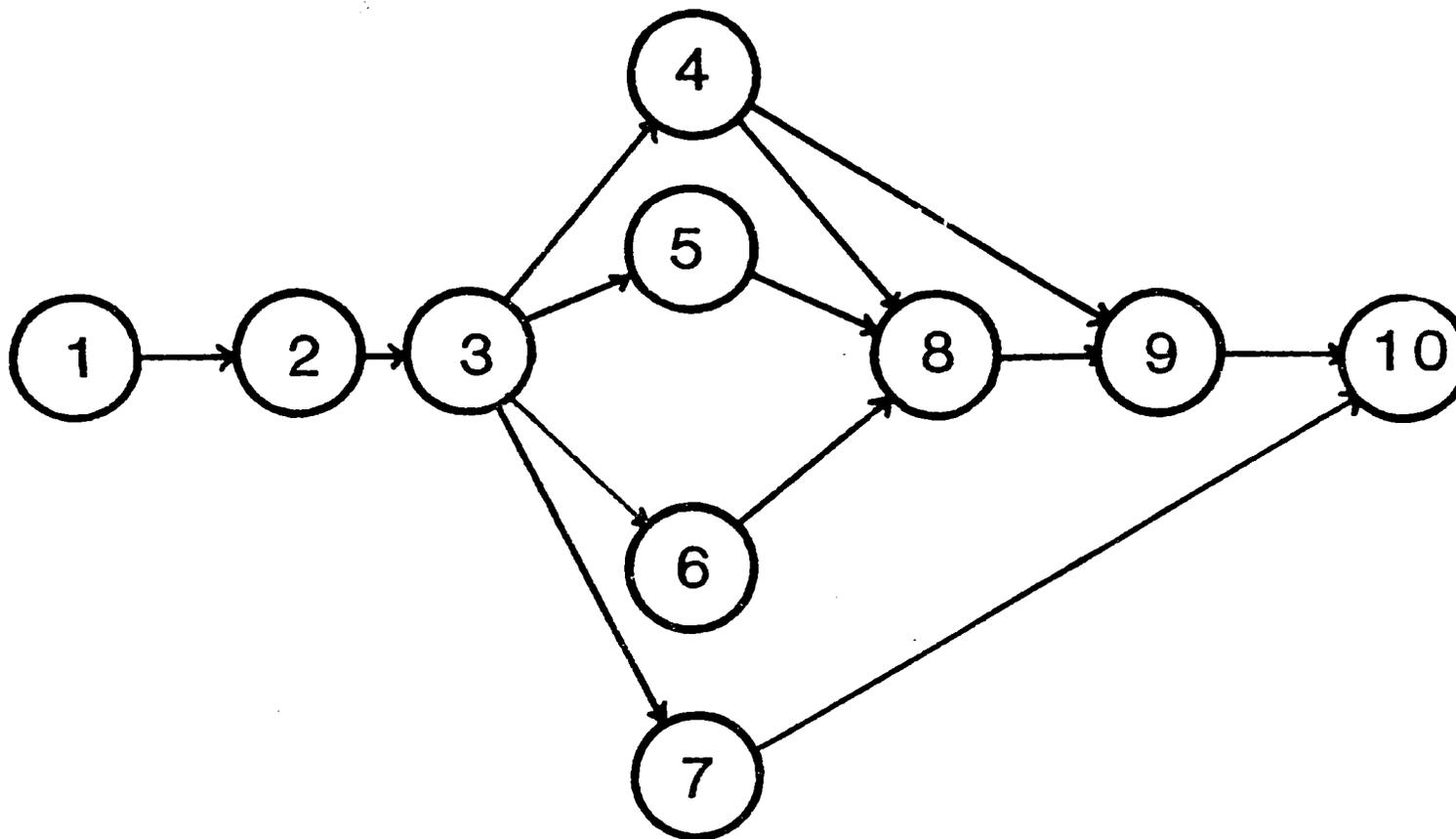


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Public Relations Program - Pert Analysis

