# IMPROVING LINKAGES BETWEEN TRAINING AND EMPLOYMENT IN PANAMA

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#### **ACKNOWLEDGEMENTS**

This is a report on a one-month study of training in Panama, with particular emphasis on how better linkages might be formed between private sector employers and the providers of training. The analysis and recommendations are based on a review of available literature, discussions with employer/worker, government, and training sector representatives, and two sets of structured interviews -- of employers and training institutions.

In all our activities, we were assisted, and often guided, by the Instituto de Investigación y Educación para el Desarrollo (INEDESA), contracted to assist in the logistics and coordination of project activities in Panana. Mr. Ezequiel Urrutia coordinated survey activities and Mr. Pedro Hartiz assisted in many significant ways, from tabulating survey results to providing helpful analytical insights and arranging administrative details. We are particularly appreciative of their ability to deliver the impossible within a limited time constraint.

David Evans was responsible for most of the material in Chapter One and Gonzalo Garcia for the materials relating to training institutions in Chapters Three and Four. Analia Cuervo supplied some much needed information and editing assistance. The entire report was drafted by Terence Kally. Dennis and Hary Herschbach prepared and edited the final report. He would like to thank all the groups and individuals who so graciously gave of their time to participate in the project. We would also like to thank the AID Mission staff in Panama --particularly Juan Belt, Frank Skoronski and Lewis Thornton -- for their cooperation.

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#### EXECUTIVE SUMMARY

The focus of this study is on linkages between the training systems and employment. A training system with strong linkages between providers of training and users of the output will be more effective and efficient than a system where linkages are weak or nonexistent. In the case of Panama, to which this report is restricted, the training system was first considered in relation to the economy. Chapter Two, accordingly, presents an overview of Panama's economic and social structure, recent economic trends, manpower needs, and implications for training. In Chapter Three, the training system itself is discussed, with particular attention given to the National Training Institute (INAFORP). Chapter Four presents the results of interviews and discussions with employers, unions, trainers and government officials and concludes with a synthesis of problem areas within the training sector. Seven basic themes emerged.

- The majority of training activities are concentrated within the industrial sector while the majority of employment is in agriculture and services.
- The abundance of small size employers makes it difficult to organize training courses in response to the desperate needs of employers.
- The training sector is faced with serious budget problems.
- There is a need for more practical work experience within training programs. There is, however, the perception among employers that the labor code complicates efforts to provide work experience.
- Work attitudes (motivation, responsibility, honesty, punctuality) could stand significant improvement.
- Although there are serious obstacles to establishing an effective training system, the basic structure, nevertheless, exists.
- There is definitely a problem of the lack of linkages. Until information flows are improved, it will be difficult to establish better linkages.

The discussion in Chapter Five focuses on the elements necessary for a more effective training system in Panama.

#### CHAPTER ONE

### INTRODUCTION

Objectives and Scope

This report is concerned with various aspects of training in Panama. The focus of the study is linkages within the system, defined as a flow of information and influence designed to shape decisions regarding course offerings, methods of instruction, location of facilities, scheduling of activities and, perhaps most important, the utilization of trained arsonnel. A training system with strong linkages between providers of training and users of the output of training institutions will be more effective or efficient than systems where linkages are weak or nonexistent. The specific objectives of this analysis are:

- To identify examples of potential and actual linkages within the system.
- To determine whether the presence of linkages is beneficial to the operation of the system or, more important, whether their absence is inhibiting.
- To suggest how linkages might be strengthened by way of structural reform or specific activities which could facilitate closer connections between employers and the training sector.
- To characterize the training system in Panama, and assess its capability to provide employment-related linkages.

This study is part of a three-country project including Honduras, Panama and Jordan sponsored by the Bureau for Science and Technology of the United States Agency for International Development. These countries differ considerably in their attempts to facilitate linkages. The objective of the project is to determine the significance of these differences.

In the case of Panama the training system was first viewed through the eyes of employers to determine: their views on the relevance and effectiveness of training programs, their suggestions for improvement, and their needs in the area of training. This information, along with other data and the opinions of trainers and administrators, was then used as a basis for assessing the system.

Linkages between employers and training institutions are dependent on a number of prior interconnections or information flows:

A correspondence between the needs of employers and the needs of the economy. Linkages within the existing system can be of little benefit if new employment is available primarily in nontraditional industries.

- An articulation of the needs of the individual employers at the local level to their national level representatives.
- A dialogue between employers or their representatives and the training establishment.
- Communication and cooperation within the training sector to maximize responsiveness to employment-related needs.
- A flow of information between the training sector and employers.

Put another way, when speaking of a "linkage" between employers and trainers, there are a number of elements to be considered. Furthermore, a linkage is a two-way street: employers' needs must be articulated and trainers must market their outputs by establishing collaborative relationships with employers.

## Methodology

The field work for this study was conducted in one month, an extremely short time period for the amount of information and number of systems being analyzed. The observations are based on a variety of sources: available literature, discussions with government and international officials as well as with representatives of employer organizations and unions, and two sets of structured interviews -- with employers and training institutions. No single source dominates the discussion below. Fortunately, there was a substantial consistency across the different information sources.

There is extensive literature on economic trends and labor market conditions in Panama, although much of it is based on slightly dated statistics. 1/ Literature on the training system is quite scarce and most of it refers to the pre-1980 situation. 2/ As will be noted below, there have been significant recent changes in the training sector, and some are still in progress.

Discussions with public sector officials and with representatives of the training and private sectors (including worker representatives) illustrated the diversity of the Panamanian economy and the plurality of training needs and problems. A true picture requires recognition of this diversity, but limited time meant that only "key actors" could be visited.

<sup>1/</sup>The problem is not so much that available data are old, but that there has been an apparent break with the recent past. Even data from as recent a year as 1980, fail to reflect the current labor market situation.

<sup>2/</sup>One exception is an AID/Panama financed study by van Steenwyk (1984).

With regard to the two surveys -- one of employers, the other of training institutions -- an attempt was made to be systematic, but no claim is made that results are scientific.

The employer survey was drawn from lists of employer associations and directories, using criteria that ensured a broad occupational and industrial spread, with ultimate stratification by size of firm. The final sample size, after refusals or inability to make contact, is only 40, hardly sufficient for a scientific representation of the Panamanian economy. The survey of training institutes was more representative, covering nearly half of the known training providers in the country. The problem here was that many of those interviewed simply did not have the necessary information at their disposal. Response rates to some questions, such as costs or follow-up information, were therefore unacceptably low.

#### Limitations

In addition to the rather specific problems noted just above, there are some general limitations to be considered as well. First, most of the employers we were able to interview were established, in the sense of having been in business for over a year (or else they could not have been included in the source directories). Thus, there is an undercount of newer firms whose training needs and experiences could differ from those samples. A related problem is the industry mix of the sample. As will be discussed below, training in Panama is skewed in favor of the traditional industrial sector (manufacturing, construction, electrical, etc.), while employment is in agriculture and services. The survey structure allows us to assess the existing system but not the ideal or even the possible future system.

A fundamental problem is the possibility of "the blind leading the blind" syndrome. To the extent that we are looking for linkages which do not exist, it is questionable whether those responsible for the lack of linkages can be very informative about possible remedies.

Finally, this case study was carried out two months prior to the inauguration of a new President in Panama. Inevitably, such a period is characterized by a lull in policy formulation as everyone waits to see what the new Administration will suggest. There was unanimity among employers, unions, and trainers to the effect that, "... it is hard to know what kinds of courses to promote until we know the direction the economy will take."

<sup>3/</sup>The sample size was dictated by the available budget. Additionally, all employer interviews were conducted in Panama City.

A/Reference is here made to known formal institutions. Private schools offering specialized courses (computers, secretarial) were sampled, but much less systematically. In general, no pretense is made that coverage of service sector courses was sufficient.

