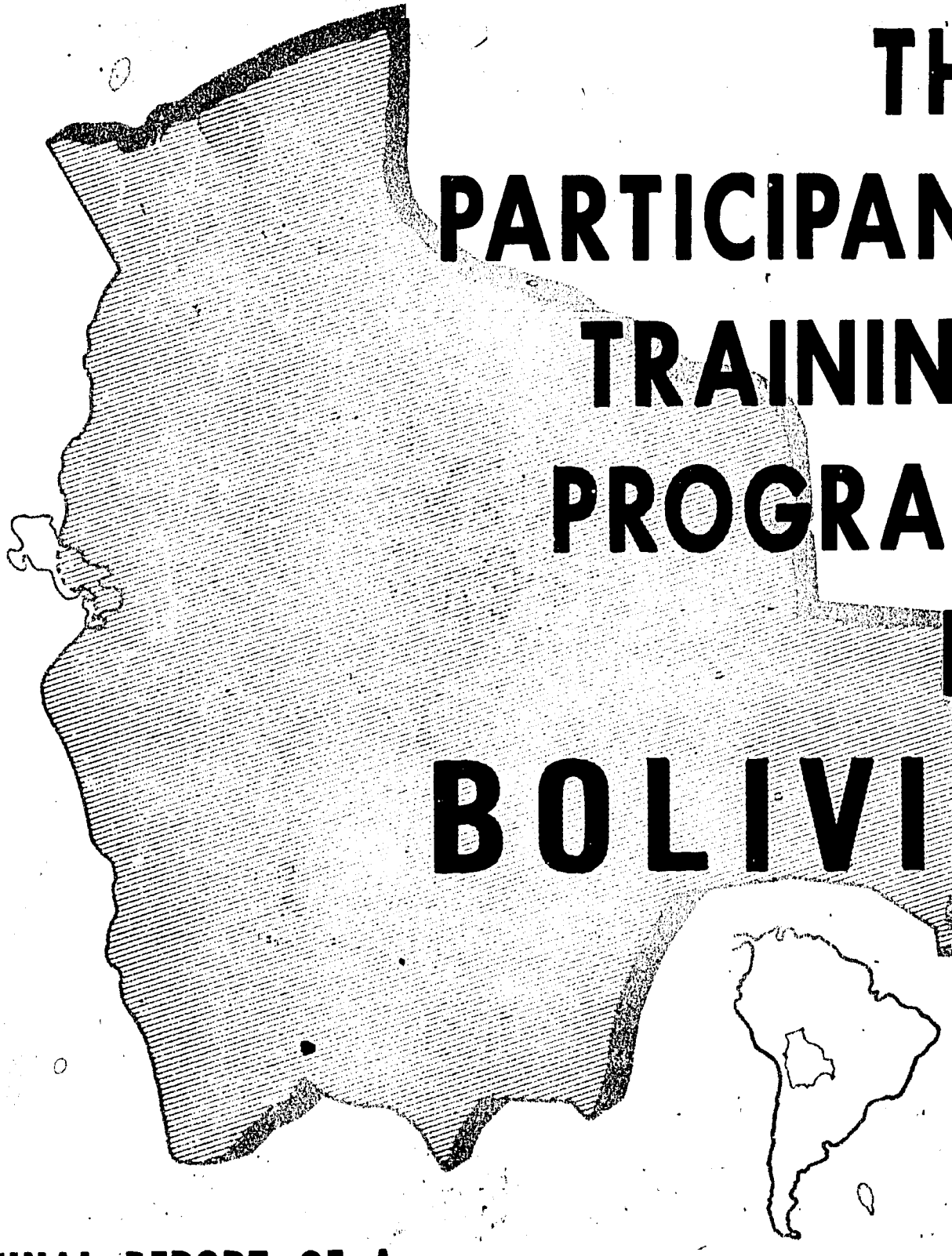


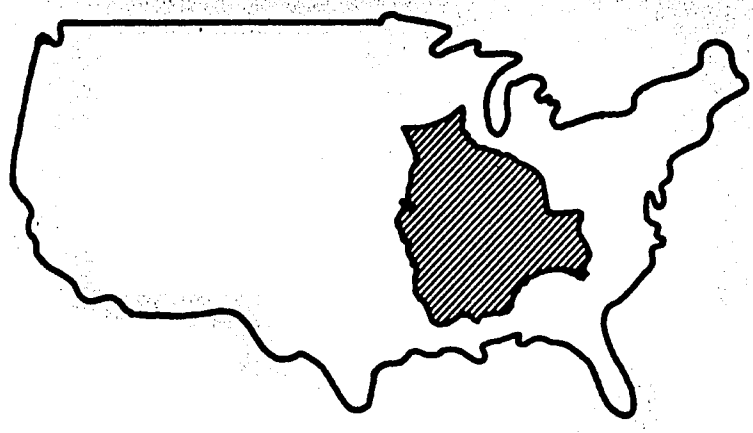
THE PARTICIPANT TRAINING PROGRAM IN BOLIVIA

FINAL REPORT OF A TRAINING EVALUATION STUDY

AREA OF BOLIVIA ..... 424.162 square miles

COMBINED AREA OF THE 15 FOLLOWING STATES ..... 423.735 square miles

GEORGIA	58.876
FLORIDA	58.560
WISCONSIN	56.154
NORTH CAROLINA	52.712
NEW YORK	49.576
VIRGINIA	40.815
SOUTH CAROLINA	31.055
WEST VIRGINIA	24.181
MARYLAND	10.577
VERMONT	9.609
NEW HAMPSHIRE	9.304
MASSACHUSSETS	8.257
NEW JERSEY	7.836
CONNECTICUT	5.009
RHODE ISLAND	1.214
	423.735



SOMETHING ABOUT THE COUNTRY

Bolivia is a land-locked country near the Center of the South American continent. In colonial times it was called "Upper Perú". Its present name dates from its independence, won from Spain in 1825 under the leadership of Simón Bolivar.

The Republic of Bolivia has an area of approximately 416,000 square miles, about the size of Texas and California combined. Its population is approximately 4,000,000.

The country has three well-defined geographic zones: (1) the 12,350 foot-high upland plateau known as the "altiplano", (2) the temperate and sub-tropical valleys of the eastern slope of the Andes Mountain Range, and (3) the northern and eastern lowlands comprising headwaters of the Amazon Basin and the Paraná River system.

The altiplano extends for some 450 miles from Southern Perú to the Argentine border, and has a maximum width of about 120 miles. Although it comprises only about 14% of the total area of Bolivia, it contains about two-thirds of the total population. It is populated mostly by Aymara and Quechua Indians, who support themselves with a primitive agriculture and sheep raising economy including "auquénidos" (llamas, alpacas and vicuñas). The main cities in this high-altitude zone are La Paz, Oruro and Potosí.

The eastern cordillera of the altiplano contains the main mineral deposits which have constituted the principal wealth of the country. Its mines produce tin, wolfram, antimony, copper, zinc, silver, lead and gold.

The temperate sub-tropical valleys are known generally as the "yungas". These are devoted mainly to small-scale agriculture, with coca, coffee, fruits, potatoes, wheat and corn as the main crops. Although several important cities, Cochabamba, Sucre and Tarija, are located in the intermediate valley zone, many farming areas suffer from lack of marketing outlet.

The lowlands known as the "Oriente" cover two-thirds of the country's total area. This zone contains good agricultural and grazing lands which will be developed as roads are built to open them to colonization. It is believed that the future of Bolivia lies in this as yet relatively undeveloped part of the country. The petroleum-yielding zone falls between the "Mato Grosso" and "Chaco" areas. Principal cities of the lowland are Santa Cruz, Trinidad, Riberalta and Cobija.

THE PARTICIPANT TRAINING PROGRAM IN BOLIVIA

FINAL REPORT OF A TRAINING EVALUATION STUDY

United States AID Mission to Bolivia
La Paz,
Bolivia

December, 1964

TABLE OF CONTENTS

SUMMARY HIGHLIGHTS

BOLIVIA AND THE PARTICIPANT PROGRAM

Bolivia, whose Participant Program is the subject of this Survey, is a country of undeveloped potential located in the heartland of South America.

United States aid to Bolivia has been given for more than 20 years through economic assistance and technical cooperation primarily in the fields of Health, Education, Agriculture, Labor, Industry and Mining Public Administration and Public Safety, and Transportation.

The Participant Program has been closely related to the projects of the United States Missions to Bolivia. Through 1963, more than 1600 Bolivians had gone abroad for specialized training. Seven hundred and one returned participants were interviewed out of a universe of 1422.

The Bolivian participant is male, married and about 35 years old. He has more than a high school education and approximately 7 years in his field of specialization. He probably lives in La Paz and works for the Bolivian Government or a state entity at the middle management level.

PRE-TRAINING FACTORS

Pre-Training and training procedures affect the quality of training.

Good selection is of basic importance. Most Bolivian participants are selected by their Bolivian supervisor or a U.S. technician. There are no guidelines for selection. The generally high calibre of the Bolivian trainee may be attributed to careful selection by U.S. technicians.

Qualifications considered the most important by the participants are: personal ability, needs of the job, and professional and educational preparation. Personal contacts were considered fairly important. Language ability was thought to be the least important.

There is almost no participation in program planning by the trainee and the supervisor.

Most of the training programs were arranged completely before training began. This appeared to be an element contributing to participant satisfaction and good post-training utilization.

Supervisors and trainees would have liked to play a greater part in pre-program arrangements.

A high percentage of the trainees were well informed prior to training about their programs, and about non-technical (orientation) aspects of their training.

THE TRAINING PROGRAM

Three-fourths of the training programs (76 per cent) took place in the United States (continental U.S., Canal Zone, Puerto Rico). Third country training (24 per cent) took place primarily in Latin America.

The majority of the trainees had a combination of more than one type of program with two-thirds having observation tours and on-the-job training and one third following an academic program. On the average, observation tours lasted approximately a month, on-the-job training slightly over 3 months, and academic training slightly over 8 months.

Two-thirds of the participants thought their training was "too short".

Slightly more than two-thirds of the trainees thought the level of their program was "about right".

Two-thirds of the participants received orientation that took more than one day, and only four per cent considered they would have preferred the time for other things. Three-fourths of the trainees thought the money for per diem was "about right". Over half were entertained in private homes and over 95 per cent enjoyed it very much. Less than a fourth thought they should have had more activities.

Only 10 per cent attended a communications seminar at the close of training, and not all who did have been able to use what they learned there.

ATTITUDES ON TRAINING

Almost without exception the participants (96 per cent) were "satisfied" with their training programs, and the number of "satisfied" participants was rather evenly distributed by field of activity in which training was given. Two-thirds of the participants who went to the United States and the Canal Zone were "very satisfied".

Participants following an academic program, who received a degree, found the degree very valuable. Those who did not receive a degree would have liked to have one as a form of recognition for job advancement.

Criticisms of training dealt with lack of relationship of the training program to country and participant/job needs, and emphasis (or change in emphasis) related to practical versus theoretical training. Rather few changes were made in programs prior to training (157 cases), but most participants had suggestions to make concerning what changes they would like if they had a chance to go through the program again. These were most frequently related to program arrangements and the need for more specialization.

The technicians and supervisors rated training as satisfactory.

Technicians' criticisms dealt with the need for better advance planning and longer training.

The supervisors considered the training "worth the cost and effort" for three-fourths of the trainees they knew. They too would have liked programs better oriented to participant and Bolivian needs.

Three-fourths of the participants thought training was "the most important thing they had ever done", primarily because of the educationa experience it represented and its contribution to improved job performance.

TRAINING UTILIZATION

Nine-tenths of the trainees said they are utilizing at least some of their training acquired skills.
Sixty-five per cent of the Bolivians can be classed as "high utilizers" of training.
Top policy makers, engineers, and professionals have the highest scores as do those best educated and with the most years of specialization.

Ninety-nine per cent of the returned participants are employed and over 50 per cent in training related work.

Returned participants are applying their training in relation to the fields of economic endeavor in which they were trained.
The record of transmission of training is very high (98 per cent).
Improved practices on the job, teaching, and giving demonstrations are the most frequently cited methods of training utilization.

The supervisors and technicians substantiated the trainees' estimate of the degree and means of training utilization.

Problems of training utilization are lack of equipment, money, trained personnel, and political, economic, and social conditions of Bolivia which limit good job performance.

There is a high correlation between "satisfaction" with training and good training utilization.

Despite the high quality of the training and an excellent record of utilization, improvements can be made in the Bolivian participant program which will enable it to be more effective.
"Follow-up" after training is one of the most important ways in which this can be done. Less than half the participants interviewed had had post-training contact with U.S. technicians or USAID/Bolivia. Only one-seventh were members of a U.S. professional society. Two-sevenths received and used U.S. publications.

LIST OF FIGURES

LIST OF TABLES

Note to reader:

Many of the tables included in the text and Appendix A are titled according to the corresponding cross tabulation given in the book of model tables provided in the Survey plan, as prepared by AID/Washington. These titles generally consist of two distinct factors and the relationship is shown in the use of the word "by" which signifies "in relation to". There were several standard series developed according to the major field of activity of the training, the year the participant left for training, etc. As the total table title is often very long, when the table appears in the text, the factors involved are listed at the top of the table, and the word "by" is centered between them, thus indicating the relationship of the factors involved in the tabulation.

Some of the composite tables are made up of factors which are too numerous to list in the table title, in which case "selected factors" is used in the title and the factors themselves can be clearly understood by reading the table itself. The figures following the title of each table are the card and column number on which the data of the tables are based.

LIST OF APPENDIX TABLES

Note to Reader:

No card or column numbers are given here because they are attached to each table in the Appendix.

ACKNOWLEDGEMENTS

The efforts of many are required to conduct as extensive a study as is represented in the Final Report of the Training Evaluation Survey of the Participant Program of the United States AID Mission to Bolivia.

The most generous thanks are accorded the Bolivian Survey staff for collective and individual capability, dedication and interest evident at all times. The interest of the Director of the United States Aid Mission to Bolivia, Mr. Alexander Firfer, and the Deputy Director, Mr. John C. Eddison, in initiating the study, is particularly appreciated. Appreciation is due also, for all possible assistance, to the Training Office, the Communications Media Branch, and the Executive and Controllor's Offices. Dr. Robert Edminster, USAID/Bolivia Economic Advisor, gave valuable editorial advice. USAID technicians collaborated generously whenever called upon for counsel.

Survey data were recorded and tabulated in the National Sampling and Machine Tabulating Departments of the Office of Census and Statistics of the Ministry of Finance. Special thanks are tendered to the Director of the Office, and the Chiefs of the respective departments for granting permission to use the IBM machines, and supervising the processing of the data.

No effort was spared to conduct a conscientious evaluation, to seek answers to the questions posed in the world-wide study plan, and to analyze the Survey findings for better understanding of the problems and achievements of training in Bolivia. It is hoped, that as a result of this study, participant training in Bolivia will receive new impetus.

Katherine H. Hoben, Ph.D.
Survey Director.

INTRODUCTION

The evaluation study of the Participant Training Program of the United States AID Mission to Bolivia, covering the years 1943-1963, was initiated and conducted according to instructions specified by the International Training Division of the Agency for International Development, Washington. The purposes of the study (listed in the airgram, ICATO A-175, November 5, 1959) are as follows:

1) To ascertain whether participants are returning to the jobs for which they were trained, effectively using the training and transmitting it to others.

2) To identify factors contributing to or hindering utilization of training and communication of acquired knowledge and skills.

3) To ascertain whether the training provided was at an appropriate level, of good quality and relevant to the needs of the participant and his country.

4) To ascertain whether the non-technical aspects of the program (e.g. orientation, extra-curricular activities) were being carried out adequately.

5) To identify weaknesses in administrative practices and procedures.

6) To study other aspects of the planning and management of participant training, such as the relative merits of U.S. vs. third-country training, the relevance of participant's age to his success, etc.

The Training Evaluation Survey of USAID/Bolivia interviewed from random and stratified samples 701 returned participants, 49.3 per cent of a total of 1422 cases of the Training Office alphabetical card file from which the samples were taken. One hundred and seventy Bolivian supervisors were interviewed relative to 258 participants; and 19 U.S. technicians were interviewed relative to 179 participants.

The procedures used in the study are described in detail in the Appendix B entitled Methodology.

To increase the reader's understanding of the Bolivian participant and United States aid and technical cooperation training, a few salient facts about Bolivia and the United States assistance programs are of interest and importance. This information is included in the first two chapters.

The remaining chapters are dedicated to analysis of the findings of the Survey. The chapters dealing with the training program and the utilization of training (Chapters IV and VI) form the heart of the study. The data compiled from the interviews are the basis of the cross tabulations and marginal tables (straight runs) which are used in the text of the Report and the supplementary tables in the Appendix. Definitions of special terms may be found in the Glossary.

CHAPTER I

BOLIVIA

Location, Geographical Characteristics and Resources

Bolivia, a country with numerous natural resources and great untapped potential, lies in the heartland of South America. A land-locked territory, it is bounded by Brazil, Paraguay, Argentina, Chile and Peru. Its area of about 420,000 square miles is roughly the size of California and Texas combine

Bolivia's geographic features provide the country with its major assets in terms of climate, soils, and mineral deposits, but at the same time constitute the most serious obstacles to the exploitation of these assets. The Andean mountain chain raises a massive barrier to internal commerce and to the import and export of goods and raw materials via the Pacific. The wide stretches of undeveloped land and the inadequate or non-existent transport facilities of the lowlands of Bolivia and adjacent regions of neighboring countries, constitute an equally effective barrier to domestic commerce and international trade to the east.

Bolivia is a country with three well-defined geographic zones: 1) the altiplano, or upland plateau where the administrative capital, La Paz, is situated at about 12,500 feet; 2) the temperate and tropical valleys of the eastern slope of the Andes system; and 3) the lowlands of the Amazon and Plata river basins.

Probably more is known abroad about the altiplano than the other two zones of Bolivia. The altiplano, comprising 30 per cent of the country and the least promising region for large agricultural growth, supports some 75 per cent of the population.