- | <u>No.</u> | <u>Description</u> |
|------------|--|
| 1. | With assistance from U of H and Ecuador, an employment contract complying with all legal requirements will be drawn up |
| 2. | By March '86 the selection and hiring of a Public Relations Representative will be concluded. This person should have good relations with the Ecuadorean government and the Guayaquil business community. From the moment this person joins the organization, he should monitor and assist on matters relating to government relations (7) |
| 3. | Two months after hiring, the P.R. Representative will have prepared a work schedule for his office for the first year of operation |
| 4. | By the end of April, the P.R. office will start a TV and radio campaign that would go on throughout the year |
| 5-8. | The P.R. office will assist in the scheduling and promotion of two seminars; with the following tentative dates: Nov '86 and March '87 |
| 6. | The P.R. office will have a leading role in the development of the endowment fund program. By May '86 this plan should be operative |
| 9. | The P.R. office will start assisting in the recruiting of students in Oct. '86 |

5a. Public Relations Program - PERT



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1/2

Student Recruiting and Admission - Pert

- | <u>No.</u> | <u>Description</u> |
|------------|---|
| 1. | Selection and hiring of person responsible for the admissions office |
| 2. | Definition of a market strategy in order to obtain the desired number of students |
| 3. | Define student selection criteria |
| 4. | Prepare brochures |
| 5. | Prepare admissions exam |
| 6. | Direct advertising/promotion of program |
| 7. | Process applications |
| 8. | Selection of students |
| 9. | Collect fees from students |
| 10. | Classes begin |
| 11. | Student affairs office starts operations |

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6. Student Recruiting and Admission - GANTT Chart



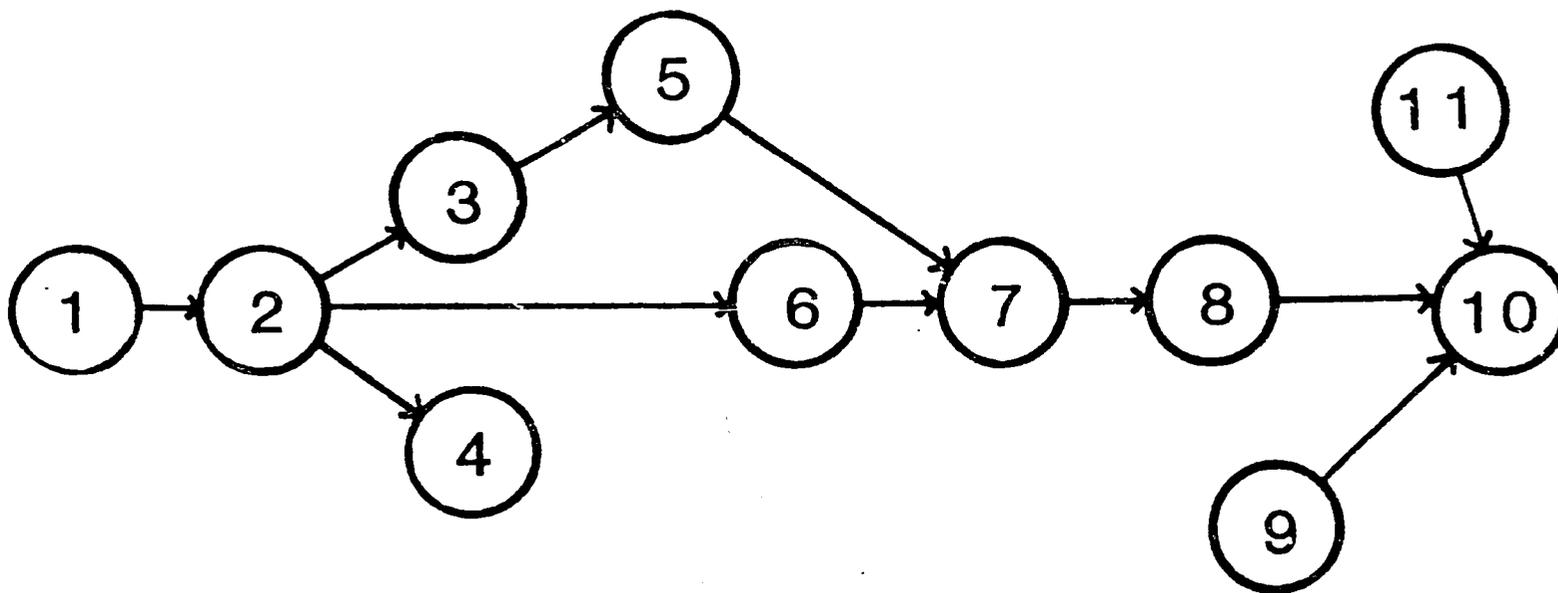
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Student Recruiting and Admission - Pert Analysis