The next chapter of this report deals with the demand sector of the labor market -- the structure of the economy, trends, the outlook, and implications for training. Chapter Three covers the supply sector, providing an overview of training programs, financing, types of courses, costs, etc. Chapter Four provides an assessment of the training system in light of employer requirements. Employer views of the system are presented first, followed by an analysis of the ability of the system to respond to those requirements within existing constraints. Chapter Five presents concluding remarks concerning alternatives for improving linkages within the structure and the constraints of the Panamanian system. Panama, perhaps more so than other countries, could benefit from improved linkages, not just for training but for other labor market decisions as well. But because of special constraints, the formation of those linkages may be more difficult and more costly than in other settings.

#### CHAPTER TWO

## THE ECONOMIC SETTING

Overview

Panama's social and economic structure is a direct function of its geography -- its location and its shape. A middle-income country (GDP per capita of nearly \$2000), Panama's economy has largely been based on income derived from services rendered to incoming visitors. Although only about one-quarter of the country is inhabited, more than one half of its population of 1.9 million is concentrated in the two cities which control entry and exit from the Canal. This concentration of people and jobs is a matter of no small concern to the government of Panama. There remain pockets of severe poverty in urban and rural areas, with accompanying malnutrition.

The country has a relatively developed infrastructure, including an educated population. In the 1970s it achieved impressive improvements in the provision of schooling, health and family planning services, potable water, electricity, and communication services. Some of the resultant social indicators include:

- a An adult literacy rate of 85 percent.
- An infant mortality rate of 21 per thousand.
- Life expectancy of more than 71 years.
- complete school enrollment at the primary level and a 65 percent rate at the secondary level.
- Access to water and sanitary disposal for 85 percent of the population.

Many of these improvements were, however, financed through international borrowing, and, as a result, Panama's national debt now nearly equals its GDP. The government is under severe pressure to limit further public expenditures and is likely to experience difficulty in trying to sustain the momentum of its development. Among its Central American neighbors, save perhaps Costa Rica, Panama stands out in terms of the level and sophistication of its economy. In common with the rest, however, it faces reduced growth prospects and the need for an austerity program.

As already mentioned, Panama's economy is heavily oriented toward the production of services, which account for more than 70 percent of national output (see Table I). Primary and secondary industries (agriculture, manufacturing, mining, and construction), although much less important in terms of output, provide employment for about 55 percent of the Panamanian labor force. It is important to highlight the fact that the manufacturing, construction, and transportation sectors, which are the source for much of the demand for training institutions under review in this study, represent under a quarter of the country's output and employment.

PANAMA: SECTORIAL ORIGIN OF GROSS DOMESTIC PRODUCT AND EMPLOYMENT, 1977-1982

	GDP BY SECTOR (1970 Prices) 1/						EMPLOYMENT BY SECTOR 2/			
	19		19		% of Change	1977		1982		% of Change
	Millions \$	%	Millions \$	%	1977-1982	000's	10	000's	%	1977-1982
Gross Domestic Product	1,321.4	100.0	1,873.7	100.0	41.7	-		-	-	
Agriculture Mining	175.5 2.1	13.3	190.9 4.1	10.2	8.8 95.2	147.7	31.3	157.4	28.0	6.6
Manufacturing Construction	152.5 73.8	11.5	183.8	9.8	20.5	48.4	10.3	54.4	0.1 9.7	-25.0 12.4
Public Utilities Commerce	44.0	3.3	165.6 59.3	8.9 3.2	124.4 34.8	24.4	5.2 1.2	38.5 7.7	6.9	57.8 35.1
Transportation and	202.3	15.3	250.5	13.4	23.8	64.3	13.7	73.9	13.4	14.9
Communication Finance	73.0 58.0	5.5	123.0 83.3	6.6	68.5 43.6	25.1 15.6	5.3	34.5	6.2	37.5 56.4
Housing Rent Public Administration Other Domestic Services	116.5 181.7 145.5	8.8 13.8 11.0	140.4 228.7 203.0	7.5 12.2 10.8	20.5 25.9 39.5	120.5	25.6	154.4	27.5	23.1
Services to Canal Area Panama Canal Commission Colon Free Zone Adjustment	71.4 -48.6 -23.5	5.4 - 3.7 -1.8	206.0 70.2 -35.1	11.0 3.7 -1.9	44, 4	18.4	3.9	15.6	2.8	-15.3
Total Employment	-	-	2	=	, -	470.5	100.0	561.1	100.0	19.3

Source: 1/ IMF, Recent Economic Developments, 1983

2/ Direccion Nacional de Empleo, <u>Informacion Estadistica sobre Recursos Humanos</u>, Cuadro 11-36, 1984

In 1978, the Panamanian economy underwent a strong recovery after several years of oil-price induced stagnation. Real GDP grew nearly 10 percent in that year and, despite a generally unfavorable international economic environment, the expansion continued at an average rate of 8 percent through 1982. This rebound was led by a surge in private investment, particularly in construction activities (housing and commercial real estate), the expansion of the Colon Free Trade Zone, and the construction of an oil pipeline across the Isthmus. Although, Panama sustained its growth through 1982 by activities oriented toward the domestic market, the world economic slowdown began to have a strong impact. Export-oriented sectors, such as banking, commerce, the Colon Free Trade Zone, and tourism, stagnated or contracted in response to weak foreign demand. In 1983, a stand-by agreement was reached with the International Monetary Fund, which imposed strict constraints on public spending. This fiscal austerity combined with a contraction in external demand to produce economic stagnation in 1983 and 1984.

Given recent economic trends and the age distribution of the population -- over half of the total is under 19 years of age -- it is not surprising to find a high and rising rate of unemployment. In 1982, the latest year for which official data are available, the unemployment rate was 8.4 percent. Underemployment was estimated at an additional 4.9 percent of the economically active population. Unofficial estimates for 1983 suggest that the unemployment rate has increased to 11.3 percent, with underemployment adding another 2.7 percent. These rates are at their highest levels in the nearly two decades for which such data have been collected. Moreover, they were registered when labor force participation rates were hitting all-time lows (53.7 percent of the economically active population), due to increasing levels of school enrollments and reductions in the average age of retirement, both of which have been occurring since 1970.

Unemployment in Panama is concentrated -- geographically, by age, and by sex. The metropolitan region of Panama City, Colon, and environs contain about 55 percent of the economically active population, but 73 percent of the unemployed. In 1982, the unemployment rate for males 25 years of age and older was only slightly above 2 percent, a rate significantly lower than that for females or younger persons. Over 44 percent of the total unemployment in 1982 was comprised of new labor force entrants.

The distributions of employment and unemployment by major occupational groups are shown in Table II. There are two significant features in the data. The first is that employment in white-collar occupations increased rapidly in relation to the total between 1970 and 1982 (craftsmen and clerical occupations grew rather more slowly), while employment in agriculture declined in relative terms. Secondly, aside from the category of new labor force entrants, craftsmen and clerical workers (occupations which are the focus of this study) comprised the largest shares of unemployment in 1982.

TABLE II

DISTRIBUTION OF EMPLOYMENT 1970 - 1982 AND UMEMPLOYMENT 1982,
BY MAJOR CCCUPATIONAL GROUP

THE PARTY OF THE P			
MAJOR OCCUPATIONAL GROUP		UTION OF DYMENT	DISTRIBUTION OF UNEMPLOYMENT
	1970	1932	1982
White Collar Workers  Professional, Technical and Related Administrative and Managerial Workers Clerical and Related Workers Sales Workers	25.2 6.0 3.5 8.3 7.4	32.3 10.6 4.3 10.7 7.2	19.6 3.1 1.4 9.3 5.8
Manual Workers Drivers Craftsmen Laborers	24.0 4.3 14.9 4.8	24.8 5.4 16.0 3.4	$ \begin{array}{r} 13.1 \\ \hline 1.9 \\ 12.0 \\ 4.1 \end{array} $
Service Workers	<u>15.1</u>	16.0	14.0
Agricultural Workers	35.6	26.2	3.5
Seeking First Job	-	-	43.5
Unspecified	-	-	1.3
TOTAL	100.0	100.0	100.0

Source: G. Zakrzewski, Panamanian Labor Force, 1984

## Policy Developments

Panama's past economic policies were of a dual nature. the one hand, conditions were created which favored the development of a dynamic international service sector characterized by flexibility and a minimum of governmental interference. At the same time, however, the government promoted the development of an industrial sector based on the objective of import-substitution and protected from foreign competition by a system of import quotas. In addition, a labor code was enacted which increased labor costs and has subsequently been credited with restricting employer flexibility in the areas of wages and apprenticeship training. In agriculture, the government emphasized self-sufficiency in basic food commodities and increased interventions through the establishment of public enterprises and large-scale marketing activities. All indications are that the incoming Administration, under President-elect Barletta, will be attempting to reverse such policies and to minimize government interventions in the marketplace. Some of the expected policy changes include:

- Relaxing price controls on agricultural commodities.
- Divestiture of state enterprises.
- Cessation of restrictions on exports.
- Revision of labor legislation.
- Replacement of import quotas with a tariff system.
- Encouragement of nontraditional exports.
- Emphasis on market incentives.
- Introduction of policies to promote productivity, particularly labor productivity.