BOLIVIA

Area 424,162 sq. miles

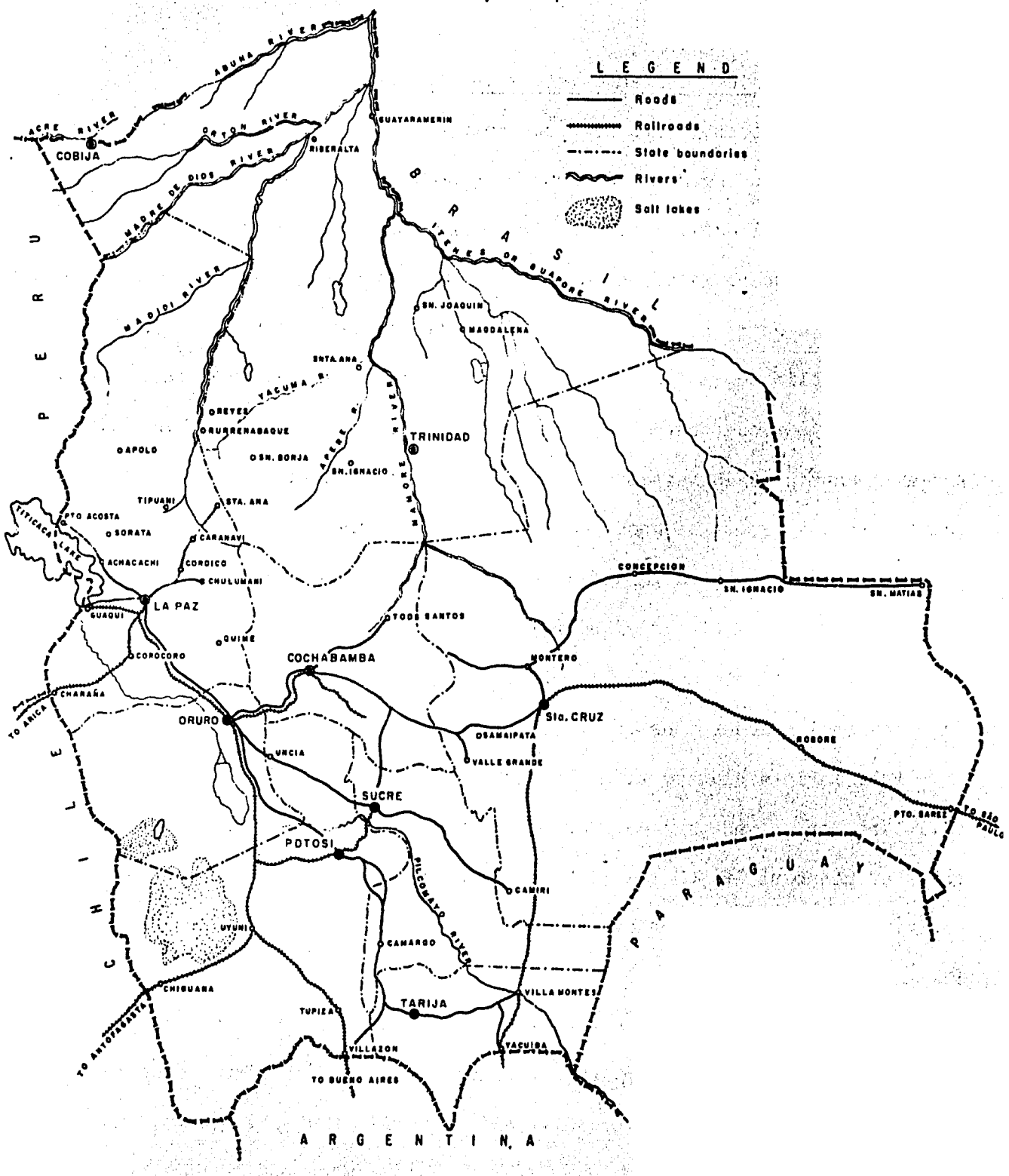


Figura 1

The eastern lowlands and the intermediate valleys, with 70 per cent of the total area and 25 per cent of the population, offer a variety of climatic, soil, and topographic conditions, which have the potentiality of producing a great diversity of semi-tropical and tropical produce as well as livestock. The varied climates of Bolivia permit the production of almost all known agricultural products but are especially suitable for high-grade coffee, sugar, rice, corn, potatoes, barley, oil seeds, tropical fruits and vegetables. Small scale agriculture and industry prevail in the valley area and several of the principal cities of Bolivia -- Cochabamba, Sucre, Tarija -- are located here.

The lowlands and plains, sloping to the east, include the districts of the Beni, Pando and Santa Cruz. It is on this area that many people think the future of Bolivia depends because of the good agricultural lands and potentials of oil and natural gas. As new roads are opening up the territory, both Government-planned and spontaneous relocation (colonization) of people from the over-populated and less productive altiplano is occuring.

The Santa Cruz district, including the city of Santa Cruz, is one of the most rapidly developing areas of Bolivia. Increasing the productivity here would help correct the present national economic imbalance. This economic disequilibrium is attested by the fact that 70 per cent of thepopulation is engaged in subsistence agriculture, and 90 per cent of the foreign exchange, produced by less than two per cent of the population, is derived from the production of metals, of which Bolivia possesses great and diverse deposits.

The eastern cordillera of the altiplano comprises the principal mineralized area with mines producing tin, tungsten, antimony, copper, zinc, silver, lead and gold. However, the dependence of Bolivia on exploitation and exportation of its primary minerals, particularly tin, is a source of weakness as

well as strength for the national economy.

According to some Bolivian observers, the misfortunes of the country have paralleled the discovery of its basic natural resources. Such a tendency can be noted not only relative to gold, silver, and tin, but other raw materials. The extensive guano and nitrate deposits in the southwest coast area were initially exploited by Chile with the permission of the Bolivian dictator Melgarejo. They were a primary cause of the War of the Pacific, after which in 1879 Bolivia lost all of her Pacific coast.

When rubber gained importance, the productive forests of the Acre region came to the attention of Brazil, who encouraged an independence movement there. The result was that after a brief war, Acre and additional eastern territory of Bolivia were incorporated into Brazil in 1903.

Between 1913 and 1916 the discovery of oil in the southeast, Chaco-Boreal, was an important factor in the conflict with Paraguay. The war lasted from 1932 to 1935 and was disastrous for Bolivia in economic, manpower and territorial losses.

In contrast to its rich natural resources, Bolivia's human resources are limited. With a population of barely four million, of which 80 per cent are Indian and 70 per cent illiterate, Bolivia suffers from a lack of trained manpower. The Indian campesinos, most of whom speak indigenous languages, live in a subsistence economy that permits them to buy little in the form of manufacture and imports. On the barren hostile altiplano and in the valleys, they till plots that are often too small to permit significant production for the market.

The miners who constitute 11 per cent of the labor force are well organized and vocal, though their lack of education and political experience limits their contribution, under present circumstances, to Bolivian development. For

generations they have toiled and suffered in the mines. Now having attained recognition their obstructive tactics are a factor in lowering the production and raising the cost per pound of tin.

The city workers -- as of the railroads and factories -- are also well organized. With the miners they make up a population sector of strategic economic and political significance.

The middle and professional classes are slowly increasing in number since being depleted by the exodus of many technical as well as propertied citizens and foreigners at the time of the 1952 revolution.

Economic and Political History

The autocratic tendencies of the Inca Empire, of which the present territory of Bolivia was a part, were continued and extended in the Spanish conquest.

The Spanish, although they brought Catholicism to the native Indians, did little to enrich the society they found on the shores of Lake Titicaca. The discovery of enormous silver deposits in the region of Potosí led to the exploitation of both mines and local inhabitants. Great wealth was taken out of the country with few returns. Even after independence, which was won in 1825, Bolivia remained with a feudal economic and social structure which was unbalanced in favor of a small elite.

Economically, Bolivia began to feel the influence of the Industrial Revolution in the 1870's but was unable to respond to its stimulation until early in the 20th Century. At that time the industrialized nations of Europe, mainly Great Britain, in search of markets and raw materials provided some development capital for tin and the construction of several railroads. Nevertheless, the pattern of the country remained rural rather than urban, and the core values were expressed in deferential and elitist terms and manifested few egalitarian tendencies. A privileged few reaped enormous rewards from Bolivia's resources but failed to invest much of this wealth in the development

of the country. Thus despite the influx of considerable U.S. capital after World War I, Bolivia's economy tended to remain on dead center.

With the revolution of 1952 the traditional and feudalistic society was shattered. The mines were nationalized, universal suffrage was proclaimed and agrarian reform was begun.

In the initial stages of the revolution Bolivia had sufficient monetary reserves, a well organized extractive industry and a fairly sound economy, although the masses of the people received few economic benefits. However, certain policies followed by the National Revolutionary Party (MNR) immediately after the revolution, such as the use of multiple exchange rates, resulted in artificial prosperity for some manufacturing fields and import industries, and a galloping inflation which reached perilous heights by 1955. Even as early as 1953 famine and chaos were imminent.

At this point the United States stepped in with aid -- gifts of food, equipment, loans and technical assistance. A stabilization program checked the inflation and helped lay the basis for more orderly and productive economic growth. Unfortunately, while the program succeeded in its first objective, because it did not include a development component, it did not prevent decapitalization and a period of stagnation in many sectors of the economy.

Many of Bolivia's economic and social problems resist solution until the political climate for their solution has been improved.

Throughout its history Bolivia has been plagued by political instability often bordering on anarchy. Since Independence 10 presidents have been assassinated, and there have been more than 130 coups, insurrections and revolutio Bolivia has had very little experience with the democratic process. After the ten year, effective but autocratic, rule of Santa Cruz (which began in

1829), Bolivia suffered a succession of governments based on personal leadership -- caudillismo -- wherein the political bosses were concerned primarily with extracting from the semi-feudal agricultural and relatively advanced commercial mining sectors, sufficient resources to maintain their personal civilian and military following.

The ferment of unrest, stirred by the costly and futile Chaco war finall erupted in the revolution of 1952, led by the National Revolutionary Movement of which Victor Paz Estenssoro (a former economics professor) was a key figur

Victor Paz, as the MNR candidate, received the greatest number of votes in the 1951 Presidential election. However, the Congress and the outgoing President refused to accept the electoral mandate. The resulting popular uprising established the MNR as the principal political party which remained in power until November 4th, 1964, when yet another revolution deposed Paz, who was just beginning his third term in office. A military junta took over the government, headed by General René Barrientos O. the former Vice Presiden The Junta permitted the return from exile of the opposition leaders, promised honest government and democratic elections.

Bolivia's future is still in question. However, it is of considerable importance to the Western Community of nations that Bolivia emerge as an economically viable, democratic nation.

CHAPTER II

UNITED STATES AID TO BOLIVIA

United States assistance to Bolivia has been given over a period of more than 20 years, in various forms and through programs and agencies of various names. The technical cooperation of the early days was later supplemented by economic aid. Currently U.S. assistance includes grants for budget support of the Government, large loans both of local currency and dollars for selected economic development activities, and extensive distribution of excess U.S. agricultural products. In keeping with the philosophy of the Alliance for Progress, the programming of both economic aid and technical cooperation is stressing an increasing degree of self help by the recipient of assistance.

The remainder of this chapter sketches the major U.S. assistance efforts in chronological order by field of activity, in order to provide a background for understanding training activities.

Health

The Inter-American Cooperative Public Health Service (SCISP), the first servicio* was started in 1942 to establish medical centers, sanitary posts, and to form mobile health units. The earliest programs were related to the war effort and designed to improve health conditions in the disease ridden jungle areas where rubber and chichona bark (used for the production of quinine) were available.

Subsequently several disease eradication campaigns were initiated and carried on up to 1959. The spread of smallpox, of which Bolivia at one time

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* A vehicle for technical assistance in Bolivia, as elsewhere in Latin America, has been the servicio, a bi-national organization composed of host country (Bolivian) and United States personnel and supported by funds contributed by both Governments to carry out projects of technical assistance mutually agreed upon.

had a high incidence, was virtually stopped. A campaign against Yaws disease greatly reduced the infection in the sub-tropical Yungas provinces. An anti-malaria campaign has been carried on in cooperation with the World Health Organization and the Pan American Union Sanitary Bureau.

A special program in occupational health was initiated in 1952 in co-operation with the Ministry of Mines and Petroleum. Its objective is to protect miners and industrial workers from accidents and occupational diseases.

A potable water project helps small towns -- mainly through self-help activities -- to develop water supply facilities.

The health center project was concluded in 1960 when the centers, by then staffed and supervised by Bolivian personnel, were transferred to the Ministry of Health. The occupational health and potable water projects continue as major activities of the health division of the United States AID Mission.

Education

The second servicio, established in 1944, was the Inter-American Cooperative Education Service (SCIDE). In the beginning its program was limited to rural education, but was broadened in 1955 to include vocational programs in industry and agriculture. As part of this project, the Education Service had control, on a rotating basis, of a selected group of rural elementary and normal schools which it administered, supervised, and financed.

The Education Service has also planned and helped produce teaching aids, related materials and textbooks which have been distributed free of charge or at cost.

Aid to education continues through financing construction of rural and urban schools, furnishing desks and textbooks, and teacher training programs.

The Health and Education Services were liquidated in 1961, 1962, and

their activities turned over to the Government of Bolivia ministries or agencies most directly concerned.

Agriculture

The Inter-American Cooperative Agriculture Service (SAI), was started in 1948. During its early years, SAI maintained experiment stations in various regions of Bolivia, and organized a nation-wide program of agricultural extension.

Continuous efforts have been carried on to improve crop and livestock production, and significant contributions have been made relative to the production of rice, sugar cane, corn, and cattle.

A plant for producing pasteurized and powdered milk was built in Cochabamba in 1960 in cooperation with the United Nations and the Government of Bolivia.

The development of the Agricultural Extension Service was a long range project closely associated with the Ministry of Agriculture. It has followed the pattern of agricultural extension services in the United States. The work in Bolivia includes an effective rural youth movement of 4-S Clubs (similar to the U.S. 4-H Clubs), and rural home economics instruction.

USAID/Bolivia at present pays half the operational costs of the Agricultural Extension Service, which is now a part of the Ministry of Agriculture.

In collaboration with the Bolivian Agricultural Bank and International Development Services, Inc., a nation-wide program of supervised agricultural credit was established in 1954. This program of supervised agricultural credit continues and a $3.7 million loan has been granted to recapitalize the Agricultural Bank.

Advice has been given in forming marketing cooperatives for wool, rice, and citrus fruits. The Bolivian sugar industry, aided by warranty loans from

USAID totalling $10 million since 1959, has developed to the point of making the country self-sufficient as regards this product.

Transportation

The Bolivian-American Cooperative Road Service (SCBAC) was formed in 1955. Its program has been very effective. Many inter-city, farm-to-market and secondary roads have been improved and maintained.

The Road Service was dissolved in 1960, when responsibility for maintenance and development of the Bolivian road network was turned over to an agency of the Bolivian Government, the National Road Service, subsequently retitled the Consejo Nacional de Caminos. The United States AID Mission to Bolivia has continued to advise the Road Service through its Engineering and Public Works Division. A development loan of $6 million has been granted to finance feasibility studies for future road construction.

Loans and grants have been made for rehabilitation of the Bolivian section of the Antofagasta-Bolivia Railway.

Important as roads and railways are, the geography of Bolivia necessitates developed air transportation. The first airline was started by a resident German in 1925. During World War II, when the Germans were excluded, a managing contract was signed with Panagra. After the contract expired in 1946, assistance was given the Bolivian airline, Lloyd Aereo Boliviano (LAB) by United States technicians who came for brief periods and gave advice on various aspects of airline operation and management. The airline received a grant in 1963 to finance a contract under which a United States airline provides technical advice on administration, maintenance, and operation procedures. Other loans and grants have been made for the construction and repair of the airports of La Paz, Cochabamba, and Santa Cruz.

Recently, assistance in the fields of transportation has broadened to

include river as well as land and air transport.

Public Administration

In 1955, a project designed to improve public administration was initiated through a contract between the University of Tennessee and the University of San Andrés in La Paz, financed by United States and Bolivian funds. The objectives of the project included advisory service to public agencies, the establishment of a School of Public Administration at the University of San Andrés, and training for public employees. The project was discontinued in 1960 when the University of San Andrés was unable to finance either the continuation of the University of Tennessee contract, or the School of Public Administration.

Assistance has also been given by U.S. technicians to the Superintendency of Banks, the Office of Communications, the Customs Administration, the Office of Internal Revenue of the Controllor General, and the Postal Service.

The Public Administration Division has stimulated reorganization of the customs operations (through the work of a contract team), and the construction of a new customs warehouse is planned. A National Civil Service Office has been established. USAID financed and helped install a substantial amount of IBM equipment for use in employee payroll schedules, tax listings, and other government administrative operations.

Within the field of Public Administration, at the time of initiating such activity, was the Public Safety Project whose aim was to train police and traffic officials. The Public Safety Project has since been broadened to include wider aid in administration, investigation, and law enforcement procedures. A new Police Academy has been constructed which will permit extensive local training in administration, criminal investigation, traffic control, patrol methods, first aid, communications, and riot control.

Industry

The initial activity in industry was a program of Supervised Industrial Credit; the project now includes technical advice and aid in development, rehabilitation and expansion of traditional and new Bolivian industries, suc as textiles, food products, hides, lumber, and handicrafts.

Through the Supervised Industrial Credit Program, loans have been made to rehabilitate and recapitalize existing industry. The nationalized oil industry has also received loans totalling almost $16 million.

Mining

The major assistance to the all important mining sector was an intensiv study and detailed report prepared under a U.S. financed contract, with the engineering firm, Ford, Bacon and Davis, Inc. The report was submitted in 1956 though no significant action was taken then.

A program of technical advice and credit to the private mining sector -- as distinguished from the State mining entity, Corporación Minera de Bolivia (COMIBOL) -- was begun in 1958. Aid to COMIBOL through a tri-partite project known as the "Plan Triangular", has just completed its first two phases. The plan, financed by the United States Aid Mission, the Interamerican Development Bank, and the Federal Republic of Germany, envisages the reorganization and rehabilitation of COMIBOL over a period of approximately 3 years.

Advice on administration and possible reorganization has been given to the Mining Bank, and it is probable that a loan will be granted by the Inter-american Development Bank to recapitalize it.

Since it appears that much of the high grade tin ore has already been extracted, efforts are being made to discover new mineral resources. For this purpose, financial and technical aid has been given to the National Department of Geology. Assistance has also been given to the Inter-American

Geodetic Survey which is helping the Military Geographic Institute in its geodetic mapping program.

Santa Cruz Area Development - Colonization and Other Projects

One or two other projects, which are significant and of a special category should be mentioned. For example, the combined efforts of several inte linking programs have produced dramatic results in the development of the economy of the eastern plains area, particularly Santa Cruz.

Prior to 1956 the region was economically isolated from the western population centers. An impetus to growth was given by the construction of a all-weather highway between Cochabamba and Santa Cruz, financed in part by a loan from the U.S. Export-Import Bank (1942-1955). The completion of the highway opened markets for the regional crops. Further stimulus to development has been furnished by the servicios: SCISP in establishing health centers, SAI in collaborating on crop improvement, and SCBAC in its road program.

Colonization was begun several years ago in collaboration with the Bolivian Development Corporation (CBF), bringing Japanese and Okinawan farmers and resettling Bolivians in the Santa Cruz and Beni areas. The new settlers have become self sustaining and are contributing extensively to local and national development.

Other special activities include Civic Action programs and various self-help projects. USAID/Bolivia also takes part in the world-wide program of Food for Peace, providing daily food to nearly 1 of every 10 Bolivians. In addition to the above, funds are made available to contract technical experts for specific needs.

The U.S. assistance activities, which include training, are discussed in detail in the following chapter.

Summary

United States assistance to Bolivia has been given continuously since 1942, in various forms and through programs and agencies of various names. The technical cooperation activities have been supplemented by extensive economic aid. In keeping with the philosophy of the Alliance for Progress, the programming of both economic aid and technical cooperation is stressing an increasing degree of self-help.

The servicio, a bi-national organization composed of Bolivian and United States personnel has been used in Bolivia as a vehicle for technical assistance. The first servicio was the Inter-American Cooperative Health Service (SCISP) established in 1942. Subsequently servicios were established in Education (SCIDE, 1944) Agriculture (SAI, 1948), and Roads (SCBAC, 1955). The health, education,and roads services have been disbanded. Programs continue in these fields however. Other assistance activities have been carried on in Civil Aviation, Mining, Industry, Public Administration (including Public Safety), and area development.