- | <u>No.</u> | <u>Description</u> |
|------------|--|
| 1. | A person will be selected and hired to head the admissions office by July 30, '86 |
| 2. | This person's first responsibility will be to develop, in conjunction with the school's top management, a comprehensive market strategy that would permit recruitment of the required number of students. This task should be concluded by Oct '86 |
| 3. | A set of selection and admission criteria for students should be defined by the end of Nov '86 |
| 4-6. | By Nov '86 the Admissions personnel should also be finishing the preparation of brochures describing the MBA to be offered. These brochures and oral presentations will be the main factors in the promotion campaign to sell the school |
| 7/8. | By Dec '86 a system for processing student applications should be in place. This process would lead to the selection and admission of the first group |
| 9/10. | Student fee payment system in place when classes begin |
| 11. | The admissions office will handle student affairs, at least for the first months of operations |

6a. Student Recruiting and Admission - PERT



5.5

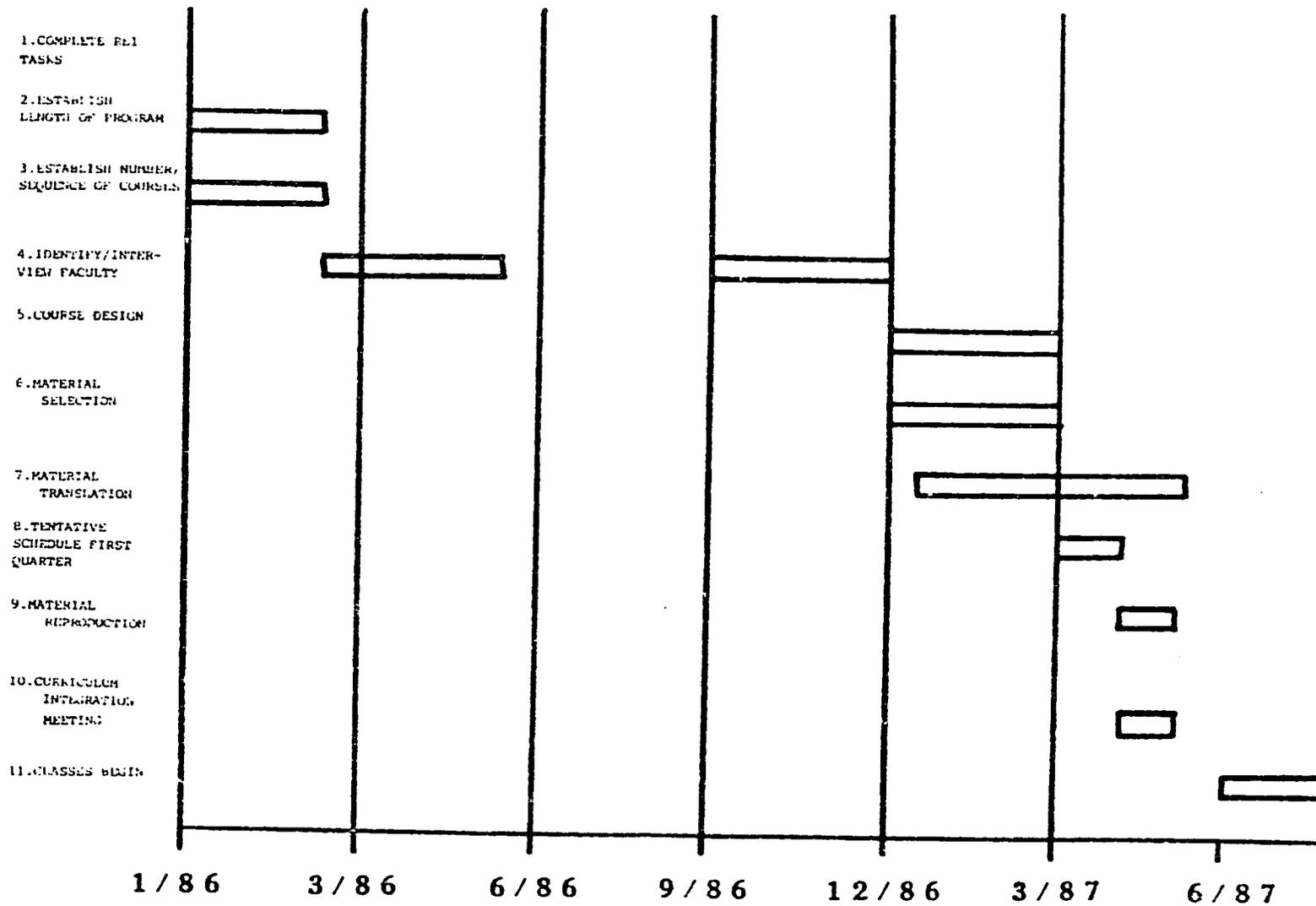
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Curriculum Development - Pert