## The Economic Outlook

From the current vantage point, Panama's economic outlook for the next several years is not bright. With improving world conditions, it can be expected that growth will resume in 1985 at an annual rate of 2.5 percent in real terms, moving up to a rate of 6 percent in 1989.

Growth, of course, is a function of a number of factors -economic conditions within the region and the Hemisphere, the political
persuasiveness of the newly elected president, the reaction of the
private sector to policy initiatives, and other imponderables. To
illustrate the implications of alternative assumptions, Table III
presents AID/Panama data associated with two different scenarios, based
on GDP growth rates of 3 or 6 percent, respectively. Some of the
important points suggested by a comparison of the two scenarios are:

TABLE III

PANAMANIAN ECONOMIC GROWTH SCENARIOS

	. High Growth							<del> </del>		
	1902			Low Growth				Difference	in GDP,	
	1502	120/	1992	% Change 82-87	1982	1987	1992	2 Change 82-87	Sectoral Employment	
1) Gross Domestic Product-1982 \$ Growth rate of GDP	4287.1 -	4970.3 6.0	6.0	15.9	4287.1	4602.1	5335.1 -	7.3	368.2	
2) Sectoral GDP (Millions \$) Agriculture, Forestry, Fishing Industry and Mining Construction Services	376.4 406.5 380.6 3123.6	409.2 522.7 315.3 3722.1	486.0 921.2 419.2 4825.0	8.7 28.6 -16.9 19.2	376.4 405.5 380.6 3123.6	401.3 425.2 293.6 3402.0		6.6 4.6 -32.9 11.5	7.9 97.5 22.7 240.1	
3) Composition of GDP by Sector Agriculture,Forestry,Fishing Industry and Mining Construction Services	8.8 9.5 8.9 72.9	8.2 10.5 6.4 74.9	7.3 13.9 6.3 72.5	-	8.8 9.5 8.9 72.9		8.5 9.7 6.3 75.4			
4) Employment (000's) Agriculture, Forestry, Fishing Industry and Mining Construction Services	157.4 54.8 38.5 310.4	160.5 67.2 35.1 379.4	167.1 106.2 41.4 430.5	1.9 22.6 -3.9 22.2	157.4 54.3 38.5 310.4	159.8 56.8 33.6 307.2	164.4 66.5 36.5 393.9	1.5 3.6 -12.8 18.3	.7 10.4 1.5 12.2	
Total	561.1	642.2	745.2	14.5	561.1	617.4	661.3	10.0	24.8	
5) Population Participation rate Unemployment rate	2043.7 53.7 8.4	2274.5 55.0 12.7	2514.6 55.0 11.4	11.3	2043.7 53.7 8.4	2274.5 55.0 16.1	2514.6 55.0 21.3	11.3		

Source: Panama Urban Development Assessment

- Under neither the high nor the low growth scenario is the construction sector expected to attain its 1982 level of activity until well after 1987, due to a sharp decline during 1983-84. Under the high growth scenario, the leading growth sectors, in terms of sectoral contributions to GDP, would be the industrial and service sectors, while under the low growth scenario the leading sectors would be services and agricul ture. In terms of employment, the high growth scenario implies relatively large employment increases in services and industry, while the low growth scenario implies significant increases only in services. The difference between the employment implications of the two scenarios is not large, less than 25,000 workers by 1985. Unemployment rates, under both scenarios, are expected to rise steadily over the next five years to unprecedented levels.
  - Given the age structure of the labor force, replacement demand (separations from the work force due to deaths and retirements) is likely to represent a relatively small number of job openings in the next 5 years -- perhaps as few as 10,000 -- which would be concentrated in the industrial and construction sectors.

For the longer term, it would be reasonable to be cautiously optimistic regarding Panama's growth prospects. On the positive side, a number of advantages may be listed:

- Geographic location and easy access to international markets.
- A relatively competitive wage structure.
- Absence of foreign exchange risk (Panama is one of the few countries in the world which issues no paper currency of its own). The Balboa is strictly tied to the U.S. Dollar, to the point that U.S. bank notes are used exclusively.
- An absence of restrictions on profits and capital transfers.
- Well-developed financial and communication systems.
- A relatively well-educated/trained labor force.
- A relatively stable political environment, and leadership well-trained for the task ahead.
- A comparatively well-developed infrastructure.

 Preferential access to the U.S. market as a result of the Caribbean Basin Initiative.

Some of the negatives to be considered would include:

- a Relatively high transport and port charges.
- Exceptionally high-cost electricity due to earlier reliance on fossil fuels and an only recently developed hydroelectric capacity.
- A labor cost which is at least perceived to limit productivity and profitability.
- A reliance on already matured sectors for further economic growth (international banking, free trade zone operations).

Implications for Training

The above discussion suggests a number of observations of relevance to training in Panama. First, because of the slow growth outlook for at least the next 5 years, there will likely be a particular glut of job seekers for entry-level positions. This suggests that training activities should emphasize skill upgrading in addition to the current entry-level courses. It is expected that some 232,000 persons will be reaching labor force age in the next 5 years. Even with continued declines in labor force participation rates and a high growth economic scenario, a surplus of 40,000 workers can be expected, which clearly implies a rise in unemployment levels and rates.

Secondly, more traditional course offerings -- carpentry, machine operators, construction -- may be aiming at already saturated markets and thus require reorientation. Given government plans for structural adjustment in favor of export promotion, providers of training should consider how they can assist in the adjustment process. With slow growth and an austerity budget, for example, repair activities might be in greater demand than operating skills. Furthermore, greater attention might be given to training for agro-industry (food processing, canning, preserving) and services, along with the traditional vocational skills preparation.

At the same time, serious consideration should be given to the content and the training implications of a swing toward exports and nontraditional industries. It is not sufficient to merely tell trainers that they are preparing graduates in the wrong fields without signals as to what the "right" fields would be. Market signals are of some use, if they are read, but they may lag significantly behind government initiatives. Some sort of tripartite communication, or linkage, is probably essential to the implementation of a structural adjustment program. Given the current uncertainty regarding the content and magnitude of growth, it is all the more important that linkages be promoted.

Related to this is the problem that structural adjustment inevitably implies rapid change. Industries come, industries go. The training system must be all the more flexible in such periods. In addition to getting signals and reading them, trainers must be able to act on them. Greater flexibility and adaptability will thus have to become primary objectives, and the system must be restructured to incorporate these objectives.

Finally, the traditional caveat that training does not create jobs and must not be expected to do so, should perhaps be invoked at this point. In periods of slow growth, job placement activities are particularly important, to insure the best possible match between the skills of job seekers and the requirements of job vacancies.

## OVERVIEW OF THE TRAINING SYSTEM

Organizational Structure and Content

Vocational training activities in Panama have much in common with similar programs elsewhere in the free world. There is a so-called "formal" component, consisting of institutional instruction carried out under the authority of the Ministry of Education. A supplementary "informal" component operates under the responsibility of private or semiautonomous entities (such as the National Training Institute, INAFORP). One feature distinguishing training in Panama is the absence of an integrated on-the-job training component. As will be discussed in the next chapter, this lack is largely explained by certain pay and firing provisions in the Panamanian Labor Code. Figure 1 provides an overview of the basic structure of education and training in Panama. Table IV lists enrollment in official and private technical institutions from 1976 to 1983. These figures exclude a significant but unknown number of students enrolled in short-term courses in the private sector (secretarial, administrative, management).