The programs have been closely related to Bolivian needs. Not all the projects, however, have included training.

Former participants applying new safety techniques in a Bolivian mine.

Bolivian nurses are trained in modern laboratoy techniques.

New graphic arts techniques are passed on to others by a former participant.

A participant explains improved rabbit growing techniques to a group of Bolivian Aymaras.

After receiving training abroad, Bolivian participants apply their new techniques in various Agricultural Experiment Stations.

Applying newly learned thechniques in Riberalta.

CHAPTER III

TRAINING FOR ECONOMIC DEVELOPMENT IN BOLIVIA

PART I - TRAINING IN BOLIVIA

The Function of Training in Economic Development

Every developing country has to compress into a few decades a diverse, interrelated set of fundamental changes in which the role of trained manpower is assuming increasing importance. Without "manpower" -- leaders, professionals, technicians, skilled and semi-skilled workers -- development programs are destined to delay, if not to failure. Neglect of careful planning, or oversight of any of the required steps in planning, including provision for human as well as other forms of capital, will limit development.

> "Whatever the course, the direction and timing of a nation's plans for economic development, they must assure that the development of the country's human resources keeps pace with the development of its material resources. It may seem strange that a proposition so basic and obvious should be so often overlooked or misunderstood. But it is . . . .
>
> "It takes quite a bit longer to train a skilled machinist than it does to build a machine shop; it takes far longer to train a metallurgist than it does to build even the largest of steel mills . . . .
>
> "In this century's great drive for human betterment, the race will probably go not to the swift, but to the carefully planned program of economic development. And it will go only to those who comprehend and include the basic elements of manpower planning and action essential to the achievement of the economic goals sought."*

*Manpower Programs and Planning in Economic Development, U.S. Department of State. Agency for International Development, Communications Resources Division, Washington D.C. March 1963. Page 2.

Most developing countries do not have the educational and training facilities to prepare the numbers of technicians and workers needed in a wide range of complex skills. Therefore, as a part of United States foreign assistance, host country nationals have been sent abroad to receive special technical cooperation training in order to play a more vital role in their countries' development.

The extent and depth of this "skill sharing" has varied with changes in United States policy and the capacities and requirements of the countries receiving foreign aid. Nevertheless, investment in human beings through education and training has been one of the instruments of moving knowledge among less developed nations.

The Bolivian Participant Program

More than 1600 Bolivians had taken part in U.S. Mission sponsored out-of-country training programs by the end of 1963. The fields of specialization of this training and who the trainees are is relevent to understanding the contributions and limitations of such skill sharing in promoting Bolivian development.

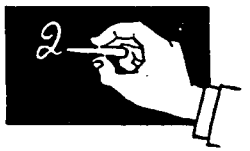
The total number of Bolivians trained under the economic development projects of the United States assistance programs may seem relatively insignificant in relation to the size of Bolivia, its population and its economic necessities. But the group of Bolivian trainees, small as it is, when effectively integrated in development plans, is nevertheless a nucleus of trained manpower with growth potential.

Training of Bolivians under the auspices of technical cooperation programs began immediately after the programs were launched and has usually been related to the size and needs of specific projects.

NUMBER OF BOLIVIAN PARTICIPANTS TRAINED ABROAD IN THE U.S. TECHNICAL COOPERATION PROGRAMS

by Year and Field of Activity 1943 - 1963

Agriculture
249



Education
152

Roads
57

Labor
276

Health
211

Public Administration
97

Inter-American
Geodetic Survey
110

U.S. Army School, Panama
167

Public Safety
157

Industry and Mining
74

Miscellaneous
23

Civil Aviation Agency
55

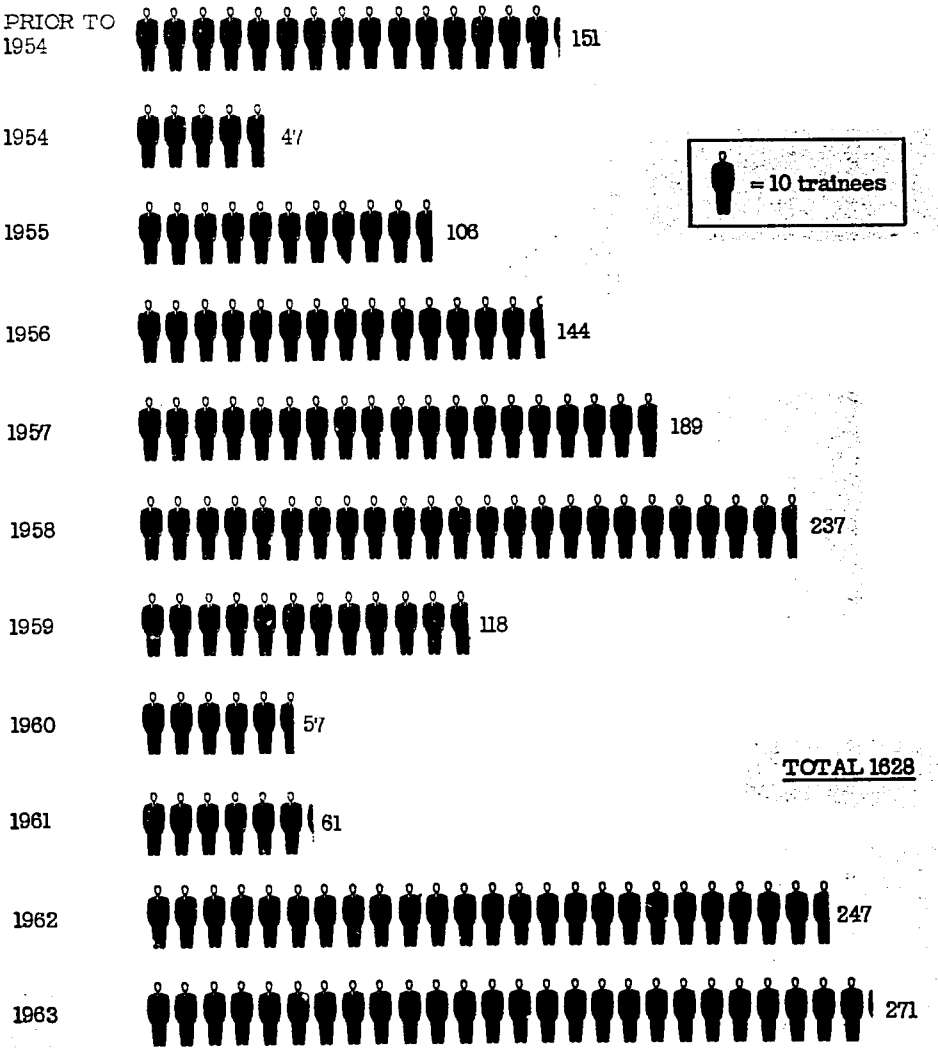


Figure 2

Figure 2 based on data from the USAID/Bolivia Training Office summarizes the total number of participants by field of sponsorship through fiscal year 1963.

Some comments are in order concerning training as sponsored within the general fields of activity.

Agriculture. Through 1963 Agriculture has accounted for 249 participant programs. Training has included preparation of personnel for the various activities of the Agricultural Extension Service. Other participants have been trained at a relatively high academic level so that they might work with the experiment stations in research and in various aspects of the different crop improvement programs. Trainees have also studied in more general fields of agricultural sciences such as entomology, horticulture, plant pathology.

A sufficient number of participants have been trained in agricultural credit to occupy key posts in the Agricultural Bank in La Paz and in the provincial cities.

Army sponsored training was processed by the Mission Training Office through 1960, when the United States Army Mission took over these functions. This training, which has been closely related to Bolivian army needs, supported increased mechanization of the army, its road and construction functions, and the development of military leadership, through the basic "Staff and Headquarters Course".

Civil Aviation training began in 1949 and a few trainees were sent abroad each year until 1963. Generally the numbers of trainees varied from one to five per year except in 1956 when 15 trainees went abroad. No trainees were sent in 1963. No Civil Aviation staff technician has been at the Mission continuously; furthermore, the training has proved to be somewhat inapplicable for reasons discussed later.

Education training has specialized in elementary, normal school and vocational education, the latter in agriculture and industry. Training in offset printing, and printing machine operation and maintenance was related to the Education Service program of publishing books, pamphlets, and teaching aids.

Engineering and Public Works. The training of this division during the period covered by the Survey has dealt primarily with roads. Engineers have studied road maintenance and betterment; mechanics have been taught the operation and maintenance of road building and servicing equipment. The training in accounting and administration is being used effectively, previously for the cooperative servicio, and at present for the National Roads Servic

Health. The first Bolivian trainee who went to the United States in 1943, was a doctor and professor of medicine whose work was closely associated with the Health Service. Health training as part of the program of the Health Service included specialization in maternal and child care, cardiology, epidemiology, orthopedic surgery, dentistry, malariology, hospital architecture, administration, aspects of sanitary engineering and environmental sanitation, as well as nursing and public health. Some of the projects have resulted in improved health conditions, others have not been utilized because economic limitations have prevented their being put into effect. The occupational health and potable water programs are now stressed.

Industry training has been related to certain industries (such as textiles -- loom operation) and has also offered opportunities for Bolivians to visit the United States to observe industrial development there.

In the mid- and late 1950's there was some combination of industry and labor training when a few groups which went to the United States were made up of representatives of labor and management.

Inter-American Geodetic Survey training is given in the Canal Zone Cartographic School. Consequently, the trainees do not pass through all the same procedures as other participants of Mission sponsored training. The training fulfills the IAGS specifications of technical job-related training. It is designed to develop and improve specific skills which are used by the trainee in their work immediately following training and thereafter with the Geodetic Survey and the Military Geographic Institute.

Labor participants in the years 1955-1960 studied labor legislation, labor law administration, labor statistics. Since 1962 emphasis has been on "Basic Trade Union Programs" for commercial workers, teachers, etc. Labor trainees have included not alone union members, miners and farmers for example, but lawyers, doctors, professors. Not all labor sponsored training is "job-related" in the technical cooperation sense of the term. A labor trainee who has a "Basic Trade Union Program" usually finds little in his training which he can apply directly in his work, even though his training may have important effects, through orienting the various worker and union groups towards a democratic labor movement. Labor sponsored training received unusual emphasis after 1961, when the number of trainees sent abroad per year increased so greatly as to surpass in a single year the totals for several years in other fields. Eight participants were sent abroad in 1954 as compared to 77 in 1962 and 114 in 1963.

Mining. Until recently U.S. assistance to the Bolivian mining sector included little training and was sponsored with industry as "Industry and Mining". Since the establishment within the Mission of an organizational unit for geology and mining, training has been closely integrated with the work and needs of the National Department of Geology.

Public Administration training has recently been classified as "Government Management Assistance". At one period (the time of the University of Tennes-

see contract, 1956-1960) stress was placed on in-country middle-management training. However, a total of 10 participants were sent abroad sponsored under the University of Tennessee contract. The fields of specialization have cut across the public sector in an effort to raise the level of government administration.

Public Safety originally was a sector of the USAID Public Administration Division. Within the past three years this section has assumed increasing importance. The number of trainees and the variety of fields of specialization have grown with a view to strengthening internal security through building up a stable police force.

Costs of Training

Training costs are only a fraction of the sums involved in grants and loans of the United States assistance program for Bolivia. However, the annual and total training budgets are sufficiently large to warrant an expectancy of value received for both Bolivia and the United States.

Costs of training vary depending on the place of training, the length of time involved, and the degree of specialization of the program.

In some fields there are relatively few participants (such as Civil Aviation, Roads and Government Management Assistance). The length, cost and importance of individual training programs in these fields may be greater than in the case of a short term participant in the field of Labor or Public Safety. Moreover, the Division programs, due to their character and/or Mission policy in any given year, may not require an extensive number of trainees. A decrease or increase in the number of trainees by fiscal year may reflect phasing out a program, change of policy (at the Mission or Washington level), provision of in-country training facilities, budget modifications, or other similar reasons. Figures on Mission Program and training costs are given in the Appendix.

The Role of Training in the USAID/Bolivia Program

Despite the numbers of trainees sent abroad, and the breadth of the training by fields of specialization, training per se has rarely had a coordinated and fundamental role in the programs of the U.S. Missions to Bolivi On only a few occasions has the role of the Training Office risen above paper processing functions. Probably because training has been planned and finance through the various divisions it has rarely been integrated into the total Mission program as a component of economic development. There have been, and are, duplications and overlapping in fields of specialization. Programs are not always carefully planned in advance and adapted to country requirements. The host country officials and agencies play a limited role in assuring training utilization. Trainees and projects have sometimes been abandoned with little or no effort to salvage the human and technical values they represent.

Unless training is considered of sufficient importance to support it consistently and completely, it is unlikely to pay full dividends.

Actually, the Survey found that, despite a lack of overall planning, integration, and moral support, which affect the Bolivian participant program, the training itself is generally good, thanks to the growing experience of the "trainers"; and the degree of training utilization is relatively high due to the persistence and integrity of the trainees themselves and to the collaboration of some U.S. technicians. If such returns are reaped in the face of existing obstacles and neglect, it is to be hoped that the potential investment value of training will be more fully recognized and proper action taken to ensure that Bolivia realizes increasing returns from U.S. training expenditures.

PART II - THE BOLIVIAN PARTICIPANT

Numerous factors influence training effectiveness but the most basic factor is the quality of the Bolivian trainee.

The "typical" Bolivian participant is male, married, and in his early thirties. He lives in La Paz, and has more than twelve years of education, having attended either the university or a special school. He has approximately seven years of specialization in his field and probably works for the Government of Bolivia or a state agency. He is most apt to be engaged in program or administrative activities at a middle management level.

The first two pages of the interview questionnaire provided space for personal and occupational data on the trainee. This information is presented here so that the reader will know more about the Bolivian participants of the Survey.

Personal Data

Sex. Ninety-two per cent or 644 of a total of 701 Bolivian participants interviewed for this Survey, are men. The 57 women interviewed are nurses (health), teachers (education, labor), home demonstration agents (agriculture), office workers, librarians, social workers, or specialists in a field related to the work of the Inter-American Geodetic Survey.

Marital Status. Eighty-two per cent of the participants of the Survey are married.

Age. The median age of the Bolivian participant at the time of departure for training was 34 years and 6 months, and at the time of coding of the interviews, 36 years and 8 months. The difference in age between that of the time of training and the age at the time of interviewing is relatively slight, in view of the fact that a 20-year period is covered by the Survey. This is largely because trainees selected in recent years have been younger at the time of departure for training than those of the preceding 15 years.

TABLE 1*

Age in Years at Time of Departure for Training

Age	No.of Participants	Per cent
Under 25 years	72	10
25-29 years	188	27
30-34 years	160	23
35-39 years	128	18
40-44 years	69	10
45-49 years	53	8
50-54 years	22	3
55 years and older	9	1
Total	701	100.0

While 78 per cent of the trainees are under 40 years of age, 12 per cent are over 45 compared to 10 per cent under 25.

The participants 55 years and older include doctors (health), engineers (transportation), professors (education), and high level government officials (public administration).

The level of the position of the participant in relation to his age shows a major concentration in the 25-39 year group at the subordinate management, professional and sub-professional occupations.

The Bolivian participant is young enough to have many years of useful service ahead of him, but not so young as to lack experience and maturity.

Education. None of the Bolivian trainees is without some formal education. Slightly more than 40 per cent have up to 12 years of schooling; and of the remaining 60 per cent, 32 per cent had more than 17 years of education at the time they were selected for training. Almost 48 per cent had attended the university (335 cases) and 33 per cent held university degrees. This latter group includes 44 doctors, 32 lawyers, and 102 with degrees above the level of a Master's degree.

Fifty-seven per cent of the Survey population attended a special school before training, such as engineering and industrial schools (89 cases), military school (61 cases), nursing and public health schools (33 cases), normal schools (54 cases), and business, commercial and secretarial schools (59 cases).

*Data from Card 01, Col.54. Hereafter the card and column number will accompany each table.

Occupational Characteristics

Area of Residence. Approximately 69 per cent of the trainees lived and worked in the capital city area at the time of selection for training, and 70 per cent lived there at the time of the interviews. The "Provincial City" areas include Cochabamba, Santa Cruz, Tarija, Sucre, Oruro, Trinidad (Beni), and Potosí. Twenty-seven per cent of the participants came from provincial cities at the time of selection and the same per cent (plus two cases) resided in the provincial cities at the time of the interviews. The number in the rural areas decreased by one per cent.

Participants in the rural areas include members of the army, agricultural extension and research workers, health center and disease eradication personnel, and mechanics and heavy equipment operators of the road service. It is the custom in both police and army units to relocate personnel at regular intervals, rotating them from La Paz to provincial cities, to rural areas, and back to La Paz. It was found that about 25 per cent of the Survey universe had shifted from one region to another; the remainder stayed in the locations from which they came at time of training.

There appeared to be no significance, or any observable trend in the data relative to the number of participants from particular areas or by year of training, so no tabulations are included.