- | <u>No.</u> | <u>Description</u> |
|------------|---|
| 1. | Complete the 10 REI tasks. |
| 2. | Define length of program. |
| 3. | Establish number and sequence of courses. |
| 4. | Identify faculty required. |
| 5. | Complete course design. |
| 6. | Select teaching material. |
| 7. | Translate into Spanish selected material. |
| 8. | Reproduce translated material. |
| 9. | Develop tentative schedule for first term. |
| 10. | Integration meeting in order to balance and integrate curriculum. |
| 11. | Classes begin. |

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7. Curriculum Development - GANTT Chart



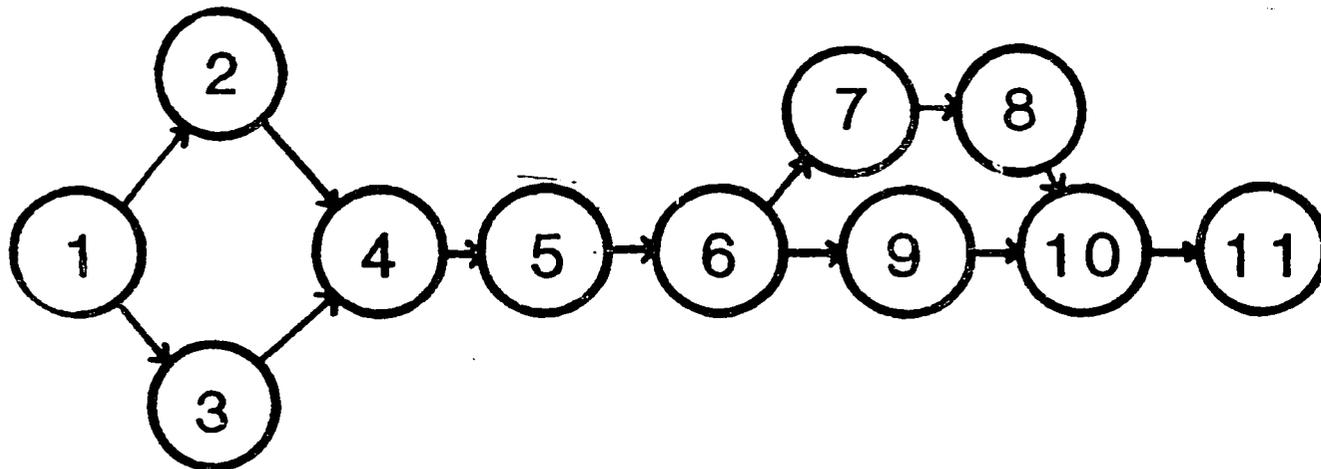
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Curriculum Development - Pert Analysis