Formal vocational education is designed to prepare persons for employment in technical occupations at medium and higher skill levels, primarily within industrial, commercial and agriculture fields. Vocational-technical training centers are primarily at two secondary levels: grades 6-9 and grades 10-12. The major objective at the lower level is to provide an orientation to work, although those not going on to a higher level of education obtain basic employment skills. Students at the higher level are prepared to enter skilled occupations. In addition, some continue on to advanced skill training or education.

Enrollment in formal vocational education programs by field of occupational preparation is shown in Table V. That enrollment, as noted previously, is concentrated in professional/technical, business, and industrial programs. Agriculture, though an important employment area in Panama, accounts for less than one percent of enrollments in formal vocational education programs.

Linkages between academic and vocational preparation can occur, theoretically, anytime after completion of basic education. In practice, the majority of this crossover takes place upon entrance to higher education, with low academic achievers moving into technical or vocational fields or graduates from vocational education moving into academic universities. There are those who criticize this latter flow, pointing to the relatively high costs of vocational education, the benefits of which are wasted if the preparation is not used in the market place. There exist no tracer studies (longitudinal surveys) of passed-through graduates with which to assess this contention. There are no data available showing earning and employment profiles of graduates versus others, so that the ultimate impact of training programs in Panama remains unknown.

Figure 1
The Educational System in Panama

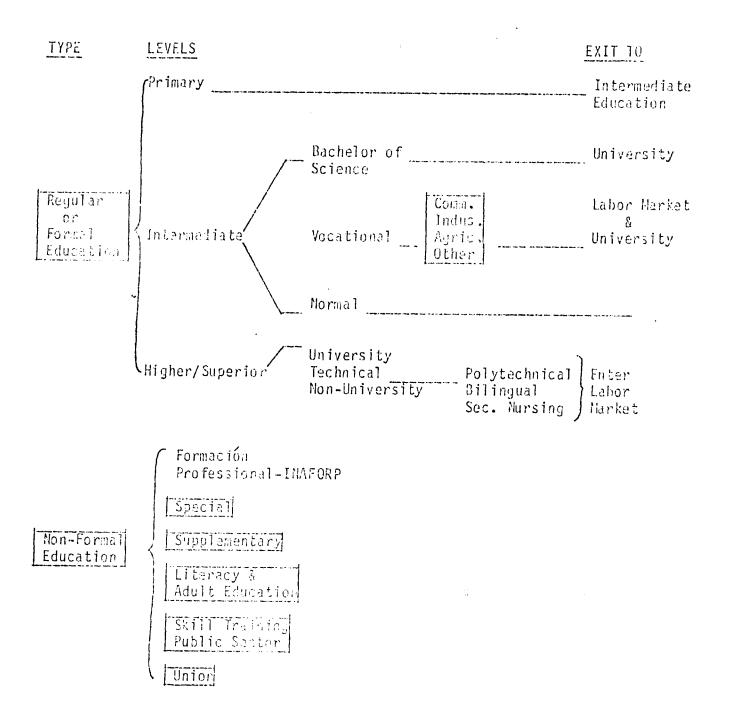


TABLE IV

ENROLLMENT IN PROFESSIONAL AND TECHNICAL EDUCATION IN THE REPUBLIC OF PANAMA (1975-83) BY TYPE OF SCHOOL

Type of	YEAR									
	1976	1977	1978	1970	1980	1981	1982	1983		
Official	on to	31,358	30,877	23,461	25,095	28,284	29,075	31,651		
Private	*** ***	12,147	11,905	12,346	13,703	14,913	15,289	15,222		
MATERIAL STATE STATE ASSESSMENT OF A STATE O	The second the fact had been been		of a state of the Assault and Assault	g dilak - haji minay kisak sasa , a kapaba ga ak	en e	***************************************	The first feet feet first a . p. Su	or the days delp through the tagency of		
TOTAL	41,141	43,505	42,792	40,807	3 <b>9,</b> 793	43,197	44,364	46,873		

SOURCE: Extracted from Avance de CIFRAS Bulletins No. 130 (Aug. 1982), No. 139 (May 1983), No. 147 (Jan. 1984)

Note: Includes students in nautical, crafts, professional and technical courses that do not require preparation of the 1st cycle of secondary school.

TABLE V

ENROLLMENT IN PROFESSIONAL/TECHNICAL EDUCATION IN PANAMA FOR 1983 BY OCCUPATIONAL AREA AND TYPE OF SCHOOL

		TYPE OF VOCATI	ONAL INSTITUTION
AREA	TOTAL	Official	Private
Professional & Technical	46,873	31,651	15,222
Agricultura	851	580	271
Business	27,337	19,239	8,098
Domestic	1,943	663	1,280
Industrial	15,663	11,119	4,549
Other	1,024		1,024

SOURCE: Estadisticas de Educación, Bulletin No. 147, Preliminary Findings, January, 1984.

The Ministry of Agriculture operates one agriculture school. The Technological University is the principal agency training at the higher technical level. In addition, vocational-technical instructors are trained.

The major nonformal training organization is the Instituto Nacional de Formacion Professional (INAFORP), restructured under a new law in 1983. Programs are mainly concentrated in the industrial and construction field, with some instruction given in service occupations. The principal support for INAFORP is from the National Educational Security tax (an estimated \$5.2 million for 1985).

There exist over 50 nonformal institutions for training in Panama, in addition to an unknown number of others -- which come and go over time -- offering short courses in the commercial field (Table VI). Some of the institutions are operated privately, for profit, others by private voluntary organizations, and still others by the public sector (e.g., the military). Courses run the same gamut as those in the formal vocational education sector, but, of course, programs are generally of shorter duration in nonformal training. Ostensibly, all nonformal programs fall under the purview of the National Training Institute, INAFORP, which is charged with overall management and coordination of training in Panama. Although its lineage can be traced back well over 10 years (when it was known under the acronyms IFARHU and then SENAFORP), INAFORP's current incarnation began only in 1983, when it was moved out from direct control by the Labor Department and given semiautonomy. Because of lack of adequate funding and relative newness -but despite its history -- INAFORP has not really initiated any serious coordinating activities.

Of all the PVO training programs, the foremost appears to be the Don Bosco Technical Institute operated by the Catholic Church and recognized as perhaps the best industrial training institution in the country. Total enrollment for 1984 was 912 students which included 210 students in grades 1-6. Ninety (90) students graduated with a technical high school degree out of a class of 128. Don Bosco is recognized by employers for its discipline and good basic technical education. The school has excellent linkages. It receives more requests from employers than they have graduates to place. They have a 100% placement rate two to three months before graduation. Yet, they use traditional teaching methods and 30-40 year old, outdated equipment with a student-teacher ratio in the labs and shops of 1-40. Their students also come from a lower SES (Socio-Economic Status) than students in other schools (Cuervo 1985).