Employer. It is logical that a high percentage of trainees reside in La Paz inasmuch as most of the government offices are located there and 62 per cent of the Bolivian participants of the sample, work for the Bolivian Government or a state agency or nationalized industry. The percentages of

TABLE 2

Major Field Of Activity In Which Training Was Given (Card 01, Col. 14)

Current Residence At Time Of Interview (Card 01, Col. 20)	Direct Military Support (0)	Agriculture (1)	Industry & Mining (2)	Transportation (3)	Labor (4)	Health (5)	Education (6)	Welfare, Public Administration (7)	Com. Devel., Housing (8)	Social Miscellaneous (9)	Not ascertained (X)	Total	%
Capital city area (1)	36	46	45	29	59	50	36	96	10	85	-	492	70.1
Provincial city area (2)	18	43	8	24	23	28	10	34	1	-	-	189	26.9
Rural place, village, town (3)	2	7	-	5	-	6	-	-	-	-	-	20	3.0
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	
Total	56	96	53	53	87	78	52	130	11	85	-	701	100.0

TYPE OF EMPLOYMENT AT TIME OF SELECTION

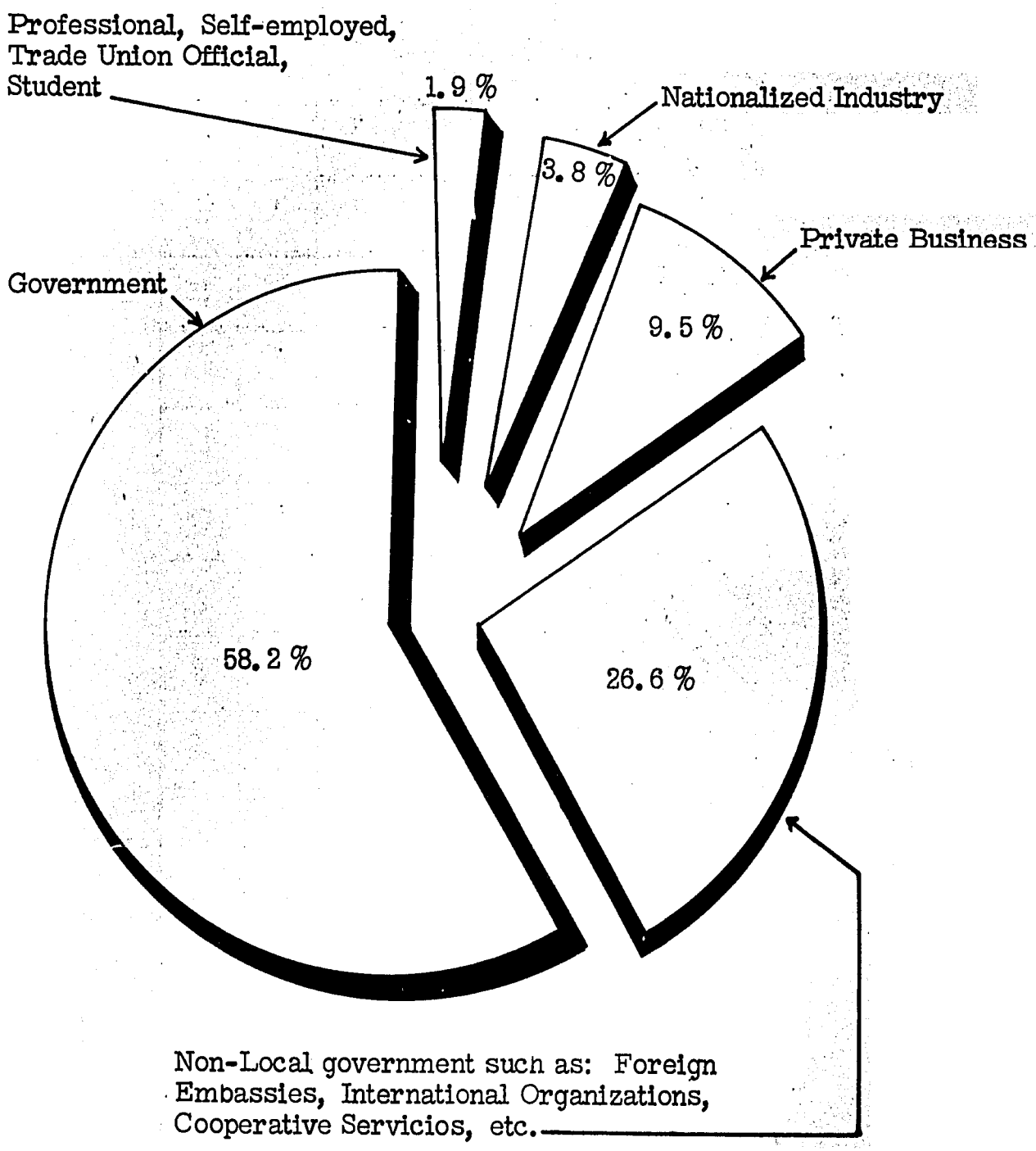


Figure 3

those working in government-related activities becomes even higher if one includes those who worked for a servicio. (This group is classified as "Other".)

The trade unions are also closely associated with the Government. Thus there are only 11 per cent -- distributed between private business and the professions -- who can clearly be considered "non-Government".

Level of Position. The level of the position of the participants indicates the areas in which training may be utilized, and identifies to some degree a conceivable relationship between training and economic development.

Forty-one per cent (289 cases) of the trainees are coded as "subordinate management -- line or staff". This classification is slightly misleading however inasmuch as it includes categories of personnel with considerable responsibility and experience, such as program or project superintendents, production managers, program division chiefs, field office directors, chief inspectors, personnel, welfare officers, finance officers, executive assistants, technical advisors, school principals, union organizers, public safety officials and others. The Bolivian participants of this group constitute a well educated middle class base for the economy. Among the first and second level policy makers are to be found trainees who have served as cabinet ministers, agency chiefs, national deputies, industrialists and high level university officials, (3.2 per cent, 23 cases).

Twenty-two per cent of the participants are engineers or professionals, such as doctors and lawyers, (22.2 per cent, 156 cases).

Many of those classified as "sub professional" are white collar workers. In this category (109 cases or 16 per cent) are nurses, and employees of the Inter-American Geodetic Survey, such as cartographers and scribers.

Supervisors, foremen inspectors, artisans and craftsmen constitute 88

TABLE 3

Major Field of Activity In Which Training Was Given (Card 01, Col. 14)

Level of Position at Time of Selection (Card 01, Col. 44)	Direct Military Support (0)	Agriculture (1)	Industry & Mining (2)	Transportation (3)	Labor (4)	Health (5)	Education (6)	Com. Devel., Social Welfare, Housing Public Administration (7)	Miscellaneous (8)	Not ascertained (9)	Total (X)		%
Top policy makers - National level and/or national impact (1)	-	-	2	-	2	-	1	1	-	-	-	6	0.8
Policy makers - Second level and/or non-national impact (2)	3	5	4	1	1	2	-	1	-	-	-	17	2.4
Subordinate management - Line or staff (3)	22	44	25	11	24	24	15	107	5	12	-	289	41.4
Engineers (4)	2	2	7	12	1	5	-	-	-	2	-	31	4.4
Professional occupations (5)	2	27	5	2	17	24	30	12	3	3	-	125	17.8
Sub-professional occupations (6)	5	9	5	9	5	16	3	2	2	53	-	109	15.6
Supervisors, inspectors, foremen (7)	5	6	1	4	12	4	2	3	1	2	-	40	5.7
Artisans, craftsmen (8)	14	-	2	14	9	-	1	-	-	8	-	48	6.8
Occupations not elsewhere classified (9)	3	3	2	-	16	1	-	4	-	5	-	34	4.8
Inactive (Y)	-	-	-	-	-	2	-	-	-	-	-	2	0.3
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	
Total	56	96	53	53	87	78	52	130	11	85	-	701	100.0

BACKGROUND PROFILE OF PARTICIPANTS AT TIME OF DEPARTURE FOR TRAINING

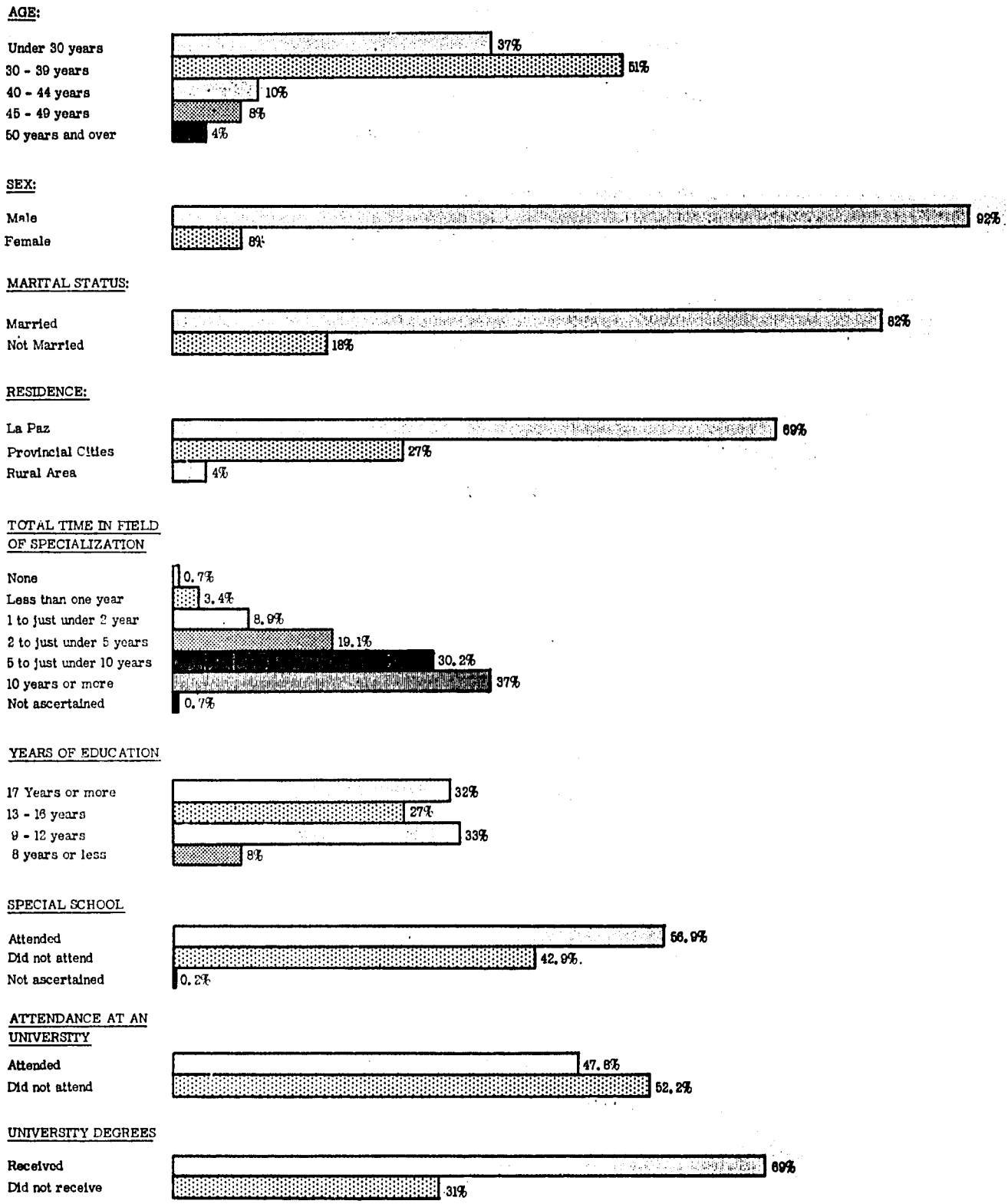


Figura 4

cases or 12.5 per cent of the Survey sample. The former group have limited education (no more than 4 years) and the latter work with their hands and have varying degrees of skill.

Some of the trainees are, or could be, in key positions. Most of these have administrative or planning experience and given the opportunity and the required support, should be able to exercise leadership and management functions necessary to a developing economy.

Specialization. Thirty-seven per cent (259 participants) had worked more than 10 years in their fields of specialization prior to training. The greatest number of cases (346 or 49 per cent) had had more than 2 years, and just under 10 years of experience. Only five participants (one per cent) had no specialization prior to training.

Number of People Supervised. It is difficult to offer any meaningful commen relative to the number of people supervised by the trainees. Twenty-six per cent said they did not supervise anyone. Twenty per cent claimed to supervise between 1 and 5 people; and 25 per cent supervised between 6 and 19 people. Not all respondents understood what was meant by "supervision" as used in the questionnaire. The few cases of trainees "supervising" more than 200 people include army and police officers whose divisional direction may naturally be on a large scale.

Summary.

Training is an important factor in economic development because of its contribution to trained manpower. Participant training has been an essentia part of U.S. foreign aid since the time of World War II.

In Bolivia the participant training program began in 1943 and has continued ever since, the fields of specialization of the participants and the numbers of trainees sent abroad following closely the projects and

funding of the United States aid Missions to Bolivia during this period. The major areas of training have been Agriculture, Health, Education and Labor. Over 1600 Bolivians have been sent abroad, through 1963, of whom the Training Evaluation Survey interviewed 701 (roughly 50 per cent of those who had returned to Bolivia by June 1963).

The costs of training are relatively small in view of the investment in human beings involved. However, to some degree the importance of training for Bolivia has been overlooked so that its full value has not yet been realized.

The "typical" Bolivian participant is male, married, and about 35 years old, with more than a high school education, and about 7 years of experience in his field of specialization. He works for the Government of Bolivia or a state entity, probably in La Paz, in a middle-management program level.

On the whole the Bolivian participants appear to constitute a well-qualified though rather small group.

CHAPTER IV

PROGRAMING TECHNICAL COOPERATION TRAINING

PART I - PRE-TRAINING PROCEDURES

Good programing is fundamental in training for economic development. A high percentage of the information gathered by the Evaluation Survey dealt with training programing; pre-training and training experience, and the related administrative and non-technical factors.

Pre-training procedures include selection of the candidates for training, preliminary planning of training programs to fit particular projects, and preparation of the trainee for his out-of-country experience.

USAID/Bolivia Training Procedures

In the early years, programing training in Bolivia (as in many other Missions) was comparatively informal. It was often arranged through correspondence between Mission technicians and their friends at other government agencies or educational institutions in the United States or elsewhere. Apparently in Bolivia the role of the U.S. Mission technician is still paramount in both trainee selection and programing.

The Training Office acts as liaison between the Mission technicians, some of the host country contacts, and the Washington backstopping agencies. The Training Office assures the correctness of bio-data and PIO/P (Project Implementation Order/Participant) information and corresponds with Washington on program requests and other arrangements such as security clearance, visas, travel plans. Administration and budgeting of English language training, given at the Centro Boliviano-Americano, is another responsibility of the Training Office. Instruction to the Participant concerning U.S. Government regulations and some orientation for U.S.-based training are given prior to departure, by the technician and/or the Training Office.

No correspondence is carried on with the participant during training except in special cases. Reports, other than a final report, are required only if the length of the training program exceeds two months. A Certificate of Achievement is given at the completion of training, although whether or not it is presented with ceremony depends on the Mission division or United States technician involved.

The Training Office, thus far, has not carried on any follow-up activities. It sends the trainee, his books or other effects when they are consigned through the Training Office, but it does not systematically verify if the participant returns to job-related training, nor make consistant efforts to establish contact between trainees and U.S. technicians.

The size of the Training Office staff has varied from one or two to a maximum of four people. Inasmuch as processing the papers for participant training is a relatively time consuming task, little or no time is left for non-administrative activities, such as coordination or follow-up, which are often of basic importance to successful training and its implementation.

Participant training will continue to be affected by the size and status of the program and the Training Office staff.

Selection of Participants

Only seven per cent (47 out of 701) of the participants in the Survey said they had made application for training. The other 93 per cent (654) reported they were selected: 47 per cent (330) by a Bolivian supervisor and 32 per cent (225) by a United States official. During the period covered by this study, many participants worked for one of the bi-national servicios. In such a case, the supervisor was often a U.S. technician. This is also true in the Inter-American Geodetic Survey, where the person in charge of training is a U.S. official who supervises many of the

participants both before and after training.

TABLE 4 *

Who Selected You?

	No.of Participants	Per cent
My supervisor	330	47
Won scholarship	0	
U.S. official	225	32
Selected myself	0	
Special board	14	2
Ministry/Home Government official	65	9
Labor Union/Trade Association official	48	6.8
University official, professor	3	0.4
Employer (if not represented above)	31	4.4
Other, not covered above	29	4.1
Don't know, don't remember	16	2.3

Card 02:17-20

Only two per cent (14 cases) said they were selected by a special board. A selection board existed for a brief period in the past, as part of Mission training activity. Its duty was to review the qualifications of each prospective trainee. A similar committee was recently established, but it does not affect any of the cases of the Survey.

One or two participants said that they were selected by a committee from their office or organization (such as a union). These committees appear to be ad hoc groups which have operated for a specific purpose and time.

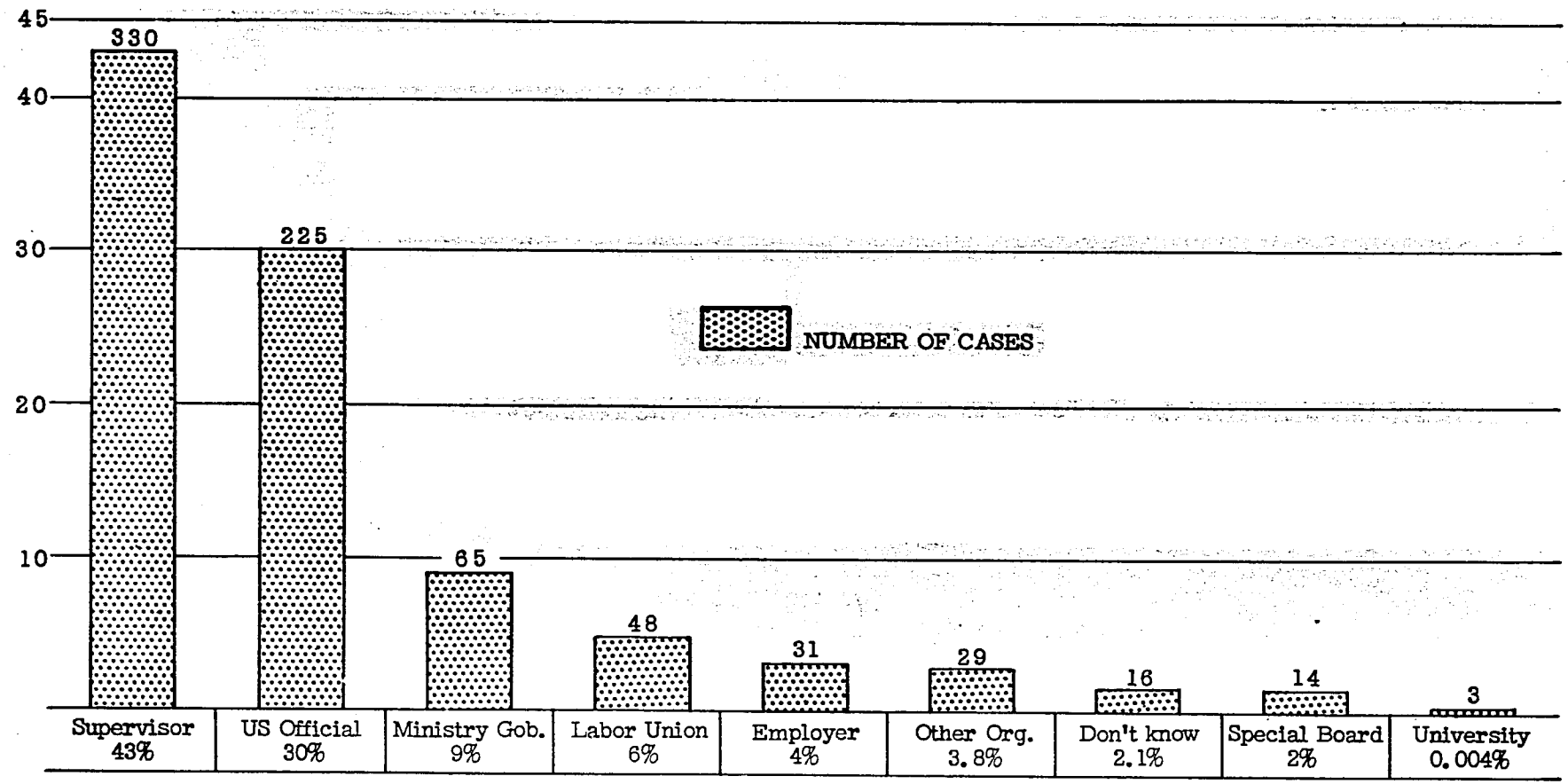
No information is available as to whether or not any board, U.S. official, supervisor, or Bolivian official has ever followed definite guidelines in selection procedures.

When either a supervisor or a U.S. technician is responsible for the selection of a participant, it is presumed the selector is sufficiently well acquainted with the prospective trainee, his personal background and the

* Totals add to more than 701 and 100 per cent because some respondents gave more than one "selector".

REPLIES RECEIVED TO THE QUESTION: "WHO SELECTED YOU?"