- | <u>No.</u> | <u>Description</u> |
|------------|--|
| 1. | After completion of the "10 REI task" design phase, a decision will be made regarding the length of the program to be offered |
| 2/3. | This will be decided concurrently with the number of courses required as well as the proper sequence in order to achieve a strong and balanced program |
| 4. | Once the courses are defined, the proper faculty will be identified |
| 5/6. | Each professor would then procede to design his/her own course and select all teaching material for that course. Whatever material not found in Spanish, will be translated (7). |
| 8/10. | In order to integrate and balance the student's load, a meeting is scheduled before classes start. A final schedule of the first term should also come out of that meeting |
| 9. | The translated material will be reproduced and arranged in the proper format to be handed out to the students. |

7a. Curriculum Development - PERT



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Evaluation Schedule

To insure that the programmatic quality planned for is achieved and that necessary adjustments are made in the program, it is essential to conduct periodic evaluations of the project as well as two indepth evaluations, one midway through the project and the other in the last year of the project. These evaluations will include joint reports by the Consortium and the Junta Ejecutiva, contractor reports by the Consortium, and evaluations conducted by outside experts. These reports include:

1. Annual Progress Report by the Consortium and Junta Ejecutiva - This report will be submitted each year to AID at the end of each project year and by a date to be specified by the Agency. The purpose of this report is to measure the level of outputs achieved by the GMP in such areas as number of students, courses taught etc., as well as the Junta's success in meeting fund raising targets necessary to establish the endowment outlined in the Financial Plan. It will also discuss adjustments or changes in the project which would necessitate higher levels of expenditure or modifications in the contract. This report will provide the basis for annual funding renewal by AID.
2. Quarterly Contractor Report - This report, to be prepared by the Consortium, will focus on its inputs to the project. This will include personnel and equipment for the project in Ecuador, support mechanisms in the U.S., interfaces with the Junta Ejecutiva and an evaluation of contractor performance with recommendations for any modifications deemed necessary. The report will be provided to both AID and the Junta Ejecutiva.
3. Outside Expert Report - On an annual basis the Consortium and the Junta Ejecutiva will secure the services of outside experts with extensive experience in graduate management programs in Latin America to review and evaluate the progress of the institution. That report will focus on the quality of the masters programs, the efficiency of the administration and the overall financial condition of the institution. Copies of the report will be submitted for review and comment to the Consortium, the Junta Ejecutiva and AID. This report will provide additional inputs on possible modifications to be made in the project, and serve as an objective standard by which to judge the quality of the Annual Progress Report prepared by the Consortium and the Junta Ejecutiva.

4. Final Report - Prior to the conclusion of the Implementation Phase, the Consortium and the Junta Ejecutiva will prepare and submit to AID a report on the implementation of the project. That report will trace the evolution of the GMP, adherence to the original plan, modifications made in design and implementation, the level of inputs provided by both the Consortium and the Junta, the impact of the GMP in terms of courses taught, faculty trained, students graduated, and placed, executive programs conducted, and the overall impact of the program.

To the extent possible the information gathered for these reports should be quantifiable. Such data would include the records of the Principal Investigator and Chief of Party, the financial records of the institution, and the endowment fund, contract records of Consortium members, and student academic records. In addition, interviews with faculty, administrators and students of the school as well as representatives of the Consortium, the Board of Trustees and AID officials can be included.

5. In-depth Evaluation Reports - There will be two in-depth evaluations during the third and sixth years of the project. The first in-depth evaluation will examine the extent to which the project is achieving its objectives. It will measure and report, in addition to the quality of the academic program, on aspects such as:

--the perceived benefits, including better jobs and salary increases, which have accrued to those individuals who have participated in the Master's level program and a sample of the individuals who have participants in the executive development program;

--the degree of access to the 'Master's program by eligible middle and lower income individuals through scholarships and loan programs;

--a detailed evaluation of the status of the FPE's fund-raising effort;

--an assessment of the progress of the participant training activity;

--adequacy of the physical facilities and equipment; and

--the progress toward an efficient, functional Ecuadorean administration.