The National Training Institute (INAFORP)

To be clear, there are really two INAFORPS: one, a real training institute, the other, a Board which is to deliberate and make recommendations regarding all training activities in Panama -- and which also runs the institute. The Board (National Committee) is composed of representatives from the Ministry of Labor, the Ministry of Education, the Ministry of Business and Industry, and three representatives from each employer, worker, agriculture and craftsmen groups. This

#### PUBLIC SECTOR INSTITUTIONS OFFERING NONFORMAL TRAINING

1. Instituto Nacional de Formación Profesional (IMAFORP)

2. Ministerio de Educación

2.1 Proyectos Especiales del PREDE - OEA

2.2 Educación de Adultos

- Ministerio de Planificación y Política Económia (MIPPE)
   3.1 Sistema Nacional de Adiestramiento
- Ministerio de Gobierno y Justicia
   1.1 Dirección General de Desarrollo de la Comunidad (DIGEDECOM)
   1.1.1 Circulos Comunitarios (CICOM)
   2.2 Centro de Rehabilitación Femenina

5. Ministerio de Salud

- Ministerio de Hacienda y Tesoro
   Ministerio de Obras Públicas (MOP)
- Ministerio de Comercio e Industrias (MICI)
   B.1 Dirección de Recursos Marinos Depto, de Pesca Artesanal

9. Ministerio de Desarrollo Agropecuario (MIDA)

Ministerio de Trabajo y Bienestar Social
 10.1 Instituto Panameño de Educación Laboral (IPEL)

11. Instituto Nacional de Telecommunicaciones (INTEL)

- 12. Instituto de Recursos Hidraulicos y Electrificación (IRHE)

  13. Instituto para la Formación y Aprovechamiento de los Pecurs
- Instituto para la Formación y Aprovechamiento de los Recursos Humanos (IFARHU)
- Instituto Panameño de Habilitación Especial (IPHE)
   14.1 Centro de Adjestramiento del Impedido (CAI)
- Universidad Teconológica de Panamá (UTP)
   15.1 Programas de Extensión Universitaria
- Universidad de Panamá
   16.1 Centro Audio Visual

17. Centro El Educador

18. Direccion Nacional de Aeronáutica Civil

19. Autoridad Portuaria Nacional

20. Ferrocarriles de Panamá

- Cuerpo de Bomberos de Panamá 21.1 Oficina de Seguridad
- 22. Lotería Nacional de Beneficencia

23. Caja de Seguro Social

24. Contraloria General de la República

25. Instituto de Acueductos y Alcantarillados Nacionales (IDAAN)

Junta Comunal de Bella Vista
 26.1 Centro de Atiestramiento y Empleo (CAYETD)

Source: INEDESA, 1984

representation ensures that the private sector is represented, but the representation is limited. Currently, the Board meets twice per month. Budget funding for INAFORP is derived from the Education Insurance fund which is financed through a special payroll tax earmarked for this purpose. IMAFORP has never received its full allotment of 15% of the fund, actual allocations are below 10%. (The difference has been used to cover operating expenses at the Labor Ministry.) In 1983 INAFORP's allocation was 1.6 million, fully 4.4 million short of the nearly 6 million which would have been implied by a 15% allocation. The problem is compounded by frequent delays in the disbursement of funds by the Ministry of Education, resulting in particular strains on operating and maintenance activities. There have been numerous recommendations urging an increase in allocation up to the full amount authorized by law, the most recent one by a special Presidential commission which reviewed training needs and programs throughout the country. There is a fair degree of confidence -- but no assurance -- that the new President will increase funding for INAFORP. The lack of sufficient financial resources has had a negative impact on some program elements. INAFORP, for example, currently has neither curriculum development nor placement officers, something which all concur would be desirable but which is precluded by lack of budget. And while there is provision for linkages between private employers and the training sector at the formal committee level, day to day contacts at the working level are virtually nonexistent.

IMAFORP's budget is augmented by external funds, most notably from the governments of West Germany and Japan. Particularly important is the impact of these grants on the content of available training courses. The grants are closely tied to specific product lines, such as Japanese televisions or German refrigerators. Training is organized around those products by way of equipment, tools, and the skills and experience of instructors, with the result that it is hard to say whether such grants promote training or marketing. Such a strategy, apparently quite different from that pursued by AID does have the advantage of linking training directly to expected market demand. Of course, this also means that the training curriculum is driven by the availability of foreign funds rather than by domestic economic needs. If the grants were just an add-on to the public sector training budget, there would be no problem. There is every likelihood, given the scarcity of domestic funds, that such contributions merely substitute for the regular training budget, tilting expenditures away from domestic priorities.

Curriculum: INAFORP currently offers courses in the following areas: construction, industry, metal mechanics and business services. The majority of the courses are 1 or 2 years in duration, with 1 day of theory and 4 days of practice per week, for an average of 1,400 hours annually. For 1984, INAFORP had slots for 2350 participants in job entry programs, and 4700 slots for skills upgrading. The majority of skill training activities are in the areas of construction, industry, and metal mechanics.

Target Population: Training programs in Panama are not targeted in any strict sense of the word. As in other countries, however, training is often viewed as an activity of last resort, primarily serving the un- and underemployed who have few resources to finance academic pursuit. The result is that both formal and nonformal training programs in Panama enroll mostly persons from the lowest socioeconomic stratum. This is particularly true of INAFORP. INAFORP has a total of 5 regional outlets and mobile centers. The mobile centers appear to have a capacity for 8,000 students but an enrollment of only about 1,500. There is some question whether the location of the centers corresponds with the distribution of the target population. Urban youth appear to be in a preponderance in the various programs. The largest and best equipped center is about 15 miles from Panama City, necessitating budget expenses for buses.

Instructional Staff: In 1983, INAFORP reported having 92 instructors on its payroll, out of a total staff of 150 persons. Most of the instructional staff have been with the Institute for a number of years, when it was known as SENAFORP. There is a general consensus within the training sector that instructors are technically qualified (at least given the equipment with which they have to work), but that they lack pedagogical and methodological skills or experience. This is true at INAFORP and at many other nonformal training centers across the country, although technical qualifications do not appear entirely satisfactory in all programs. It is noteworthy that trainers fault themselves on the lack of pedagogical skills, while employers fault them for the lack of real-world work experience.

Vocational instructors are poorly paid in Panama. In consequence, the better ones, or at least the more marketable ones, jump to the private sector as soon as possible. This creates a constantly aging stock of instructional skills, rarely infused with the new techniques and technology that would be associated with higher instructor turnover.

In the visits with the various training institutions, there was little evidence of curriculum development or placement officers. Certain instructors pursue these activities on their own, but there is no specific funding for such functions. Many of those interviewed felt this to be a serious shortcoming, and it was generally blamed on inadequate budgets. At one institution, we were told that new courses are added to the curriculum on the basis of parental desires.

Plan and Equipment: There is a wide variation in the quality and age of available tools and equipment in the various training centers in Panama. INAFORP, at one extreme, appears well-equipped for the courses it offers, a fact due, in no small degree, to foreign contributions. In this case, the problem is with underutilization, attributable to course offerings, scheduling, location of main facility, and lack of overhead budget for intake and placement services. In other institutions, the problem stems from an insufficient operating budget to cover maintenance and replacement of tools and equipment, or in other words, too high a ratio of capital (plant and equipment) to operating budgets. In these facilities, equipment and techniques are outmoded and

frequently in need of repair, work stations are ill-kept, and there is considerable "down time." Very few training centers visited were operating anywhere near their optimum levels of capacity. INAFORP turned away 20-30% of its applicants, the reasons for this were unclear.

A common problem of many vocational education/training systems is that high capital costs crowd out necessary operating expenditures, and equipment depreciates without realizing its full potential training value. Instead of being complementary, capital and operating budgets are treated as competitive -- a problem of underfunding of "up-keep." There are alternative ways to spread these costs more efficiently. A few are mentioned in Chapter Five.

## Implications for linkages

Linkages, even if defined loosely as contact between employers and trainers, are in short supply in Panama. The INAFORP Board would be an example of a formal linkage at the upper levels -- representatives of training meeting regularly with employer and union representatives. At the informal level, there are private contacts among employers and trainers -- but they are sporadic and nonsystematic. Private institutions notwithstanding, the training system in Panama is, by and large, not accountable to the private sector to the point of maintaining regular contacts at the working level.

#### ASSESSMENT

General Observations

Below are the results of interviews and discussions with employers, unions, trainers, and government officials. The material presented is interpretive in nature, combining information from a variety of data sources.