N° of responses 761 (100%)



Adds to more than 701 responses because some participants named more than one selector

Figure 5

TABLE 5

PARTICIPANT QUESTIONNAIRE
Major Field of Activity in Which Training Was Given
(Card 01, Col. 14)

SUPERVISOR QUESTIONNAIRE: Did You Recommend That (Participant) be Sent on a Training Program? (Card 10, Col. 18)	Direct military support (0)	Agric. & natural resources (1)	Industry & mining (2)	Transportation (3)	Health and sanitation (4)	Labor (5)	Education (6)	Public administration (7)	Comm. devel., social welfare, housing (8)	General & miscellaneous (9)	Not ascertained (X)	Total	%
Yes (1)	6	8	8	3	3	2	6	12	-	32	-	80	31.0
No (2)	1	4	3	1	9	4	4	9	-	9	-	44	17.1
Don't know or don't remember (9)	-	-	-	-	-	-	-	-	-	-	-	-	
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	
Not applicable (Y)	24	10	8	15	7	10	10	31	-	19	-	134	51.9
Total	31	22	19	19	19	16	20	52	-	60	-	258	100.0

job requirements, to vouch for the trainee's acceptability and capacity to follow an anticipated training program.

Eighty participants were recommended for training by the supervisors who were interviewed (31 per cent of 258 participants).

This is a rather small number in view of the fact that 330 participants indicated they had been selected by their supervisors, although it is possible that many participants did not clearly understand the selection procedures or know who had selected them.

The following table gives the data on participant relationship to supervisors at the time of the interview.

TABLE 6

Do You Have a Supervisor? May We Interview Him?	No. of Participants
Have supervisor	468
Have supervisor but refuse permission for interview	45
Have no supervisor	183
Not ascertained	5
	701

Card 06:62.

It was found that many of those indicated as supervisors worked only indirectly with the participants of the Survey. Some of these were GOB Ministers, agency division chiefs, army and police officials who proved to be unacquainted with the participant, or too busy to devote time to an interview. Other "inapplicable" cases occurred when the supervisors named by the participants did not wish to be interviewed because they said they knew nothing about the participant's training program. Typical examples are labor trainees whose job, and thus their supervisor, had no connection with the training, such as an upholsterer, a clerk in a telegraph office, and a miner.

TABLE 7

Year Participant Left for Training Program By Supervisor Questionnaire - Did You Recommend that Participant be Sent on a Training Program?*1

	Yes	No	Not Applicable*2	Total
1949 and earlier	1	-	1	2
1950	1	-	1	2
1951	-	1	-	1
1952	-	-	-	-
1953	5	1	4	10
1954	2	-	4	6
1955	1	2	5	8
1956	3	4	7	14
1957	3	4	15	22
1958	5	3	37	45
1959	5	2	16	23
1960	6	3	3	12
1961	11	3	9	23
1962	26	17	26	69
1963	11	4	6	21
Total	80	44	134	258
Percentage	31.0	17.1	51.9	100.0

Cards 01:24-25; 10,18.

U.S. technicians who have contracts for two years tours usually serve one or two tours in Bolivia. Due to this fact, and the 20-year span of the study, very few technicians were acquainted with all the factors of participant selection, training programing, and training utilization.

Qualifications of the Participants

One of the interview questions asked the trainee to evaluate the importance of five different qualifications affecting the decision to go on training. Almost all of the participants were in agreement that their personal ability, professional and educational qualifications, and the needs of the job were "very important". Their personal contacts were also "very important", though less so than any of the above. Language ability was considered important by fewer trainees. This may be due to the fact

*1. No cases were coded "Don't know, don't remember" or "not ascertained".

*2. Participant did not work for this supervisor before he left, or supervisor doesn't know or doesn't remember whether participant worked for him before he left.

that 45 per cent, (315 trainees) went to the United States as the primary country of training, and of this group a considerable number, not ascertained, may have had interpreter service (as is the case with most of the labor trainees). Thus the 258 participants for whom language ability was "very important" may represent correctly those U.S. -trained who needed to use English.

TABLE 8

Importance of Certain Factors

in Participant's Decision to Go on Training

Factor	Very Important		Not Very Important		Don't know	
	No.Part.	%	No.Part.	%	No.Part.	%
Personal ability	662	94.5	26	3.7	13	1.8
The needs of the job	652	93.0	45	6.4	4	0.6
Professional and educational qualifications	639	91.2	54	7.7	8	1.1
Personal contacts	545	77.8	147	21.0	9	1.2
Language ability	258	36.9	430	61.3	13	1.8

Card 02: 41-45.

The fact that 78 per cent (545 cases) considered personal contacts important, confirms somewhat the opinion of the respondents (voiced as additional comment to the interview), that political factors operating through personal contacts, or lack of them, affected selection of trainees, and subsequently their post-training utilization of new techniques and knowledge acquired.

English Language Competence of the Trainees. Participants whose training is in the United States and for whom no interpreter service is provided are expected to reach a certain competence in the English language. The minimum score in English for academic training is 80, and for on-the-job training is 50. Unfortunately insufficient information is available to

evaluate correctly this factor relative to selection, because English grade scores could be found for only 43 participants whose primary country of training was continental United States. Attention should be called to the fact that 373 participants said their programs required a knowledge of English. Three hundred and fifteen of these had continental United States as the primary country of training and only 232 studied English prior to departure from their home country. Of the 53.4 per cent who needed to know English, almost three-fourths experienced some difficulty with the language.

TABLE 9

Difficulty with English in Relation to Pre-Training English Instruction

If you had any difficulty with your English during your program what was it?	Did you receive any English language instruction in preparation for your program?				
	Yes	No	Not applicable	Total	Per cent
No difficulty at all	51	52	-	103	14.7
Difficulty in being understood	44	9	-	53	7.5
Difficulty in understanding	43	17	-	60	8.5
Both	94	62	-	156	22.3
Not applicable	-	-	328	328	46.8
Not ascertained	-	1	-	1	0.2
Total	232	141	328	701	100.0

Card 05:18.15.

There is no information on the length or intensity of language training. The 52 cases who said they had no difficulty with English, and had not studied in preparation for the training program, include individuals who had previously visited or studied in the United States.

The lack of time for classes and few opportunities to use English, are limiting factors in the Bolivian trainee's capacity to dominate the language. Some trainees underestimate the difficulties they will face and what they may lose of training advantages if they are not well prepared in English.

A few trainees whose programs provided interpreter service indicated a desire to know English in order to profit more from their stay in the United States.

Participation in Program Planning

Only 28 per cent (195 cases) of the participants said they had participated in planning their training programs. Of those who helped plan their program, 4 per cent (31 individuals out of 195) said they had not participated in the planning to the extent that they wished. Only 10 per cent (of the 28 per cent) said their programs were based entirely on their ideas, and 14 per cent said their programs were based equally on their ideas and the ideas of others.

The 72 per cent (506 individuals) who had not participated in program planning include trainees whose programs were arranged according to requests of technicians.

The supervisors interviewed, who had recommended 80 participants for training, had had an opportunity to participate in program planning for only 35 individuals. This is only 5 per cent of the total of 701 cases of the Survey. The Bolivian supervisors interviewed were not closely associated with training. Sometimes, as selectors, they merely gave the name of a person who needed training. All subsequent procedures were entirely in the hands of the U.S. official and the Training Office.

TABLE 10*

Supervisor Questionnaire
Did You Recommend That Participant Be Sent On A Training Program?
By Did You Help In Planning Participant's Training Program?

Was participant recommended by you?	Did you help in planning program?			
	Yes	No	Not applicable	Total
Yes	35	45	-	80
No	5	39	-	44
Not applicable	3	24	107	134
Total	43	108	107	258

Card 10:18 & 21. *No cases of "Don't know" or "not ascertained".

The rather large percentage of participants, 65 per cent, who said it would have helped if they had been able to participate in planning their programs, suggests that there may be value in consulting the participant about his training plans. Undoubtedly, the technician, or backstopping agency may be better qualified for program planning than the participant, and have ultimate responsibility for this task. But joint participation, especially in the preliminary stages of programing, by the trainee, supervisor, and technician would result not only in greater involvement of all concerned, but possibly in better training. The participant may not have complete knowledge of what is feasible or best related to the Mission project with which the training is associated. However, he is likely to know what seems to him desirable in the light of his experience and his understanding of his work and his country's needs. He will also more likely than not, develop a feeling of responsibility for gaining as much as possible from his training experience.

In order to produce greater involvement and understanding of the training on the part of the trainee, workbooks were designed by Washington for use by Mission Training Offices. However, in Bolivia, the workbooks have been used rather infrequently, partly because of the types of programs (such as those for Labor and Public Safety participants).

Completeness of Programs Before Training. Seventy-one per cent of the training programs were arranged in complete detail when the participant arrived in the country of training, and 18 per cent were partially arranged. Slightly under 11 per cent were not set up at all. Of the 76 cases in this latter category, 23 were in the field of Public Administration where the AID Washington Public Administration Training Branch has been known to await the arrival of the trainee and consult him personally

PARTICIPATION IN PROGRAM PLANNING

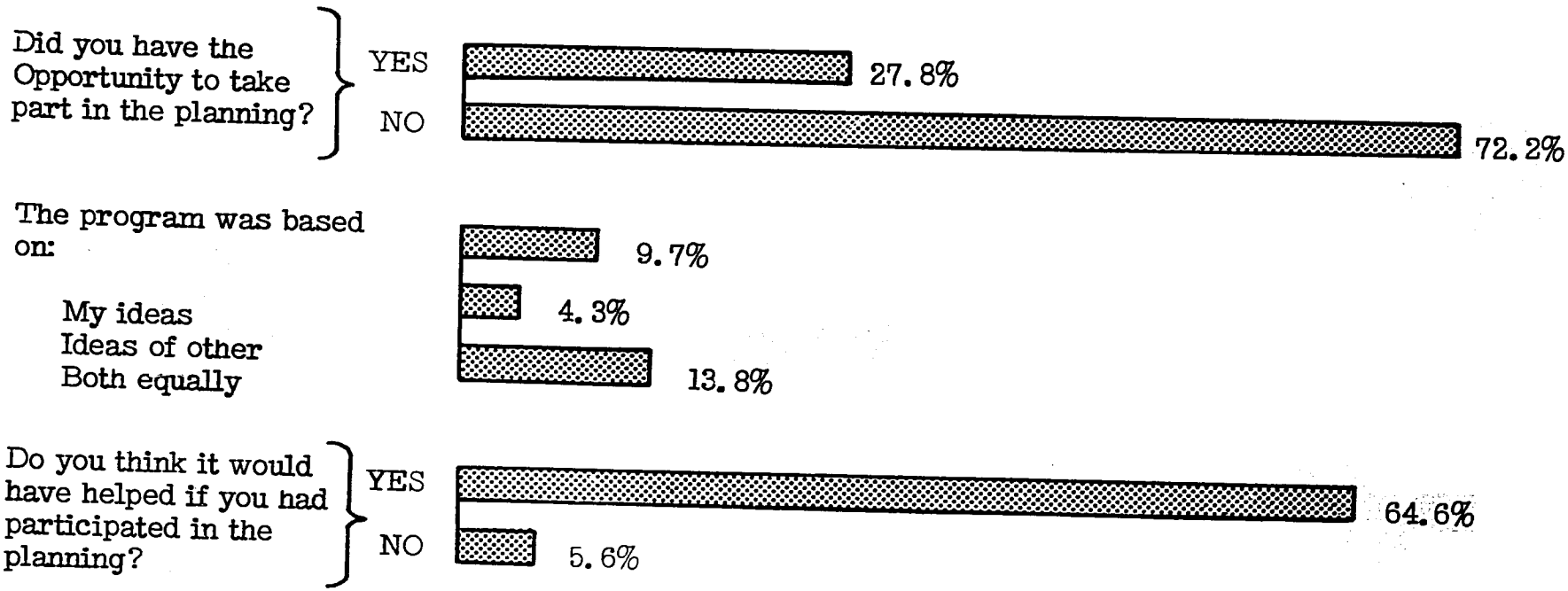
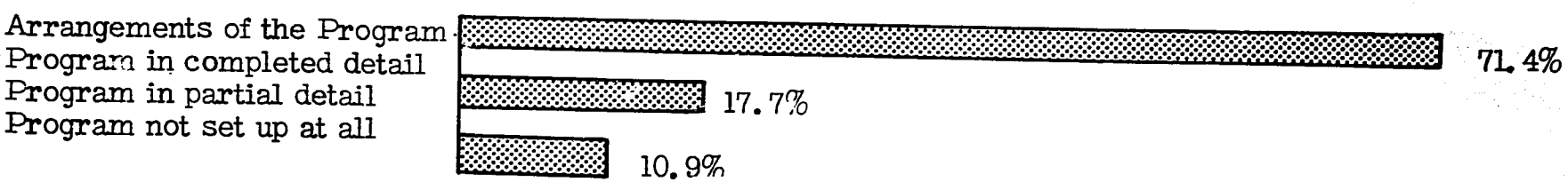


Figure 6

COMPLETENESS OF PROGRAM



Major Field of Activity In Which Training Was Given
(Card 01, Col. 4)

Major Field of Activity In Which Training Was Given
(Card 01, Col. 14)

	Mining (3)	Transportation (4)	Labor (5)	Health (6)	Education (7)	Public Administration (8)	Welfare (9)	Com. Devel., Housing (X)	Miscellaneous	Not ascertained	Total	
4	73	33	44	52	60	27	86	6	66	-	500	71.4
3	17	11	4	23	11	18	21	4	12	-	123	17.6
2	6	9	4	12	6	7	23	1	7	-	76	10.8
1	-	-	1	-	1	-	-	-	-	-	2	0.2
0	-	-	-	-	-	-	-	-	-	-	-	
Total	96	53	53	87	78	52	130	11	85	-	701	100.0

TABLE 11

in order to adapt his program to his particular needs. In some cases this results in loss of time which may or may not be compensated for by the fact that the participant has a hand-tailored program. A few Bolivian participants from this group seemed to feel a sense of insecurity in not knowing in advance what was being planned for them. Several others said they were able to include studies and visits which were among the most valuable of their training experience.

The 500 cases representing programs complete in detail when the trainee arrived in the country of training, reflect the facilities that have been developed and the degree of organization and experience gained thus far in training for technical cooperation and economic development.

Seventy-seven point five per cent of the participants (544 cases) followed their training programs as planned.

"Participant Received Sufficient Attention". Often "success" or "failure" of a training experience is closely related to the amount of attention a participant received from the person in charge of his program. For this reason, among others, it is important, especially for AID/Washington, to learn from the trainee whether or not he felt his needs were well attended.

Four hundred and ninety-one trainees (70 per cent) considered they received enough attention, as compared to only 4.1 per cent (29 cases) who did not receive sufficient attention. The 180 cases classified as "not applicable" occur most frequently in Army, (29), Public Administration (37), and Miscellaneous (32) sponsorship. The Public Administration trainees here are primarily public safety officials. Those in the "Miscellaneous" classification are from the Inter-American Geodetic Survey. In these three instances the programs are relatively standardized and the trainees do not often have individual project managers.

TABLE 12

Do You Think The Person Who Discussed Your Program With You Gave You Enough Attention or Guidance During the Course of the Program?
By Major Fields of Activity

Major Field of Activity	Do You Think You Received Enough Attention?			
	Recd enough attention	Did not receive enough attention	Not applicable	TOTAL
Army	26	1	29	56
Agriculture	79	6	11	96
Industry & Mining	38	3	12	53
Transportation	37	1	15	53
Labor	65	5	17	87
Health	57	3	18	78
Education	43	3	6	52
Public Administration	88	5	37	130
Social Welfare	8	1	2	11
Miscellaneous	50	1	34	85
TOTAL	491	29	181	701

Cards 03:55; 01:14
* There were no cases coded "Not ascertained".

Of the various officials who were in charge of the training programs, 37.4 per cent worked at the foreign aid agency, AID (or its predecessor agenci and 25.8 per cent at some other government agency.

Information on Training Program Before Departure

The degree to which a participant is informed about his prospective program before undertaking it appears to have an effect on the assurance and enthusiasm with which he undertakes the program.

Most participants received advance information about their programs from their employer rather than through the Government of Bolivia Ministry that "sponsored" the training. This may be because, as noted before, it is the practice in Bolivia for a ministry official to sign the papers (PIO/P) of the trainee but have no or little direct contact with the individual. Also, the various government ministries have played a very minor role either in preparing the training program, informing the participant about his training,

or providing for training utilization. Generally, the interviewee was unaware that a Bolivian Government ministry was involved in any way in the training, and did not consider the "sponsoring" ministry his "employer" even when he worked for the Government. This accounts for an apparent inconsistency in Table 13 in which 90 per cent (632 cases) said they did not receive information from the ministry and only two indicated a ministry as the employer. Actually, the Training Office or the U.S. technician conveys information to the trainee directly or to his employer.

TABLE 13

Did the Ministry that Sponsored You Give You Any Information About the Program Being Planned For You?*1 by When Your Program Was Being Planned Did Anyone at Your Place of Employment or School Give You Any Information About It? *2

	Yes	No	Total
Yes	42	22	64
No	393	239	632
Ministry was employer	1	1	2
Don't know, don't remember	2	1	3
Total	438	263	701

Card 02:21 & 29
*1. No cases coded "not ascertained. *2 No cases coded "don't know" or "not ascertained".

Thirty-four per cent said they received the program information from their supervisor, and 19 per cent said they learned about the program from U.S. officials. The source of information for the others is too scattered to be meaningful.

Even more important than who gave pre-program information to the trainee is the type and amount of information received: one interview question was related to five information factors on the participant's program: what he would be learning, where he would be going and when, the length and "other aspects" of the program. The second question enquired whether or not the participant knew how to get along in the country of training, i.e. how to use restaurants and public facilities, colloquial speech and idioms, religious

practices, use of money, and manners and customs generally (also five factors).

Program-Related Information. Forty-two per cent of the trainees (293) at the time of the interview could not recall the details of what they had learned in advance about their training programs. Forty-four per cent (309) however, indicated being well informed by saying they "had enough information" on each of the five aspects of the question.

TABLE 14

Amount of Information on Program
By Source of Information and Country of Training

Before You Left Home Did You Get Enough Inform. About the Program? *1. a. What you would be learning b. Where you would be going c. When you would be going d. Length of program e. Other aspects of program	When Your Program Was Being Planned Did Anyone At Your Place of Employment Or School Give You Any Information About It? *2.			Primary Country of Training				
	Yes	No	Total	United States	Canal Zone	Puerto Rico	Other	Total
Participant answered:								
All five "no"	2	4	6	1	2	1	2	6
One "yes"	11	11	22	7	1	10	4	22
Two "yes"	37	44	81	43	4	11	23	81
Three "yes"	60	71	131	54	29	16	32	131
Four "yes"	96	56	152	73	23	23	33	152
All five "yes"	232	77	309	137	71	28	73	309
TOTAL	438	263	701	315	130	89	167	701

Card 02:21,66,68-70.
*1. No answers coded "Not ascertained". *2. No answers coded "Don't know" or "Not ascertained".

The largest number, 44 per cent (312 cases), said they were informed about the subject matter aspects of their training. Only 22 per cent (156 persons) said they had learned about training in general and the administrative aspects of training. It is possible that to some extent the question was interpreted literally. If this is not the case, the percentage informed on administrative matters is unduly small in view of the fact that the

Training Office follows a practice of advising all participants before training of the regulations governing their activities abroad.