Based on the findings of this evaluation; adjustments will be made in the implementation of the project and as appropriate its design. The second evaluation will measure the same elements as the mid-term evaluation but as they measure the end of project status. This evaluation will be used to assess "lessons learned" and to determine whether A.I.D. might appropriately fund additional, follow-on activities that may be necessary to achieve the project purpose.

Description of Courses of Study

Foundation Courses

Macroeconomics: Managers need to know something about how economic forces affect the operation of any economy, especially one structured on capitalistic enterprises. Macroeconomic concepts are important in a wide range of managerial activities, such as evaluating impacts of tax or other governmental policies on markets, forecasting business trends and determining the effects of international economic events on domestic markets.

This course will focus on the Ecuadorean economy and its operation. Although the course can be quite technical every effort will be made to develop the course to be pertinent of the needs of prospective Ecuadorean managers. If this is done, there is no reason that a challenging and useful course cannot be designed without resort to the sophisticated modeling common in some schools in the United States.

Introduction to Computers: The purpose of this course is to introduce students, again as prospective managers, to the flexibility and utility of microcomputers in operating even small businesses. Included in this introduction would be a hands-on description of accounting and financial software of use to managers in both small and medium-sized businesses. As a secondary goal of the course, some familiarity with the basics of computer programming and its application in information systems would be given.

Managerial Economics: Many graduate business programs in the United States have adopted a variation of the usually taught microeconomics course in an effort to make the subject more applicable to managerially-oriented students. The course uses economic principles as a vehicle to teach prospective executives certain decision-making techniques, among them product pricing, demand analysis, cost estimation and investment evaluation. The course can be quite technical, but it is one where the important elements relevant to managers can be accomplished in a relatively straightforward manner. From this perspective, managerial economics is intended more to guide rational thinking processes than to transmit a set of sophisticated analytical techniques. It is also a course in which specific Ecuadorean examples can easily be utilized as the illustrations.

Principles of Accounting: The purpose of this course is to offer thorough grounding in accounting. In Ecuador likelihood is that relatively few students would be familiar with the subject. The purpose of this course would therefore, be to familiarize students with accounting concepts quite early in their academic program. This two-quarter course will provide an appropriate foundation for later courses in various functional areas.

Principles of Management: This course discusses concepts of management, including organizational design, planning, theories of general management, leadership and motivational methods and performance management. The course also introduces theories of decision making as well as Ecuadorean public policy measures relevant to general management practices.

Organizational Structure and Behavior: This course deals with broad concepts having to do with designing an organizational structure for either a private business or a public enterprise. In an Ecuadorean context, the course will be planned for smaller enterprises, with more attention being given to how and why organizations change as they grow larger. In addition, the course will, using Ecuadorean examples where possible, focus on problems of human behavior within organizations, and how the organizational structure affects such human responses as motivation for work, creativity, leadership and the like.

Financial Principles: The major emphasis in this course is on the institutional framework of finance, especially as it pertains to Ecuador. Included, however, would be discussion of capital markets in other parts of the world and how they are linked into the international financial markets utilized by larger corporations. This course provides a foundation for later study of financial management within businesses in a course which follows in the next quarter. Special care would need to be taken in this course, particularly during the early years, that it not become dominated by study of U.S. capital markets, where considerable academic work of interest to U.S. scholars has been accomplished. Basically, the course needs to provide familiarization for students of the financial environment relevant to them, namely, the Ecuadorean and, to a lesser degree, international capital markets.

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Marketing and Distribution Principles: This course covers institutional characteristics of Ecuadorean and regional markets. A reasonable amount of attention also should be given to a description of the U.S. marketing system, both because it provides an example of how marketing and distribution systems evolve with industrialization and because the U.S. market remains a primary destination of Ecuadorean exports. The course serves as a backdrop for an immediate follow-on course in marketing management, to be given in the next academic quarter.

Data Analysis: Many MBA programs in the United States and elsewhere incorporate a course in probability and statistics. In this course, students learn about such matters as formal hypothesis testing, sampling and, possibly, elements of Bayesian statistics used in decision theory. Clearly, these courses are intended to prepare U.S.-based prospective executives to at least monitor the types of research activities that take place in larger corporations.