From our discussions and background sources, seven major themes stand out:

- The majority of training activities are concentrated within the industrial sector (manufacturing, construction, electrical work) while the majority of employment is in agriculture and services. There is, thus, a mismatch between demand and supply.
- Reinforcing this problem is the diversity of the Panamanian economy and, by implication, of the needs for training. There is a real problem of lack of scale, especially within the industrial sector, which makes it difficult to organize training courses in response to the disparate needs of employers.
- The training sector is faced with a serious budget problem which inhibits its ability to respond to the diverse needs of the economy.
- 4. There is general agreement on the need for more practical work experience within training programs, such as some combination of on-the-job training (OJT) and institutional instruction. There is, however, a perception that the labor code complicates efforts to provide OJT.
- 5. There is agreement among both employers and trainers that work attitudes (motivation, responsibility, honesty, punctuality) could stand significant improvement. Both groups agree, however, that this is not so much a problem of training as of basic education.
- 6. While there are serious obstacles to the formation of the desired training system, they are not insurmountable. The basic structure exists; what is needed is greater imagination and flexibility.
- 7. There is definitely a problem of linkages in Panama, and it is primarily a problem among employers and within the training sector. Until intra-sectoral information flows are improved, it will be difficult to improve inter-sectoral linkages.

The general picture that emerges in Panama is that of a country poised for growth, and an emerging training system. Neither potential is likely to be realized in the short term, however, and in both cases will require time and effort,

Employer Views

Structured questionnaires were administered to 40 employers, with results supplemented by conversations with employer and union representatives. The sample included more smaller firms: 15 had 15 or fewer employees, 12 had between 16 and 49 employees, and 13 had 50 or more employees. Of course, a sample size of 40 permits only gross generalizations, even for a small country like Panama. The fact that the sample was restricted to established enterprises, is evidenced by expectations about the future: more than half of those interviewed expect business to increase in the coming year, and less than one-third are operating at less than two-thirds of their capacity. However, an effort was made to select firms that were representative of users of the existing training system.

The questionnaire and subsequent discussions were designed to address three basic issues: whether there is an existing or expected need for training, whether potential users are aware of training opportunities for their employees or new recruits, and, if so, their assessment of the system. These issues are discussed in turn.

Employers were asked about the major factors inhibiting production and productivity in their firms. They accorded the greatest importance to energy problems (electrical blackouts), a response explained by the fact that there were a number of uncharacteristic electrical failures in Panama City in the two weeks prior to the survey. Aside from this, the most important problems are costs, particularly capital costs, and lack of market demand. Some of the least important problems include lack of infrastructure and lack of basic education (reading, writing, arithmetic). Utilizing this approach, lack of trained personnel ranks seventh in the list of 14 major categories, behind such factors as lack of capital and government regulations. A more direct question as to the two most important problems yielded a rank of fifth for training (tied with lack of primary materials).

It is important to note that these results differ significantly from those of a recent AID-financed study by van Steenwyk (1984), even though the questions were similar and the sample frame was nearly identical. Van Steenwyk found that the two most important factors listed by employers were lack of markets and lack of trained personnel. That study, however, used fewer categories than is the case in this survey and, most importantly, it was clear to all respondents from the beginning that the van Steenwyk study was designed to get employer views on possibilities for expansion of in-plant training. Whatever the reasons for the difference, listing training as a medium-level contributing factor to problems of profitability seems more plausible than listing it as one of the most important factors -- especially in view of the current economic conditions in Panama.

Other parts of the questionnaire reinforce this conclusion: well over half of the respondents indicated they had no particular problems finding skilled personnel; many, in fact, fill vacancies through promotion rather than recruitment. Nor do most expect to have any such problems in the future.

A related issue did surface in discussions with employers and other labor market representatives. As illustrated by the importance attached to costs, employers view training as a way to increase productivity in order to lower unit labor costs. The sentiment here, as in most countries, was "especially for the majority of new entrants, I don't need trained personnel so much as I need personnel prepared for the kind of training I can provide."

Most employers reported knowing about one or more training institutions in the country, but a surprising proportion (nearly half) did not. There seems to be a recognition awareness rather than a knowledge of such specifics as course offerings, instructor quality, etc., except for some employers who regularly use or hire from specific institutions (such as INAFORP, the Universidad Tecnologica, or the Don Bosco Technical Institute), or from those who have representation on the INAFORP Commission. There is clearly a lack of information about the training sector.

To the extent that there is a demand for training in Panama, it seems to be a demand for job-specific training, which implies a coupling of institutional and on-the-job training approaches. (More than half the employer sample suggested they were already providing some form of on-the-job training). In this regard, the results of this study are consistent with those of van Steenwyk: 94 percent of the 104 firms surveyed in that study maintained that it was important to provide in-plant or employer-initiated training programs for their employees, but only 52 percent (about the same number as in this survey) were actually conducting such programs. Moreover, van Steenwyk found that the most frequent response to the question "what other areas might be helpful" (aside from in-plant training) was to improve public sector training programs for entry-level jobs.

Further affirmation for the desirability of a mixed training system (institutional, OJT) was provided by answers to the question whether employers would prefer to have training given within their enterprises or to purchase it from outside sources, under the assumption that training was needed in the first place. Two-thirds of the sample responded in favor of in-plant training, listing such reasons as better control of content, or "my needs are so specialized that nobody else could provide the necessary training." The one-third who preferred to use outside training sources generally listed the availability of more advanced technology as their reason. Most of these, as would be expected, were smaller employers. It is important to note that 15 percent of the responses favored a combination of training sources.

Another item of concern among employers is the Labor Code. While only one-quarter of the sample listed this as an important or very important impediment to the productivity or profitability of their

firms, subsequent discussions showed that it was perceived to be a hindrance to a desired training system. There is a fair amount of misinformation on this topic, as there generally is on legal matters where interpretation takes precedence over intent. There are two features of particular concern.

The first is a severance pay provision, applicable to all employees after only 15 days after point of hire. If the firing of such a worker is found to be without "just cause" (mainly gross misconduct) by a conciliatory tribunal, dismissal can only be effected by paying a premium of 25 percent above the legal compensation provided for in the Labor Code. As always, raising the costs of firing labor serves to reduce the process of hiring labor.

The Jacond feature is that there is an "equal pay for equal work" provision in addition to a universal minimum wage law. This, along with the severance pay provision, combines to constrain possibilities for on-the-job training and virtually rules out apprenticeship programs. Employers feel that lower productivity during periods of training must be compensated by lower rates of pay and that, in any event, they should not be forced to promise steady future employment for all the persons that they help to train. Such features are under review by the newly elected Administration, and at least one instance was found where it was possible to circumvent the Code. Specifically, a Taiwanese firm contracted with INAFORP for a combined work study program, and, because trainees were paid by INAFORP rather than by the firm, they maintained a legal status as students rather than as employees. In general, however, the Labor Code is perceived as severely constraining in-plant or on-the-job training.

The bottom line of these interviews and discussions is suggestions for improvement. Among them, the most important was a plea for the expansion of course offerings. Many of those interviewed complained of a lack of courses related to their specific needs. It is true that when those needs are cross-checked they often prove too specialized or too diverse to be served well by a traditional institutional approach. In some cases, however, e.g., in ship repair, or shoe making, the lack of course offerings is related, at least in part, to the lack of linkages.

One particularly useful idea regarding needed courses surfaced in our discussions: more than once the sentiment was expressed that, in addition to technical training -- a high order priority -- there was a need to sensitize employees to the problems being faced by industry and even to prepare some for administrative responsibilities. In Panama, as in many other countries, mid-level supervisors are often those who have been promoted from the rank and file. They are the cream of the technicians, but they often lack managerial or administrative abilities. Managerial courses exist for high-level professionals but, according to reports, not for front-line supervisors. Some see a need for such courses, with a possible emphasis on problem-solving skills.

Along with a desire for more extensive course offerings, there was a stated desire for more in-depth and quality instruction as well,

with particular emphasis on technical instruction. ("It's easy to find trained professionals, but I can't find any technicians." "We need more schools or institutions which provide more technical instruction.") This seems to be another manifestation of the specialized needs of employers in Panama, perhaps best illustrated by the remark, "For example, in Panama there are only 3 good mechanics for printing machinery and one of them is Polish."

As noted, there was a widespread view that existing training was too theoretical and required a much more practical work experience component. This relates to instructors as well as to course content. In addition to wanting more in-plant training, employers seem to want institutional courses to be followed by a period of work experience (at reduced wages, which they fear would be in violation of the Labor Code). Some sort of "dual apprenticeship" system, combining periods of formal training with in-plant experience would seem to satisfy their demands. (See the following Chapter.)