TABLE 15

Things Learned About Training Program

	No. of Participants	Per Cent
Information about training in general	60) 156	8.6) 22.1
Information on administrative aspects	96)	13.8)
Information on administrative role of own government	46	6.6
Information related to subject matter aspects of training	312	44.6
Information related to participants' post-training jobs	43	6.1
Information related to cultural, social and economic life of country	4	0.5
Information concerning climate in country of training	2	0.3
Other concepts not covered above	11	1.6
	574**	82.1**
*Total participants who received information	438	62.5
Not applicable (received no information)	263	37.5
	701	100.0

Card 02:26-28. *Percentages based on 701 cases. ** Totals refer to number of replies given by participants. Some participants gave more than one answer.

TABLE 16

The Extent of the Program-Related Information Received by the Trainee (Summary)

60 per cent - said they knew enough about <u>what</u> they would be <u>learning</u>.

74 per cent - said they knew <u>where</u> they would be <u>going</u>.

88 per cent - said they knew enough about <u>when</u> they would be <u>going</u>.

94 per cent - said they had sufficient information about the <u>length</u> of their programs.

73 per cent - said they had enough information about <u>other aspects</u> of their programs.

Twenty-one per cent would have liked to know more about the type of work they would do, what they would see, or what they would study. Twenty per cent wanted more background information about the places they would visit, such as factories, universities; and 15 per cent wanted more complete project information.

Allowance should be made for the fact that some individuals, trained ten or more years ago, may have forgotten the degree to which they were informed in advance about the program. The majority of the participants, however, appear to have known a good deal about their programs before departure for training. Inasmuch as 500 programs were complete when the participant arrived in the country of training, the relationship of information available, and information given to the trainee is well balanced.

The trainees who go to the United States are relatively well informed in advance about their programs. This is also true for participants who went to third countries for training. Those who went to the Canal Zone had more standardized programs (IAGS and Army) and were the best informed of all. The figure for those who were sent to Puerto Rico shows that sometimes trainees did not know the details of what was planned for them.

Non-Technical "Orientation" Information. Sixty-four per cent of the participants (447 cases) said they had enough information on "orientation" aspects of their programs as compared to 44 per cent (309) who had information on the program per se.

TABLE 17

Extent of Orientation Information Received by the Trainee

76 per cent knew how to use restaurants and public facilities

78 per cent knew enough about colloquial speech and idioms

84 per cent knew about religious practices

86 per cent knew about the use of money

82 per cent knew about manners and customs generally

Eleven per cent would have liked to know more about location and use of restaurants, and 15 per cent wanted data on means of transportation such as how to use buses, taxis, make reservations, etc. All of the other comments

were made by less than 10 per cent of the trainees and are not included here. Sixty-four per cent (who answered "yes" to all five questions) had enough information on all non-technical factors. Eleven per cent answered "yes" to four questions. Thus 75 per cent of the trainees considered themselves relatively well prepared for their out-of-country experience; 14 per cent would have liked more information about the country of training itself.

TABLE 18 *

In Addition to Information About the Program, Did You Get Enough Information About How To Get Along in the Country of Training? a. How to use restaurants and public facilities? b. Colloquial speech and idioms c. Religious practices d. Use of money e. Manners and customs generally	by When Your Program Was Being Planned, Did Anyone at Your Place of Employment or School Give You Any Information About It?		
	Yes	No	Total
Participant answered:			
All five "no"	20	24	44
One "yes"	23	9	32
Two "yes"	21	19	40
Three "yes"	34	24	58
Four "yes"	46	35	81
All five "yes"	294	152	446
Total	438	263	701

Cards 03:34; 02:21. *No answers coded "not ascertained", "don't know"

Many trainees subsequently received further pre-program orientation in the United States or elsewhere. However, despite extensive efforts to assure participant adjustment through orientation, specific complaints were received from trainees who went to the Canal Zone, Puerto Rico and third countries. These participants generally had sufficient information in regards to their programs but often needed more help on how to get along in the country of training. Little or no pre-departure third country orientation is given in Bolivia and there are no facilities in other countries comparable to those of the Washington International Center. The orientation

given at the University of Puerto Rico was not always satisfactory to the Bolivians who said they would have preferred some aid in finding inexpensive lodgings instead of learning about Puerto Rican history. Such complaints suggest the need of someone to fill a role comparable to that of a project manager. The Training Offices of USAID Missions where third country training takes place generally do not have the facilities for detailed attention to participants from other countries.

It was also found that the participants with the most years of education seemed better informed (answered "yes" concerning the information they had), both relative to their programs and how to get along in the country of training.

PART II - THE TRAINING PROGRAM

The data of this section is related to the entire out-of-country experience of the participant. Training programs may take place in the United States, including Puerto Rico, the Canal Zone, Alaska and Hawaii, or any (third) country outside of the above.

The training itself is classified as to the type of program, such as an observation tour, on-the-job training, academic training (usually a formal university program) and a special program not at a university. Programs may also be made up of a combination of any of the above depending on the specifications of the host country project with which training is associated.

The length of the program varies according to the requirements. Observation tours may be shorter than either academic or on-the-job training. Programs usually are longer for the primary country of training and proportionately shorter for the second and/or third country visited by the participant.

It is essential that the level of the program be appropriate to the

country needs and the background of the trainee. Programs either too advanced or too simple are equally ineffective. For this reason modification of training plans when necessary is important. Trainees should not be required to see too many things so that they are unable to grasp the significance of the various aspects of their experience, and they should also have time for their personal affairs and adjustment.

Orientation is an important factor in adjustment. In the United States it is given at the Washington International Center, American University, various government agencies or elsewhere, depending on the place and type of program.

Money is allocated to pay the trainee's expenses (per diem) over and above program costs. Volunteer groups cooperate in arranging for participants to be entertained in private homes.

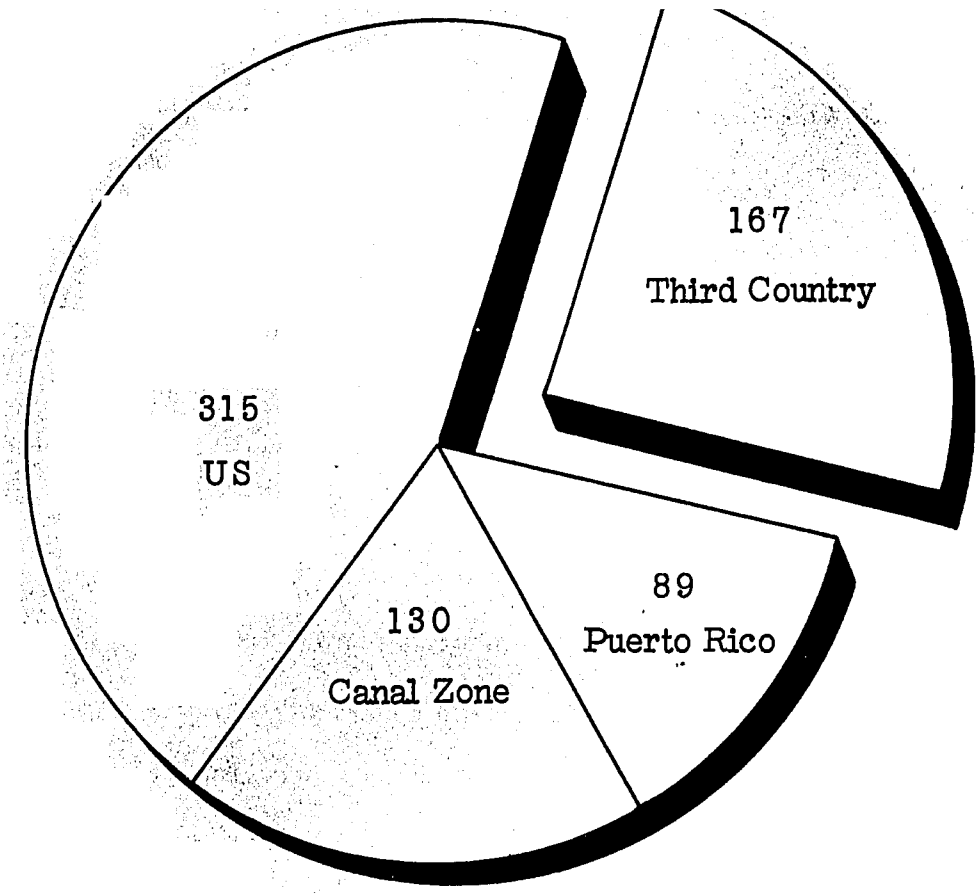
At the close of training some of the participants attend a special communications seminar where they have the opportunity to learn techniques of adapting and transmitting the knowledge and skills acquired during training, and to exchange ideas and discuss problems with participants from other countries.

Available during the entire training period for many trainees is a project manager (although a single project manager serves more than one trainee) to advise and aid on training and non-program-related activities.

Place of Training

Continental United States was the primary country of training for 315 participants (45 per cent) interviewed for this evaluation study. For purposes of the Survey, the Canal Zone and Puerto Rico are also considered "United States". A hundred and thirty trainees (18.5 per cent) went to the Canal Zone and 89 (12.7 per cent) to Puerto Rico, making a total of "U.S. trained" 534 (76.2 per cent).

PLACE OF TRAINING



TOTAL - 701

Figure 7

TABLE 19

Major Field of Activity in Which Training Was Given
(Card 01, Col. 14)

Primary Country of Training (Card 02, Cols. 68-70)	Direct military support (0)	Agric. & natural resources (1)	Industry & mining (2)	Transportation (3)	Health and sanitation Labor (4)	Education (5)	Public administration (6)	Comm. welfare, housing (7)	General & miscellaneous devel., social (8)	Not ascertained (X)	Total
United States (000)	-	51	31	31	67	35	30	47	6	17	-	315
Canal Zone *	56	-	4*	7	-	1	1	12	-	49	-	130
Puerto Rico	-	13	5	2	15	18	3	29	2	2	-	89
Other	-	32	13	13	5	24	18	42	3	17	-	167
Total	56	96	53	53	87	78	52	130	11	85	-	701

* These four cases are army officers whose training in engineering and communications was classified under the functional field of "Industry & Mining".

* Any country, not coded "Other," in which a large proportion of participants were trained should be entered in this table.

Third country training was given in Canada, the United Kingdom and in Europe (Austria, Federal Republic of Germany, Switzerland), as well as in Latin America.

TABLE 20

Country of Training

Country	First Country No.of Parts.	Second Country No.of Parts.	Third Country No.of Parts.	Total No.of Parts.
United States	315	35	1	351
Canal Zone	130	1	-	131
Puerto Rico	89	2	-	91
Canada	-	3	-	3
United Kingdom	1	-	-	1
Europe				
Austria	1	-	-	1
Fed.Rep.of Germany	-	-	-	-
Switzerland	-	-	1	1
Latin America				
Argentina	14	-	-	14
Brazil	16	-	-	16
Chile	34	3	-	37
Colombia	-	-	1	1
Costa Rica	18	2	-	20
Cuba	9	-	-	9
Ecuador	1	-	-	1
Guatemala	-	-	1	1
Mexico	30	24	-	54
Panama	7	2	-	9
Paraguay	2	3	-	5
Peru	27	3	-	30
Uruguay	1	1	-	2
Venezuela	1	1	-	2

Card 02:68-70

Fifty-four trainees (7.7 per cent) went to Mexico. The second and third largest groups went to Chile (37 trainees, 5.3 per cent) and Peru (30 trainees, 4.3 per cent).

The decision to use a third country for training depends on the host country needs and the facilities offered. For example, the nine participants who went to Cuba attended special traffic regulation courses which were given during early 1950's. Chile has facilities for training public health officials and police. Colombia has developed some programs in agricultural extension.

Frequently third country training obviates the need for the trainee to know English, although some participants consider that the opportunity of visiting the United States outweighs disadvantages caused by language and technical development differences. For the Bolivian participant, the quality of the training appeared more important than the place where it was given.

Sometimes a trainee visited more than one country for his program, as indicated in the preceding table (table 20).

Type of Program

Sixty-five per cent (449) of the trainees went on an observation tour for all or part of their program. Almost as many, 62.6 per cent (439) had on-the-job training, and 33.2 per cent (233) attended a university. Ninety participants (12.8 per cent) indicated they were members of a group program at a university. Eighty-six (12.3 per cent) were regular students and 9.4 per cent (66) were special students. Of the 233 who attended a university, only 58 received a degree. Twenty-three of the degrees were at the Bachelor level and 26 were Master's degrees. Nine said they received "another type" of degree and 175 said they had been given a diploma or certificate. There seemed to be some confusion on the part of many as to the academic status of the recognition granted.

The following table (table 21) shows a relatively high proportion of participants who went on an observation tour with the greatest number in labor training. This is because union members and officials from Bolivia,

especially within the past three years, have been sent for relatively short periods (6 to 16 weeks) to visit counterpart union groups and learn something about the economic system, the labor movement. and the way of life in the United States.

TABLE 21

Type of Program by Field of Activity

Field of Activity	Total Participants By Field	Observation Tour No.of Parts.	On-the-Job Training No.of Parts.	University Attendance No.of Parts.
Direct Military Suppt.	56	8	53	1
Agriculture	96	76	58	56
Industry & Mining	53	36	26	15
Transportation	53	31	44	7
Labor	87	83	17	32
Health	78	52	51	51
Education	52	39	29	28
Public Administration	130	87	83	21
Community Dev., Social Welfare, Housing.	11	9	5	8
Miscellaneous	85	28	73	14
Total Participants	701	449	439	233

Card 01:14; 03:61,63 & 65

On-the-job training was important for army, transportation and IAGS participants. On-the-job training in the field of Transportation included practical work for mechanics and heavy equipment operators of the Road Service, and for civil aviation trainees.

Academic programs were followed most often by agriculture, health and education trainees. Public administration trainees (as distinguished from public safety officials classified in the same field of activity) often have academic training. The special programs, not at a university are a separate category not included here since many of these participants were coded as having observation tours or on-the-job training.

Length of Training Program

The length of the training is closely related to the type of program. Observation tours, and on-the-job training are usually shorter than academic training.

The length of time spent by Bolivian participants having the various types of programs is as follows:

TABLE 22

Length of Training by Type of Program*

Length	Observation Tour No.of Parts.	Per Cent	On-the-Job Training No.of Parts.	Per Cent	University Attendance No.of Parts.	Per Cent
Under 2 weeks	26	5.7	9	2.1	8	3.4
2 weeks-1 month	80	17.9	20	4.5	13	5.5
1-2 months	186	41.4	52	11.8	20	8.6
2-4 months	155	34.5	162	37.0	42	18.1
4-6 months	2	0.5	98	22.4	20	8.6
6 months-1 year	-	-	81	18.4	114	48.9
1 year/longer	-	-	16	3.6	16	6.9
2-3 years	-	-	1	0.2	-	-
3 years/longer	-	-	-	-	-	-
Not applicable	252	35.9	262	37.3	468	66.7
	449	100.0	439	100.0	233	100.0

Cards 02:64; 03:62 & 66

* Percentages are in relation to total cases of each program type. Totals exclude inapplicable cases.

Median length of the various program types was as follows: Observation tour - 4 weeks, 4 days; on-the-job training - 13 weeks, 2 days; university attendance - 30 weeks, 3 days.

The 114 trainees with university attendance of six months to one year were able to complete one or two semesters, or three quarters of academic work. The 62 students who attended between two and six months usually followed a limited schedule.

Public administration trainees, for example, sometimes attended one to three university courses but may have an observation tour (visiting

TABLE 23

Year Participant Left For Training Program
(Card 01, Cols. 24-25)

Total Amount of Time Spent in Training (Card 02, Col. 80)	1949 & earlier (49, 48, etc.)	1950 (50)	1951 (51)	1952 (52)	1953 (53)	1954 (54)	1955 (55)	1956 (56)	1957 (57)	1958 (58)	1959 (59)	1960 (60)	Not ascertained (0)	Total
Three years or more (8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Two years to just under 3 years (7)	1	-	1	-	-	-	-	-	-	1	-	-	1	4
One year to just under 2 years (6)	7	1	3	1	13	6	19	19	18	14	5	5	7	123
Six months to just under one year (5)	3	1	1	2	5	2	3	24	22	38	17	6	12	155
Four months to just under 6 months (4)	-	-	-	1	4	3	1	10	17	26	11	11	7	133
Two months to just under 4 months (3)	1	2	-	-	1	3	11	5	7	28	4	13	15	160
One month to just under 2 months (2)	-	-	-	-	-	1	2	1	11	4	16	5	12	98
Less than one month (1)	1	-	-	-	1	-	1	1	2	1	2	1	1	28
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	13	4	5	4	24	15	37	60	77	112	55	41	55	701

TABLE 24

Total Amount of Time Spent in Training
(Card 02, Col. 80)

Level Of Position At Time Of Selection (Card 01, Col. 44)	Less than 1 month (1)	1 month to just under 2 months (2)	2 months to just under 4 months (3)	4 months to just under 6 months (4)	6 months to just under 1 year (5)	1 year to just under 2 years (6)	2 years to just under 3 years (7)	3 years or more (8)	Not ascertained (0)	Total
Top policy makers, executives, etc. (1)	-	3	3	-	-	-	-	-	-	6
Policy makers, executives and administrators - second level (2)	2	3	2	5	3	2	-	-	-	17
Subordinate management, program and administrative officials (3)	16	49	71	46	61	44	2	-	-	289
Engineers (4)	-	2	1	3	17	8	-	-	-	31
Professional occupations (5)	6	19	25	8	28	37	2	-	-	125
Sub-professional occupations (6)	1	3	28	41	20	16	-	-	-	109
Supervisors, inspectors, foremen (7)	1	8	8	9	10	4	-	-	-	40
Artisans, craftsmen (8)	1	2	11	14	13	7	-	-	-	48
Occupations not elsewhere classified (9)	1	9	11	7	3	3	-	-	-	34
Inactive (Y)	-	-	-	-	-	2	-	-	-	2
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-
Total	28	98	160	133	155	123	4	-	-	701

TYPE OF PROGRAMS BY LENGTH

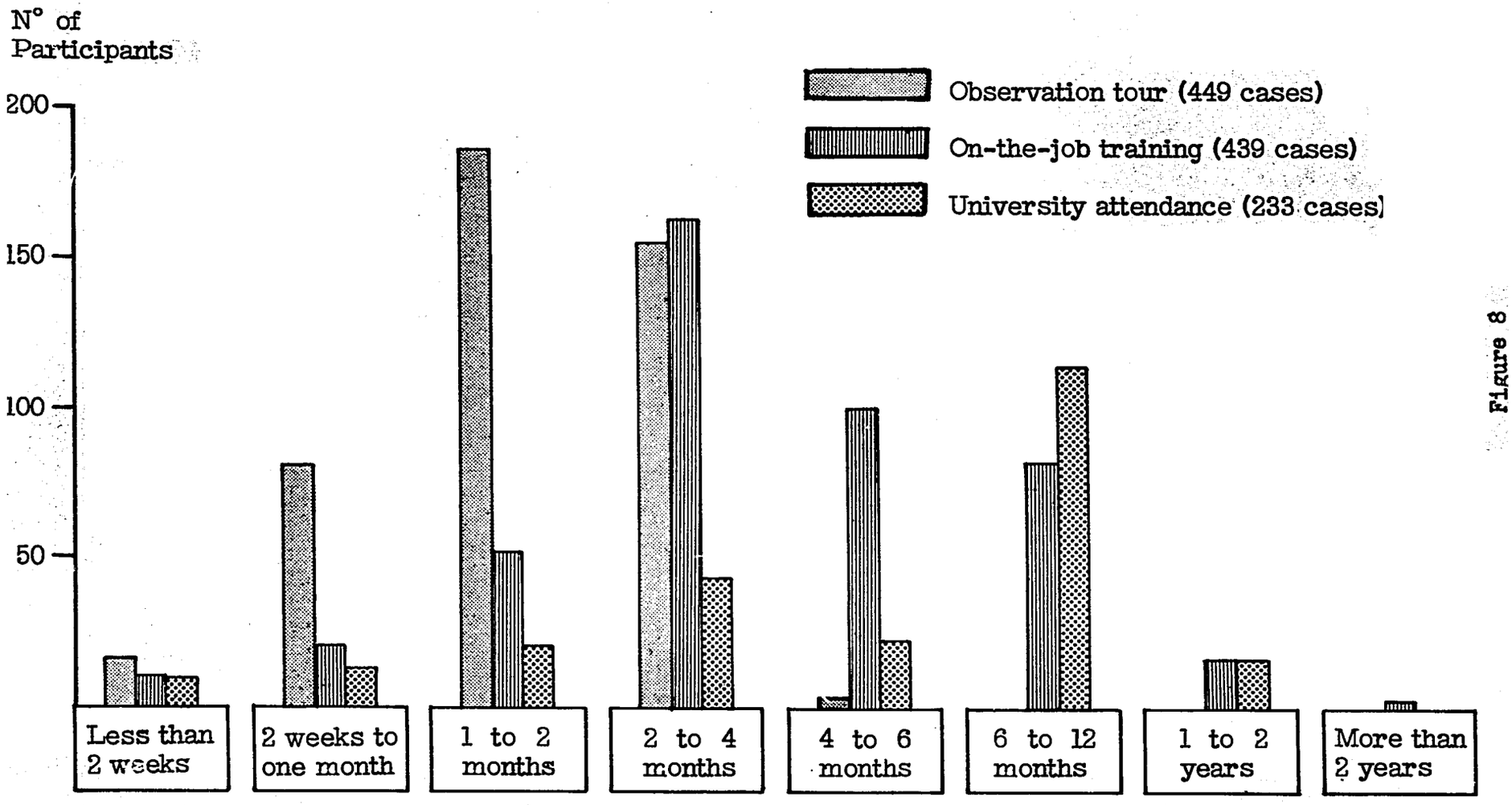


Figure 8

municipal or federal government agencies) plus special courses planned and given through the Public Administration Training Branch. The special programs are usually of short duration.