In Ecuador, it would seem that such a course would be unnecessary for the foreseeable future. Instead, students there should concentrate on the collection, analysis and presentation of business data. The focus would be less on sophisticated techniques of data analysis and more on identifying the types of information needed for specific business purposes, how such data can be used (and misused), and methods of preparing information for presentation to the various audience who might have use for the data. Thus, Data Analysis would not fundamentally be a statistics course, although some statistical concepts might be taught.

Functional and Managerial Courses

Financial Management: As a functional follow-on to the Financial Principles course, this course focuses on financial decision-making in a private company. The subject would deal with an introduction to investment decisions, with evaluating and selecting sources of capital, with cash management and with project evaluation. This course will have to "fit" the Ecuadorean environment, especially as this might imply smaller companies and more constrained financing opportunities. As with other managerial courses, this course might heavily utilize regional cases as a vehicle for teaching decision-making principles.

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Marketing Management: Here, attention is given to managerial problems associated with product development, distribution channel selection, advertising and sales promotion, sales force management, and pricing. As in Financial Management, the pedagogical technique for this course would probably involve cases, as much as possible developed in the local environment. The whole idea for this course is to introduce students to the wide variety of decisions which need to be made in any operating company, large or small, or in any operating environment, developed or developing. Marketing Management, again similar to Financial Management, needs to follow closely the antecedent course stressing the institutional framework.

Managerial Accounting: Little needs to be said to justify this course, since in many ways it is similar to the two managerial courses covered above. Managerial Accounting discusses accounting in a managerial context, meaning that it stresses the matter of using accounting data for managerial decisions. Furthermore, the course would be designed to assist those having accounting responsibilities to understand managerial needs elsewhere in the company and to design accounting reports to meet those needs. Again, real-world cases would be used where possible, with stress being given to Ecuadorean problems.

Project Evaluation: This course addresses essentially two types of questions. First, how should investment projects be gauged by private Ecuadorean entrepreneurs and how should decisions be made on whether or not to proceed? Second, in situations where governmental approval must be given before a project can proceed, what is the appropriate evaluative procedure for officials? Thus, the course deals with the analysis of projects, first, from the viewpoint of a company and, second, from the perspective of the government. For a developing country such as Ecuador, this course is a highly important one, because in many cases investment projects, especially ones involving foreign direct investment, do require governmental review. It is useful both to future managers in the private sector and to prospective governmental officials to understand the differences in analytical techniques involved in project evaluation when viewed from a private and public point of view.

Management of Public Enterprises: The efficacy of this course being required of all students hinges upon the likely importance of potential governmental employment for students following graduation. If significant numbers of graduates can be expected to become public officials, then this course clearly should be part of the curriculum. If, however, this is not the

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case, then it is a course which could easily become an elective in a future iteration of the program. Basically, the course deals with how the management function changes between public and private Ecuadorean enterprises.

Environmental Analysis: In Latin America, companies operate in an environment where the state plays a preponderant role in the economy. Problems of high inflation and drastic shifts in growth cycles are common, and a variety of social institutions, such as unions, have a dramatic impact on corporate operations. It is important for managers to understand the dynamics of these forces, especially in the Ecuadorean context, how they interact and the ways in which they may affect business operations. This course provides an understanding of the variety of ways in which private businesses are influenced by the surrounding society, in ways not necessarily considered in companies' decision-making. In any society, developing or industrial, such externalities can become quite important, and it is critical for future public and private managers to comprehend their existence and effects.

Production and Operations Management: This course is designed to provide the student with an understanding of the environmental and types of problems found in production operations. The main objective of the course is to train students in making sound, cost-effective decisions that improve the productivity of both manufacturing and service organizations.

Course coverage includes: defining production and operations management in terms of company and economy needs; the basic tools and analytical approaches to production problems; product design, manufacturing requirement planning, facility location and layout; aggregate production planning, scheduling and inventory policies; and quality control and productivity relations. This course attempts to address the specific needs of the present economic situation in the area.