Finally, two other suggestions can be mentioned. First, employers are concerned about the lack of "work ethic" (honesty, responsibility, motivation) among younger employees, and some feel that more attention should be given to this topic in training programs. None were specific as to how this could be accomplished, nor did any seem aware of the possible connection between motivation and wages. IMF data, for example, show a significant drop in real wages in Panama since 1979 -- 2% in the private sector, 4% in the public sector between 1979 and 1982.

Four employers mentioned the need for assistance in determining what their work force and training requirements should be, and two others mentioned the need for better dissemination of information regarding the availability of training services. No doubt others would have mentioned the same topics had they thought of them.

As to what all the above means for linkages, it is clear that they could stand improvement, from both sides of the labor market equation. Employers do not seem to be able to get their needs made known to the training establishment, and vice-versa. The problem, as mentioned previously, can be traced to the lack of information flow within each sector. Furthermore, while a structure does exist to permit the flow of information between the sectors, it is not being utilized very effectively at the moment. Many of the key actors, representatives of both sectors, are aware of the problem and its causes, but they are also aware of the costs of trying to solve it. Generating information flows in connection with training needs among employers implies search costs. The fact that the employers are small but numerous, with needs that are specialized and disparate, operates to increase these search costs. And the costs of getting information about training opportunities out to these employers are also high, apparently beyond the scope of already strained institutional budgets.

Views From The Training Sector

As already indicated, trainers are generally aware of many of the complaints voiced by employers, although they probably lack appreciation of the specifics. They are favorably disposed to the idea of creating better linkages with employers -- not having given much thought to the possibility of improving communication among their own ranks -- but they cite lack of funds as a constraining factor. Hore specifically, the interviews and observations of training centers suggest the following problem areas:

- embryonic stage, and as such is experiencing typical administrative and organizational problems. The potential capability of the institution to provide quality nonformal vocational skills through training and upgrading is without question. Its capacity for the administrative oversight and coordination of nonformal training is much more questionable, particularly in light of current funding problems. Although it is too early to speculate about INAFORP's chances in these areas, it can be noted that administration, management, and coordination issues do not appear high on its current list of priorities.
- INAFORP, as well as other skill training centers throughout the country, has a need for curriculum planners, placement officers, and better qualified instructional staff.
- Little evidence of standards or certification could be found in the various training centers visited, a serious gap to address before the private sector can be expected to cooperate in the training system in a partnership arrangement.
- All the training institutes in Panama, including INAFORP, need to improve visibility and image through increased community and public relations programs. In addition to linking with employers, trainers need to create linkages with potential students.
- Given the location of existing facilities relative to target populations, there is a need for additional vehicles to be used for transporting students to school and training sites (at least for those outside Panama City).
- Linkages between INAFORP and private sector employers appear to be limited and in need of strengthening. It is uncertain that the private sector representation on the National Commission of INAFORP is currently of much assistance in this regard. Employer representatives seem to be playing a fairly passive role, largely because they are not well linked in with their own constituency. In other words, while there is employer representation on the INAFORP board, this representation is limited and does not speak for all employers.

- In general, equipment and tools are adequate and modern.
  This is true for INAFORP and for a number of other institutions throughout the country -- but not for all.
  Deficiencies in available instructional materials exist and some may affect the quality of the training period.
- There is need to develop a better system for determining the training needs of business and industry. Other requisite activities related to employment, training and existing labor market opportunities would include needs assessment and occupational task analysis.
- Some mechanism needs to be established to permit the formation of linkages among trainers, whose uncoordinated activities occasionally overlap with resultant resource wastage.
- No placement and follow-up system (tracer studies) is implemented to obtain data to help measure the impact and effectiveness of training programs. Because of a lack of feedback regarding subsequent employment experiences of graduates, programs continue to train for fields which are overcrowded.
- There does not exist an adequate mechanism for training and upgrading the skills of vocational instructors in the country. Short-term inservice training would be useful.
- There are numerous recruitment and retainment problems with respect to vocational personnel, due to relatively inferior wages.
- There does not exist a system for providing cooperative on-the-job training within the private sector.
- The vocational/technical curriculum in Panama is traditional, inflexible, and obsolete with respect to technology and methods used in the private sector.

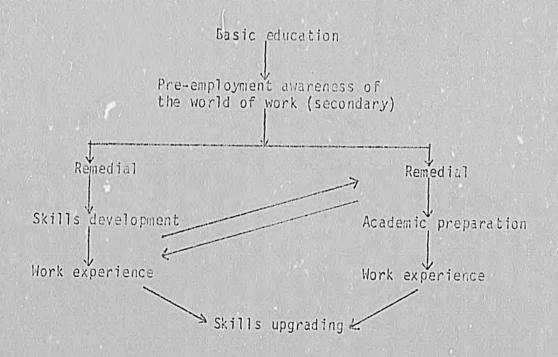
#### CONCLUDING REMARKS

Training System Objectives

In order to organize a useful discussion on a difficult topic area within a country characterized by disparity and diversity, it is useful to begin by asking what would be the elements necessary for an optimal training system in Panama given the constraints discussed. The starting point -- responsiveness to private sector needs -- is given by the existing AID strategy. Within this context, the goals of training would be to reduce the length of time of unfilled vacancies and to lower unit labor costs (including employer search costs) through productivity increases, subject to constraints on budget, the available set of training institutions, operative regulations, etc. In this framework, linkages can be viewed as an overhead function, with associated costs, aimed at promoting the efficiency (lowering costs for achieving the dual objectives) or effectiveness (maximizing the objectives for a stated level of costs) of the system.

In an ideal situation, the way to address this problem would be to answer the following questions: Is training necessary in the current or future contexts of Panama? What kind of training would be most responsive to private sector needs? For whom is the training intended? Who should be responsible for providing the training, and how should the desired system best be effected? The situation here is by no means ideal, since there already exist significant fixed-cost institutional investments which must be considered when trying to introduce recommended improvements.

From an employer perspective, skills upgrading could best take place within a generalized system, characterized by the following elements, at a minimum:



Although basic and secondary education are for all, one may take either the academic or vocational route in the latter. In either event, there would be some sort of exposure to the world of work during the secondary school years, by way of one or more courses, field visits, etc. Techniques for job search, general employer requirements, and some basics of the Labor Code could be taught at this time. An effort would be made to deal with the admittedly complex topic of "work ethics" at this point.

Thereafter, students would self-select into the training or academic routes, with the understanding that crossovers could take place at a later date. Remedial educational possibilities could be made available in either case (junior colleges, adult education, etc.). Skills development for initial job entry would have a strong on-the-job training component, perhaps in the form of an apprenticeship system (see below). Given the economic outlook, skills upgrading for already employed workers would receive increased attention, at least for the time being.

The primary elements of such a general structure already exist in Fanama, except for pre-employment instruction. What is at issue are the specifics. Those specifics, and the priority to be accorded to each, are an inherent function of the economic and institutional context of the country. The following points were made in earlier chapters, and are repeated here by way of summary:

- The economy is diverse and the skill needs of employers are specific and disparate.
- The economic growth outlook for the medium term is poor, and there is significant uncertainty as to what the content of that limited growth should or will be.
- There exist a great many training institutions under the ostensibly coordinative responsibility of the recently formed semiautonomous National Training Institute, INAFORP. There does not exist anything which could be called a "training system."
- For many reasons -- lack of money, lack of thought, the difficulty of the task -- there does not exist a proper set of linkages between private employers and providers of training. A structure exists for linkage between the two sectors, but communication and organizational failures within each sector have precluded that structure from functioning in any meaningful fashion.

In response to the above, a desirable training system for Panama will have to be, above all, flexible and adaptable, and to accommodate predictable rapid change within the context of uncertainty as to the likely content of that change. Some of the desired specifics of such a system would be:

A wider set of course offerings, to accord with the diversity of employer needs.