The distribution of length of training of Bolivian participants over the past 20 years is shown in table 23.

The longest period of training is in one country only, or the primary country of training. The data does not indicate a firm trend toward longer or shorter programs but confirms the relationship of length of training to type of program.

Top level participants had shorter training (2 to 6 months) than engineers and members of professional occupations whose training periods ranged from 6 months to just under 2 years.

Thirty-six per cent (254 cases) considered the length of their training "about right". However 62 per cent (437 cases) thought their training was "too short". Distribution of these opinions by field of activity is shown in the following table (table 25).

TABLE 25 *

Major Field of Activity in Which Training was Given. by How Was The Length Of Your Program?

	Too Long	About Right	Too Short	Total
Direct Military Support	-	20	36	56
Agriculture	3	40	53	96
Industry & Mining	1	23	29	53
Transportation	1	15	37	53
Labor	-	37	50	87
Health	3	43	32	78
Education	1	21	30	52
Public Administration	-	31	99	130
Com.Devel.,Social Welfare,Housing	-	7	4	11
Miscellaneous	1	17	67	85
Total	10	254	437	701

Cards 01:14; 04:32. *There were no cases coded "not ascertained".

COMPARATIVE LENGTH OF PROGRAMS BY FISCAL YEAR

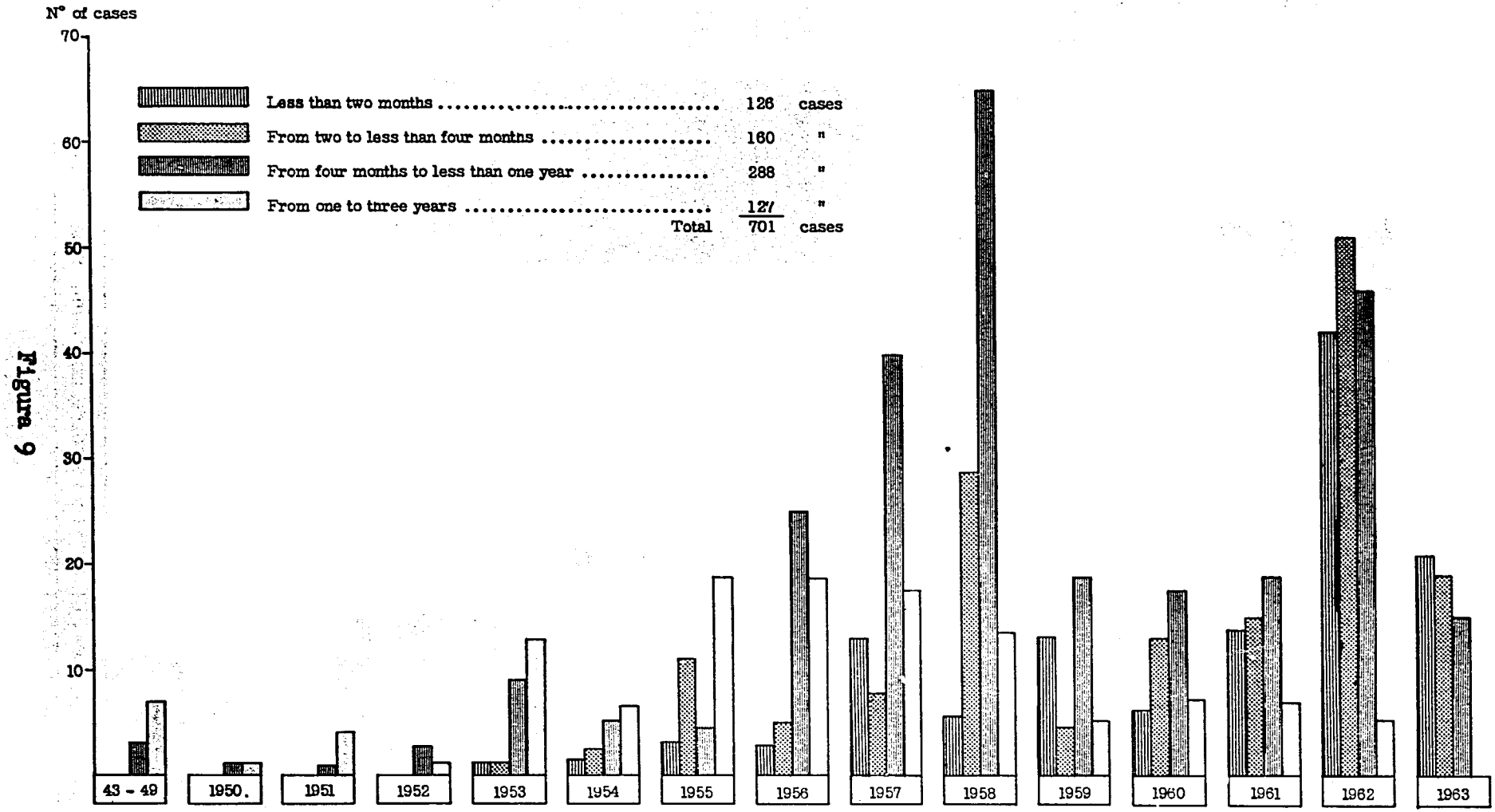


Figure 9

The median time spent in the primary country of training was 5 months (5 months, 3 days); for the second country of training 7 weeks (6 weeks, 6 days); and for the third country 4 weeks (3 weeks, 6 days).

The distribution of cases by time of training in the first, second and third countries of training is as follows:

TABLE 26

Length of Time in First, Second and Third Countries of Training

Length of Training	Number of Participants		
	1st Country	2nd Country	3rd Country
Under 2 weeks	5	32	9
2 weeks - 1 month	28	18	4
1 month - 2 months	93	29	4
2 months - 4 months	155	28	-
4 months - 6 months	122	2	-
6 months - 1 year	159	3	-
1 year - 2 years	108	-	-
2 years - 3 years	30	--	-
3 years or more	1	-	-

Card 02:71,75 & 80.

Level of the Training Program

Sixty-nine per cent of the Bolivian participants considered the level of their training "about right". Only six per cent (40 trainees) considered their programs "too advanced" as compared to 25 per cent (178) who thought their programs "too simple".

As pointed out earlier, the Bolivian trainee generally has more than the equivalent of a high school education and this may explain why a fourth of them found their programs "too simple". There is no significant difference of opinion on program level by Field of Activity that would not occur except as due to special circumstances.

The trainees in Health and Public Administration who found their programs too advanced had academic and on-the-job training which required special

aptitudes and experience beyond what they had been able to acquire in their home country situations.

TABLE 27*

Major Field of Activity in Which Training Was Given by How Did You Find The Level Of Your Program?

	Too Simple	About Right	Too advanced	Total
Direct Military Support	17	38	1	56
Agriculture	27	64	5	96
Industry & Mining	10	39	4	53
Transportation	13	39	1	53
Labor	27	57	3	87
Health and Sanitation	5	64	9	78
Education	7	42	3	52
Public Administration	43	80	7	130
Comm. Dev., Social Welfare, Housing	2	8	1	11
Miscellaneous	27	52	6	85
Total	178	483	40	701

Cards 01:14; 04:35. *No answers coded "Not ascertained".

Slightly more trainees with increased education and experience found their training "too simple" than those who found the training "too advanced".

A greater number of trainees who went to the United States and to third countries found their training "about right" as compared with those who went to the Canal Zone and Puerto Rico. Four point six per cent of those whose training was in the Canal Zone considered it "too simple", and 29.2 per cent of those who went to Puerto Rico were of a similar opinion.

TABLE 28*

Primary Country of Training by How Did You Find The Level of Your Program?

	Too Simple	About Right	Too Advanced	Total
United States	71	225	19	315
Canal Zone	45	81	4	130
Puerto Rico	26	61	2	89
Other (Third Country)	36	116	15	167
Total	178	483	40	701

Cards 02:68-70; 04:35. *No cases coded "Don't know" or "Not ascertained".

Some comments need to be made concerning the meaning of "too advanced" and "too simple". The interview did not provide for gradations of degree or qualifications and thus it is not completely clear as to whether a program might be "too advanced" in terms of the participant's capacity to follow the program, or in relation to the stage of development of his country.

Several academic programs were evaluated by the trainee as "too simple" when the subject matter itself was not pertinent to his program needs. A specific case in point is that of a trainee in Public Administration whose work was that of business manager with a servicio. He attended university courses for most of his program but many of these courses such as history of government of ancient Greece, medieval France, and the British Empire, were little related to his training needs. He wished to secure a Master's degree but time did not permit this. The Public Administration Training Branch, and his project manager made numerous changes in his program by including observation trips and some practical experience which related to the country project needs. However, on balance, the program proved "too simple" especially since he did not even have the compensation of academic recognition.

Another case is that of an industrialist whose program was primarily observation. It was impossible to arrange for him to visit factories similar to the one he owned. He was dissatisfied and called his program "too simple" whereas it was, more accurately, partially inappropriate.

There is an interesting parallel of opinion on program level as distributed by the type of program followed by the trainees.

Very few participants, 11.2 per cent (79 cases), thought that their training required them to do or see too many different things; 48.1 per cent (337) thought their programs were all right and 40.7 per cent (285 cases) would have liked more things to do and see.

TABLE 29

Major Field of Activity in which Training Was Given *2 by Did Your Training Require You To Do Or See Too Many Different Things. *1

	Too many things	Would have liked more	All right as it was	Total
Direct Military Support	7	20	29	56
Agriculture	17	34	45	96
Industry & Mining	10	12	31	53
Transportation	5	19	29	53
Labor	18	41	38	87
Health	10	23	45	78
Education	5	22	25	52
Public Administration	10	68	52	130
Comm. Dev., Social Welfare, Housing	-	1	10	11
Miscellaneous	7	45	33	85
Total	79	285	337	701

Cards 01:14; 04:34
*1. No cases coded "Don't know or don't remember" or "not ascertained".
*2. No cases coded "Not ascertained".

Non-Technical Training Related Activities

Orientation. The purpose of orientation in relation to training is to offer the participant information about the country of training in order to hasten his adjustment so that he may be more receptive of his training.

Sixty per cent (420) of the participants of the Survey attended orientation sessions that took more than one day.

In the United States the majority of the participants attended sessions at the Washington International Center (60 per cent, or 189 cases of the 315 for whom the United States was the primary country of training). Some of the government agencies such as the United States Department of Agriculture and the United States Department of Labor have their own facilities for orientation. At one period the Department of Labor sent their trainees to St. John's College for orientation. (Few cases of this Survey went there because use of St. John's was limited during the period covered in the study.)

In some cases participants attended orientation at both the Washington International Center and a government agency. On occasion, orientation has been given in conjunction with American University English language training.

A majority of the participants (60.7 per cent, 54 out of the 89) who went to Puerto Rico received orientation there. Thirty-three per cent (56 out of 167 cases) of those who went to a third country said they had some sort of orientation.

Only 16 persons (4.4 per cent out of 362) said they would have preferred the time spent in orientation for rest or other activities. Three hundred and forty-six participants (95.6 per cent of 362 cases or 49.4 per cent of 701 cases) considered the time spent in orientation "valuable". *

TABLE 30

Place Where Orientation Sessions Were Held by Do You Consider The Time Spent In These Orientation Sessions To Be Valuable?*

	Valuable	Prefer Time For Rest Of Program	Not Ascertained	Not applicable	Total
W.I.C.	180	9	-	-	189
American University	13	1	-	-	14
St. Johns College	2	-	-	-	2
University of Puerto Rico	51	1	2	-	54
Other School in U.S.	16	1	-	-	17
Agency of U.S. Government	78	3	-	-	81
Plant, factory, business in U.S.	3	-	-	-	3
Outside U.S.	-	-	-	56	56
Don't know, don't remember	3	1	-	-	4
Not applicable	-	-	-	281	281
Total	346	16	2	337	701

Card 03:42 & 44. *No cases coded "Don't know, don't remember".

Some suggestions for modification of orientation were received such as:

"Group trainees according to experience, or nationality".
"It was interesting to meet people from other countries".
"Find out what the trainee knows, and needs to know, and adapt orientation accordingly".
"Give information about special places the trainee will

*362 out of 534 (67.8 per cent) who had U.S. training (continental U.S.315; Canal Zone 130; Puerto Rico 89) spent at least one full day in orientation sessions. Of the 362, only 16 said they would have preferred the time for rest (4.4 per cent).

visit, as well as general information".

Amount of Money Available. Seventy-three per cent of the participants (511) felt that the amount of money made available to them was "about right". No one said he had more money than he needed.

The type of program appears to be of more influence on this factor than the status of the participants, although half of the top policy leaders (three cases only) said the money was "too little".

TABLE 31*

Level of Position at Time of Selection by What Is Your Opinion Of The Money Made Available To You?

	Too little	About right	Total
Top policy makers - National level and/or national impact	3	3	6
Policy makers - Second level and/or non-national impact	4	13	17
Subordinate management - Line or staff	86	203	289
Engineers	6	25	31
Professional occupations	25	100	125
Sub-professional occupations	29	80	109
Supervisors, inspectors, foremen	12	28	40
Artisans, craftsmen	13	35	48
Occupations not elsewhere classified	12	22	34
Inactive	-	2	2
TOTAL	190	511	701

Cards 01:44; 04:54. *No cases coded "Don't know" or "Not ascertained".

One third of those who went on an observation tour considered the money "too little" and slightly less than half of those who had on-the-job training found it inadequate. It appears about right for those with university programs.

The reasons given for considering the allowance insufficient were the

high cost of hotels and meals, especially for those travelling and unable to find economical accommodation; the high cost of books, not covered by other allowances; the need of participants of higher status for extra funds. In a few cases the trainees expected that they could pay certain personal expenses out of the per diem, and were disappointed that this did not cover items as varied as toothpaste, concert tickets, and the purchase of gifts for the family back home. Naturally these latter items were never intended to be budgeted within the per diem.

Often the trainees thought they were being paid less than standard U.S. government rates for U.S. personnel. The one dollar less per diem received by the IAGS trainees in the Canal Zone is a point of contention even though these trainees receive some favoured treatment relative to lodging, meals and entertainment.

Entertainment. In the United States especially, foreign visitors are frequently entertained in private homes. An effort is made in some cities, and in university communities to entertain the trainees, both to become acquainted with them as foreign visitors, and to help them to adjust to strange surroundings. Of the 410 (58.5 per cent of 701 participants) entertained in private homes, 392 (95.5 per cent of the 410 participants) said they liked it very much and only two (0.5 per cent) said they did not like it at all. The comments of the trainees indicated that they appreciated the interest of their hosts. Some Bolivians still continue to correspond with the people who entertained them. The trainees felt they became better acquainted with the United States through knowing some of its people personally and socially. They were also touched by the interest expressed in Latin America and Bolivia, and rarely resented any ignorance or misconceptions which might exist.

Seventy-seven per cent of the participants felt they had sufficient social activities arranged for them. Of the 144 individuals (21 per cent) who would have liked more activities, 93 (64.5 per cent out of 144) were under 35 years of age.

TABLE 32 *

Age in Years at Time of Departure for Training by Were There Enough Social Activities Arranged for You?

	Too many activities	About enough activities	Not enough activities	Total
Under 25 years	1	60	11	72
25-29 years	4	142	42	188
30-34 years	2	118	40	160
35-39 years	3	104	21	128
40-44 years	2	51	16	69
45-49 years	1	42	10	53
50-54 years	-	19	3	22
55 years/older	1	7	1	9
Total	14	543	144	701

Cards 01:55; 04:64. *No cases coded "Not ascertained"

Communications Seminar. Very few participants (10.7 per cent, or 75 cases), attended a communications seminar. These seminars grew out of the wish to help the participant, at the close of training, plan for its utilization.

At the seminars an effort is made to suggest methods of transmitting training knowledge such as audio-visual techniques and the ways, as well as the need, to adapt what the trainee has learned to his home country situation.

Various types of "de-briefing" have been given participants by universities and government agencies. However, the seminar planned and conducted by Michigan State University is perhaps more formal and more academic than the seminars of some other agencies. The comments of the participants who attended a seminar are listed in the following table (table 33).

TABLE 33

What Did You Like Most About The Communications Seminar?

	No.of Parts.	Per Cent
Liked everything	6	8.0
Liked nothing	2	2.7
Liked learning how to communicate with others	26	34.7
The ideas/suggestions for adapting what had been learned	15	20.0
Liked the teacher of the seminar	15	20.0
Liked the exchange of ideas with people of other countries	17	22.7
Non-specific responses	5	6.7
Other	9	12.0
Total	95*	126.8*

Card 04:71 & 72. *20 participants reported two concepts.