Entrepreneurship: This course has been inserted into the curriculum specifically to meet the needs of the Ecuadorean business community. Most businesses are comparatively small, and this course is directed to the unique problems which confront such businesses. Managers in smaller businesses need more flexibility and adaptability than would be the case in larger enterprises. This course, too, would take advantage of local cases, to the extent that such cases could be made available from case writers attached to the institution or from cases written at INCAE or ESAN.

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Agribusiness: The reason for this course is, of course, obvious. Ecuador's major business at the moment and for the near-term future is agriculture. This course simply analyzes the special problems which arise in agricultural enterprises and in businesses associated with agricultural outputs.

Export Marketing: Another needed course in Ecuador is one dealing with identifying markets abroad for Ecuadorean products, or potential products, and analyzing methods for penetrating these markets. Included in this course would be a review of international market data sources, discussion of various methods for selling goods abroad and case examples of successful (and unsuccessful) attempts to export products from developing countries.

Business Policy: Business Policy is a capstone course which integrates all of the functional areas in the Master's program. It is placed at the end of the program after all courses in the management, finance, accounting, marketing, and economics areas have been completed. The course is best taught by the case method, with reasonably complex cases which provide an experience in identifying problem areas and devising possible solutions.

The emphasis in the course is on how the functional areas impact upon each other, e.g., how the solution to a finance problem requires consideration of its impacts upon the marketing, production and management areas and vice versa. Teams of students, each taking the role of a different manager of a functional area, discuss the cases and present possible solutions, along with the ramifications and impacts on all functional areas. These solutions are then critiqued by other student teams. A by-product of this course is an experience in human relations, teamwork, and taking criticism.

English and Other Skills: Interviews conducted with leading Ecuadorean businessmen by the Academic Program team clearly established the fact that facility in English is considered an important tool in conducting business. In developing export markets, dealing with suppliers of imported technology and services, negotiating joint venture contracts and in a host of other activities, the English language provides important advantages to Ecuadorean managers. From a purely academic perspective, facility in the language greatly broadens the range of source materials available to students. Although great strides have been made in the translation of business

textbooks, journal articles and cases, the fact remains that the vast majority of such materials are available only in English. Thus, English language ability is an important asset both in terms of career performance and the enhancement of learning opportunities in the academic program. For these reasons, the curriculum will include training in English as a second language, with regularly scheduled sessions each week.

The primary thrust of the program is, of course, training in the basic business administration disciplines. Furthermore, the rigors of an intense 15 month graduate program limit the time available for training and study in a second language. Levels of fluency will also be constrained by the fact that language comprehension can be achieved more effectively in intense immersion-type classes than in those scheduled throughout a standard academic program. Despite these limitations, students who are not already fluent in English will be required to take classes in English, with the goal of achieving a basic competency in English conversation and reading.

In addition to English, there are other skills which, while not a core part of the curriculum, need to be included. For example, entering students will probably require a brief (two week) sequence of refresher sessions on basic math and analytical skills to be scheduled at the beginning of the school year. Opportunities also need to be provided for such exercises as written analysis of cases. Training in English as written case analysis will be carried out in a series of modules interspersed between regular class sessions during the school week. These modules, combined with out of class assignments which must be carried out on campus will ensure that the students are engaged in a truly full-time program. This type of intense student involvement coupled with the lockstep curriculum will ensure development of project work habits and attitudes.

In the next stage of the project the study team will provide an outline of the major topics to be covered and the principal outcome expected for each of the courses discussed in this report. This next phase of curriculum development will also provide guidelines for teaching methodology and the balance of approaches for each course.

Table 2
Fifteen-Month Academic Program

Faculty	Q1	Q2	Q3	Q4	Q5
Management	Data Analysis	Principles of Management	Organizational Behavior		
Marketing			Marketing Principles	Marketing Management	Business Policy
Finance	Principles of Finance		Financial Management	Project Evaluation	
Accounting	Introduction to Computer	Principles of Account.	Management Accounting		
Chief of	Macro-Economics	Environmental Analysis			
Specialist 1		Managerial Economics			
Specialist 2					Agri-business
Specialist 3				Public Administration	
Specialist 4					Entrepreneurship
Specialist 5				Production & Operations Management	
Specialist 6					Export Marketing
ENGLISH LANGUAGE TRAINING					

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