- Greater specificity of course content, to match employer needs.
- A heavy emphasis on on-the-job training to accord with the two points noted above.
- Mechanisms to allow employers to identify and articulate their needs -- a matter of particular concern for smaller employers and new industries.
- Increased emphasis on skill upgrading rather than on training for entry-level jobs, with other mechanisms used to deal with rising youth unemployment. Entry-level training will still be required to accommodate the needs of most industries which will emerge in the process of structural change.
- Some mechanism to permit employers to become aware of training opportunities.
- Some mechanism to allow employers to sort among job applicants and to be reassured about the quality of graduates of training programs.
- Ocst efficient programs, with efforts to shift costs away from the beleaguered public sector budget.
- A budgetary commitment to finance the overhead costs necessary to establish such a system and to insure provision for required linkages.

# Possible Responses

This study's general conclusion regarding training in Panama is that while there are many problems to be faced, they are not insurmountable. The greatest need is for ideas and for the willingness to implement them. There always can be said to exist "a need for training" -- in fact, because of information and organizational gaps, it can be argued that there exists considerable latent social and economic demand for training in Panama -- but in the current context the need is specialized rather than general. This suggests the desirability of a system which continues to incorporate generalized training but is flexible enough to allow a quick response to emerging specialized needs. It also suggests, particularly for specialized training, that a case can be made for shifting the onus of training costs more onto beneficiaries, such as trainees and employers.

Given a desire to promote greater private sector involvement in the system, it makes sense to locate more leverage and responsibility for change primarily within that sector. This might be accomplished by stimulating the effective demand for training, through a system of vouchers, loans, or tax write-offs for either employers or trainees. Panama, like most countries, allows tax deductions for investment in physical capital, so why not extend these to include investments in human capital? And if the loan approach is followed, costs to the government budget would be reduced depending on interest rate charges.

The tax deduction approach was mentioned as a possibility by a recent Presidential Commission on training. The loan approach has been discussed within U.S.AID/Panama for some time. The possible use of vouchers by potential trainees has not been mentioned, due to the fact that so much of current training is free to participants. A debate on the relative merits of the various approaches (including direct subsidies) is beyond the scope of this paper, except to note in passing that:

- The loan approach is less dramatic, more gradualistic, and thereby likely to be preferred by public sector authorities.
- The tax write-off approach for employers who invest in training would likely have a greater impact on the demand for training, except for new firms which might not have much of a tax burden to frite off.
- A combination of approaches (e.g., tax deductions for established firms, loans for new firms) is clearly possible.
- Under all approaches, there is a need for an administrative structure which implies overhead costs. Furthermore, no matter what approach might be selected, there will likely still exist a need for ancillary activities and associated costs, to promote linkages: employer associations, newsletters, polls regarding training needs, placement or curriculum development activities, etc.

The idea, though, would be to stimulate the demand side of the training market, in an attempt to make the training sector more responsive and accountable to private sector requirements. This could be accomplished through the purchase of service contracts, thereby giving the private sector leverage to get its requirements filled and the training sector the incentives to meet those requirements. The contracts could finance training within the firm (with outside instructors) or in institutions, or some mix depending on private sector needs. These activities would be on top of a basic core of traditional institutional courses which would continue to be offered by INAFORP, the Technological University, and others.

Demand stimulation, with no corresponding changes in the supply side of the market, could be counterproductive. The training sector will have to get our more into the private sector, in order to try and identify needs and potential responses. INAFORP, as the ostensible head of the training sector, will have to take a more active role in this regard. One step which could be taken would be to organize teams with instructors from various institutions to perform training audits within firms. These activities could be coordinated with those of the Investment Development Council to serve the needs of new businesses. INAFORP might also try to arrange short-term contracts with supervisors from the private sector who could assist as instructors for in-plant training. Where facilities are limited (as in the case of smaller firms), those of INAFORP could be used, or the facilities of other institutions could be rented. The idea is to supplement basic craditional course offering

with low-cost short-term courses specifically tailored to the needs of individual firms.

Within the traditional training sector, efforts will be needed to provide some degree of work experience in response to employer recommendations. Short of changing the Labor Code, consideration might be given to providing the experience on a part-time basis (part-day, part-week or part-year), or in the summer, even at given wage rates. Employers seem more converned about the severance provisions of the Code than about wage rates, and, in any event, it might be appropriate to compensate them for the training they provide. In all cases, it would be desirable to channel any compensation earned by trainees (who should be regarded as trainess rather than as employees) through training institutions. Assignments within firms should be of specified duration, with the clear understanding that employers would not be obliged to guarantee longer-term employment.

The recommended training system would attempt to respond to the diverse needs of the Panamanian economy. Precisely because of the diversity necessarily embedded in the recommended system, some external controls are required. Among other things, employers must be assured that the training system provides the services that they are paying for, and that the results are worth the investment. This will require standards and certification, so that employer uncertainty and the costs of sorting among promising job applicants can be reduced. Standards and certification are useful in all settings. They are imperative for systems with significant on-the-job training components.

## Industry Needs

One of the chief functions of certification is to promote the flow of workers from one firm to another within given industries, by reducing employer uncertainty regarding skill levels and expected productivity. This is less of a problem in Panama, where many industries contain few firms, and the costs of acquiring information are low in consequence. However, not all industries are so underdeveloped (services for example), and future growth may complicate matters considerably. For these reasons, among others, certification will become more important in the future.

But the question of industry structure is extremely important since it is one of the primary justifications for public sector funding for training activities. Left to their own devices, private employers would have a tendency to under-invest in human capital and to make those investments overly specific from a social perspective. Fearing that employees might quit after training to work for competitors, firms are induced to minimize the amount of training they provide and to make it so specific that it can benefit only themselves. Of course, if all employers provided necessary training, this dilemma would be overcome. One might lose the investment made in a given employee who later quits, but it could easily be replaced from the pool of available trainees, created by the investments made by employers as a group. This is the justification for the options listed above regarding demand stimulation: to provide an incentive for employers to act as a group, in a way which

is beneficial to all the individuals in the group and which would never be realized if they continued to act purely out of narrow self-interest. Incentives do need to be given to try to make training suitable for the needs of individual firms (promotion of industry-specific over firm-specific human capital investments). It is precisely for this reason that certification and standards can be seen as necessary adjuncts to demand stimulation activities.

Linkage Formation

The kind of system outlined above -- a parallel system consisting of a core of longer-term traditional courses supplemented by shorter courses within firms or mobile centers -- includes a number of features which would put a great deal of leverage over the training sector within private sector hands: demand stimulation (loans, tax deductions, or vouchers) contracting; a greater mix of instructors (some contracted from private industry); training audits of skill needs provided by teams of specialists; more emphasis on skills upgrading and on-the-job training; some form of apprenticeship, standards and certification. But this system does not include specific organizational structures to allow that leverage to be realized.

There are essentially three points of linkages with which to be concerned: within the private sector, within the training sector, and between the two sectors. Under its coordinating authority, INAFORP could no doubt form training teams and it could improve communication among members of the training community. In fact, it is already charged with such responsibilities. One inhibiting factor is lack of budget, and this could be overcome either by the receipt of the stipulated INAFORP budget or the enactment of the demand stimulative activities mentioned above. The structure exists for private sector involvement in decisions about training, by way of representation on the commission which controls INAFORP activities. That commission now meets twice a month. If the private sector wants anything added to, or subtracted from, the training sector agenda, it is already in a position to make its desires known, but only in a limited sense. The fact that this is not happening to everyone's satisfaction is in part the fault of the organizational structure (which highlights the fact that structures alone are not sufficient to insure linkages, and that linkages alone are not sufficient to insure program success).

As previously stated, the lack of information flow within the private sector presents a major problem. The needs of employers apparently are not filtering up to the decision-makers and what's going on in training is not filtering down to individual employers. The reasons for this are numerous: a large number of smaller firms, specialized needs, lack of proper organizational structure, lack of funds to support information flows. There needs to be a more direct line of communication between individual employers and their representatives on INAFORP -- a confederation of employer associations to match union confederations might be a useful step.