Sixty (80 per cent) out of 75 trainees said they had used something of the materials and ideas from the seminar in their work. More (24 cases) had used the materials in teaching others, and through books and pamphlets (14 cases) than in any other way. The 15 persons who said they had not used any of the materials from the seminar claimed it was due to lack of opportunity or the inapplicability of what they had learned.

Summary

Pre-training preparation and good quality programs are basic factors of effective technical cooperation skill-sharing. The selection of high calibre participants is the first ingredient of good training.

In Bolivia there are no well established standards or procedures of participant selection. Forty-seven per cent of the trainees were chosen by their supervisors and 32 per cent were selected by a U.S. official.

The USAID/Bolivia Training Office carries on all the paper work involved in arranging participant training though evidence indicates that the U.S. Mission technician plays a strategic role in participant selection and program planning.

According to participant testimony the following qualifications were judged "very important" factors in the decision to go on training:

Personal ability 94.5 per cent
Needs of the job 93.0 per cent
Professional and educational qualifications 91.2 per cent
Personal contacts 77.8 per cent
Language ability 36.9 per cent.

Use of the English language was "not applicable" for 46.8 per cent of the participants, although 315 people had the United States as the primary country of training.

Only 27.8 per cent of the participants had an opportunity to take part in planning their programs, and only 9.7 per cent had training programs based primarily on their ideas. The 72 per cent (506 participants) who did not have a chance to help in planning their programs felt that such an activity would have been very beneficial.

The programs of 500 participants (71.5 per cent) were complete in every detail when they arrived in the country of training. Four hundred and ninety one participants, (70 per cent) said they received enough attention from the person in charge of their programs. One hundred and eighty trainees (25.7 per cent) had no special project manager.

Ninety per cent of all the trainees said they did not receive pre-departure information from the Ministry "sponsoring" their training. According to the participants such information came primarily from their supervisors (34.2 per cent) and U.S. personnel (19.2 per cent).

Forty-four per cent of the trainees considered they received enough advance information about their programs. The information related to: what they would be learning (60 per cent); where they would be going (74 per cent); when they would be going (88 per cent); how long their program

Sixty-four per cent of the participants said they received enough information about non-technical aspects of their training programs, such as how to use restaurants, public facilities, transportation, colloquial speech, money and manners in general.

Seventy-six point two per cent of the participants went to the "United States" for training: 45 per cent to continental United States; 18.5 per cent to the Canal Zone, and 12.7 per cent to Puerto Rico (all considered "United States" training). The principal third countries of training were Mexico, Chile and Peru.

Most participants had combinations of the various types of programs with a distribution per type of program as follows: observation tour 65 per cent; on-the-job training 62.6 per cent; university training, 33.2 per cent.

Most observation tours lasted about 1 month. On-the-job training laste slightly longer, approximately 3 months. Academic training was roughly 7 and one half months.

Sixty-eight point nine per cent of the trainees found the level of their programs "about right".

Sixty per cent of the participants received orientation that took more than 1 day, and 49.4 per cent considered it "valuable".

Seventy-three per cent of the trainees said the amount of money allowed them was "about right".

Fifty-eight per cent of the participants were entertained in private homes and of this group 95 per cent enjoyed this activity very much. Seventy seven of all the participants thought they had sufficient social activities.

Only 10.7 per cent (75 trainees) attended a communications seminar at the close of training. Sixty out of the 75 said they had been able to use some of the materials and ideas from the seminar in their work.

CHAPTER V

PARTICIPANT, SUPERVISOR AND TECHNICIAN ATTITUDES ON TRAINING

The USAID Training Office, supervisors, technicians and Washington backstopping agencies make valient and generally effective efforts to provide training programs related to Mission, host country and participant needs; but if these programs fail to "satisfy" the participant in one or several respects, obstacles may arise which will seriously affect the trainee's learning process and possibly his capacity and disposition for post training utilization.

Similarly, if the supervisor or technician feels that the program has not met the requirements of the participant or the country needs this may indicate that the training was deficient in a respect that will limit its value for host country development.

Because evaluating the quality of training was a stated objective of the Survey plan, the interview questionnaires for participants, supervisors and technicians were designed to gather data to measure their assessment of the quality of the training.

The satisfaction with the training as planned before training; the reaction of the participant to various aspects of the program, such as country of training, type of program, level and length; and the corroboration of the supervisor and technician on the suitability of the training, are specific indications of training quality.

Participant's "Satisfaction" With His Training

The interview questionnaire contained two questions relative to the participant's satisfaction with his training. The first question asked how satisfied the participant had been with his program prior to training

and provided for two categories of classification: "well satisfied" and "not very well satisfied". Toward the end of the interview the respondent was asked to give his opinion on how satisfactory he had found his training after having completed his program. Four categories of reply were provided for the answer to this question: "very satisfactory", "moderately satisfactory", "not too satisfactory", and "not satisfactory at all".

The 55 per cent of participants (385 cases) "well satisfied" with their programs before they left for training are distributed fairly evenly by major field of activity. Thirty-four per cent (236) could not remember whether or not they were satisfied with their programs prior to training. Other than lapse of memory due to the time lag, this might indicate that the group was not integrated to any appreciable degree in program planning.

TABLE 34*

Major Field of Activity In Which Training Was Given by Before You Left To Go Abroad, How Satisfied Were You With Your Training Program?

	Well Satisfied	Not Very Well Satisfied	Didn't Know Enough, Don't Know, Don't Remember	Total
Direct Military Support	32	7	17	56
Agriculture	49	14	33	96
Industry & Mining	30	6	17	53
Transportation	29	3	21	53
Labor	47	8	32	87
Health	44	9	25	78
Education	34	3	15	52
Public Administration	73	11	46	130
Comm.Dev.,Soc.Welfare,Housing	5	1	5	11
Miscellaneous	42	18	25	85
Total	385	80	236	701

Cards 01:14; 02:36. *No cases coded "Not ascertained".

The degree of satisfaction with the program is greater after training than before. The number of those "very satisfied" is 416 (59.4 per cent)

This number, plus 254 (36.2 per cent) "moderately satisfied" makes a total of 670 (95.6 per cent) "satisfied" participants as compared to 385 who thought their programs were "satisfactory" before going on training. The number of cases "not very well satisfied" decreased from 80 to 31.

The composite table, based on various cross tabulations indicates the evaluation and degree of satisfaction after training with various factors affecting the participants' reactions.

TABLE 35

Satisfaction with Training by Selected Factors

Factor	How Satisfactory Was That Training Program? *1				
	Very Satisfactory	Moderately satisfactory	Not too satisfactory	Not satisfactory at all	Total
Major Field of Activity in which Training was Given.					
Army	34	22	-	-	56
Agriculture	48	38	10	-	96
Industry & Mining	33	20	-	-	53
Transportation	34	18	-	1	53
Labor	53	32	2	-	87
Health	52	24	2	-	78
Education	33	17	2	-	52
Public Adminis.	65	56	6	3	130
Social Welfare	8	3	-	-	11
Miscellaneous	56	24	4	1	85
Total	416	254	26	5	701
Level of Position at Time of Selection					
Top policy makers - nat.level and/or nat.impact.	5	1	-	-	6
Policy makers - 2nd level and/or non-nat. impact	12	5	-	-	17
Subordinate management - Line or staff	169	106	11	3	289
Engineers	15	14	1	1	31

Table continued on following page.

	Very satisfactory	Moderately satisfactory	Not too satisfactory	Not satisfactory at all	Total
Professional occupations	73	46	6	-	125
Sub-prof. occupations	67	36	5	1	109
Supervisors, inspectors, foremen	27	11	2	-	40
Artisans, craftsmen	26	21	1	-	48
Occupations not elsewhere classified	21	13	-	-	34
Inactive	1	1	-	-	2
Total	416	254	26	5	701
Total Years of Education at Time of Selection					
17 or more years	138	81	8	-	227
13 - 16 years	105	75	8	3	191
9 - 12 years	141	81	8	1	231
5 - 8 years	31	15	2	-	48
1 - 4 years	1	-	-	1	2
No formal education	-	-	-	-	-
Not ascertained	-	2	-	-	2
Total	416	254	26	5	701
Did You Have the Opportunity to Take Part in the Planning of your Program?					
Yes	127	61	6	1	195
No	289	192	20	4	505
Don't know,don't rem.	-	1	-	-	1
Not ascertained	-	-	-	-	-
Total	416	254	26	5	701
Primary Country of Training					
United States	190	113	11	1	315
Canal Zone	81	47	2	-	130
Puerto Rico	49	34	4	2	89
Other	96	60	9	2	167
Total	416	254	26	5	701

Table continued on following page.

	Very satisfactory	Moderately satisfactory	Not too satisfactory	Not satisfactory at all	Total
Number of Countries in Which Training was Received *2					
One country only	374	233	26	5	638
Two countries	37	19	-	-	56
Three countries	5	2	-	-	7
Total	416	254	26	5	701

Cards 06:52; 01:14,44,57-58; 02:37,67,68-70.
*1. No cases coded "Don't know" or "Not ascertained. *2. Training was received in not more than three countries.

The 10 individuals in Agriculture who found their programs "not too satisfactory", and the nine in Public Administration might warrant further investigation to discover if the difficulty was due to special circumstances or if there was a deficiency in program planning and implementation.

Slightly over half the participants who had third country training were "very satisfied" and approximately two thirds of the trainees who went to the United States and the Canal Zone were "very satisfied". The smaller number of trainees who were satisfied with Puerto Rico as a training site (even though the figure is well over 50 per cent) corroborates individual testimony of the participants that they considered the training in Puerto Rico could have been improved.

There is too great a difference in the number of participants who had training in one country only (638) and those who went to two (56) or three (7) countries to infer that the number of countries visited or not visited had an important effect on training satisfaction. Only 31 who were trained in one country only were not satisfied. The participants commented that they preferred to concentrate their training and a few complained about too much travelling or seeing too many things. Several participants who

visited two countries said the length of time in the two countries should have been better distributed, and that in many cases the time in the second country was too short to assure adequate learning. (This was the case of some of the labor trainees who spent a few days in Mexico after several weeks in the United States).

It is significant that a high percentage of first and second level policy makers, professionals, and sub-professionals, found their programs "very satisfactory", whereas in other categories the trainees judged their programs only "moderately satisfactory". One hundred and sixty-nine individuals out of a total of 289 in the subordinate management group found their programs "very satisfactory". However, 14 cases of less satisfied participants are in the subordinate management classification. The information available does not permit an analysis of these special cases.

The participants with the most years of education at the time of selection found their programs "very satisfactory".

That most of the well educated trainees with important positions found the training "very satisfactory" suggests that the training must have been of good quality.

Inasmuch as 505 participants did not have an opportunity to take part in planning their programs, it must be assumed that participant satisfaction is not dependent on having the training based on the participant's ideas. However, more participants who did not take part in program planning were only "moderately satisfied" than "very satisfied".

As may be observed from the following table, approximately 50 per cent of the participants were "very satisfied". Attention should be called to the relatively high number, 437 (62.5 per cent) who said their programs were "too short" as well as a similar number, 483 (68.9 per cent) who said the level of their program was "about right".

TABLE 36

Degree of Participant Satisfaction with Training Program in Terms of Various Program Factors

Factor	"How Satisfactory Was That Program?"								
	Very satisfactory		Moderately satisfactory		Not too satisfactory		Not satisfactory at all		Total
	No.	%*	No.	%	No.	%	No.	%	
Type of Program									
Observation tour	261	58.0	169	37.7	18	4.0	1	0.3	449
On-the-job	260	59.2	158	36.0	18	4.1	3	0.7	439
Attended university	144	61.8	80	34.3	9	3.9	-	-	233
Did you receive a Diploma?									
Yes	39	68.4	19	31.6	-	-	-	-	58
Length of Program									
Too long	4	40.0	5	50.0	1	1.0	-	-	10
About right	168	66.1	79	31.1	7	2.8	-	-	254
Too short	244	55.8	170	38.9	18	4.1	5	1.2	437
Level of the Program									
Too simple	72	40.4	84	47.2	18	10.1	4	2.3	178
About right	318	65.9	156	32.3	8	1.6	1	0.2	483
Too advanced	26	65.0	14	35.0	-	-	-	-	40
Difficulty with English									
No difficulty	72	69.9	28	27.3	2	1.9	1	0.9	103
Difficulty being understood	26	49.1	23	43.4	4	7.5	-	-	53
Difficulty in understanding	35	58.4	21	3.5	4	6.6	-	-	60
Both	87	55.8	66	42.3	3	1.9	-	-	156
Were you Entertained in Private Homes?									
Yes	247	60.3	147	35.8	14	3.4	2	0.5	410
No	169	58.0	107	36.8	12	4.1	3	1.1	291
Did you Attend a Communications Seminar ?									
Yes	47	62.6	22	29.4	6	8.0	-	-	75
No	368	59.0	232	37.2	20	3.2	4	0.6	624
Don't remember	1	50.0	-	-	-	-	1	50.0	2
How Important was Your Program?									
Most important	376	72.5	138	26.7	4	0.8	-	-	518
Waste of time	-	-	3	30.0	3	30.0	4	40.0	10
In between	40	23.1	113	65.3	19	11.0	1	0.6	173

Cards 03:61,63,65; 04:20,32,35,58,69; 05:18; 06:52;53.

*All percentages are taken on the basis of the total given in the final column

Value of a Degree. Only 58 participants received a degree after attending a university as part of their training. One hundred and seventy-five received certificates. Twenty-three received Bachelor's, and 26 Master's degrees; eight received degrees of an unspecified category.

Many participants who did not receive a degree, as noted from comments given after the interview, and those written on the "white sheet" attached at the end of the interview, were disappointed by the lack of tangible evidence of their increased academic knowledge. This measure of training and post-training "satisfaction" should perhaps receive further investigation and attention. The technicians generally endorsed the value of a degree to a trainee if he followed an academic program.

One hundred and seventeen out of 144 (81 per cent) who attended a university thought a degree would have helped their careers "very much", as compared to 21 (14.5 per cent) who thought it would not have helped at all. Of the 58 people who received a degree in the course of their training, 48 said that the degree would help their careers "very much". Only two said "not at all". The most important reason given by all who attended a university for having a degree was "prestige" (83 cases). The next two most important reasons were job advancement, and the acquisition of more knowledge.

Participants' Criticisms of Training. Although participants were found to be pleased with various aspects of training, as discussed elsewhere, some specific complaints were offered that could profitably be taken into consideration in arranging future training programs.

Relative to the training program itself, participants suggested that:

> "Plans for the training program should begin with a study of Bolivian problems. An effort should be made to gear the training toward solving these problems and foreseeing difficulties of application so that the training could 'help meet these problems in advance'.".

> "More pre-training analysis of country needs and participant qualifications for the training and the post training job would result in better selection of the participants, more suitable programs, and less difficulties in applying the training on return home."

> "More care should be exercised in the selection of the place of training. What the trainee learns or observes in the course of his training should be related to his home country situation. This is particularly true for certain fields of specialization where technical advances in the United States are so far ahead of the existing conditions in Bolivia that there is no relationship or possibility of adaptation or applicability of the training. Observing the stage of development in the United States may offer inspiration to a Bolivian trainee but it may also be the source of discouragement and frustration."

Criticism of non-technical aspects of the programs were relatively minor but the difficulties cited could cause major irritations. The participants complained that their "visits were too rapid"; that they did not have time for social activities and that attendance at cultural and sporting events should be an integral part of the training experience. A few trainees said they would have liked to live in private homes in order to become acquainted with the citizens of the country they were visiting (not only in the United States but in third countries). However, a few people said they had too little advance knowledge of the customs of the country of training (this was not covered sufficiently in orientation) and that this was sometimes a stumbling block for training learning.

Participants also felt the need of being well informed about Bolivia and their particular fields of specialization. Some were embarrassed when they could not offer adequate details about their country's development.

Program Changes. Five hundred and forty-four trainees followed their programs as planned. Of the 157 participants who requested program changes and received them, 141 thought the changes were necessary. The modifications were as follows:

TABLE 37

What Kinds of Changes Were Made In Your Program?

	No.of Parts.
Changed location of training, visited one place rather than another, studied at different institutions.	20
Changed or added subjects	67
Included more observation	21
Included more practice, on-the-job training	18
Included more academic study	9
Changed to a degree program	7
Changed to more advanced program	13
Changed to less advanced program	2
Made it a longer program, included more training	20
Made it a shorter program	17
Changed program, nature not specified	6
Other changes not included above	10
(Not applicable...544)	210*

Card 04:40-43. *Total is higher than 157 because more than one kind of change was made in some programs.

An interview question asked the participants "If you were to go through that (training) program again what changes would you like to have made in it? Why? Any additional ideas?".

Only 37 out of 701 said, after training, they did not wish any changes. Many participants suggested several changes, the most frequently mentioned being "more training", "longer training", "broader training objectives". Such suggestions were given 319 times.

The next most frequently suggested change was "The program should have been more specifically related to my needs, the needs of my job, my country". This answer (or one very similar) was given 273 times. 174 trainees said they would have liked "more specialized training", and fewer visits or subjects in order to "gain a better understanding of the things I did observe". In relation to changes in type of training program, 148 said they would have liked some, or more, practical work; that the program was too theoretical.

The various suggestions on changes in the arrangement of the training program were offered between 50 and 65 times and dealt with better program

organization, program planning by the participant, training at a different place (university or factory) better language training, more advance "orientation" information, more homogeneous grouping of trainees, more planning in regard to the post-training job. Only 50 individuals gave the last mentioned reason suggesting that the trainees themselves were not too preoccupied with pre-training utilization plans.

Technician/Supervisor Opinions on Training Procedures, Programing and Participants

It is pertinent, even at the risk of some duplication of data given elsewhere, to consider here the degree of involvement of the technicians and supervisors in the training process: whether or not the trainee was known to them, or selected by them; if they helped in planning the program, or coordinated it in any way with the participant's employer or the host country government; and finally the ideas of the technicians and supervisors on the value of training.

It should be recalled once more that the number of technicians and supervisors whose opinions were obtained is relatively small. Nevertheless, the opinions are of value inasmuch as most of those interviewed knew the participants fairly well, with the exception of 107 cases of supervisors whose present work schedules did not coincide with the training period of the participant.

Technician Opinions. The U.S. technician was asked if he had much contact with the participant (about whom the technician was being interviewed) since the latter's return from training. As regards 130 trainees the technicians said they had such contact, and that nothing interferred with it. In 56 cases the technicians helped select the participant, and in 53 cases had helped plan the training program.

TABLE 38

Technicians' Rating of Program Factors

	Satisfactory	Unsatisfactory	Can't Rate	Total*
Pre-departure orientation	130	-	49	179
Type of program	146	4	29	179
Length of program	137	10	32	179
Level of program	141	7	31	179
Country/countries of training	150	-	29	179
Appropriate materials	145	3	31	179

Card 11:39,42,50,48,52 & 57.
*Number of participant cases involved

Special comments of the technicians concerning training follow:

Army

"Selection and placement of the trainees is done entirely by the Bolivian Army whose system is to change commanders and assignments (locations) at the beginning of every year."

"Engineering training is well established and standardized to meet training needs. The trainee receives pre-departure orientation and English training at the Centro-Americano Boliviano if he is going to the United States. If he has passed his language examination he is told about the progra prepared for him. Generally the program experience is good

Agriculture

"For field training (farm credit programs) six months is adequate. For bank executives longer training is imperativ For some phases of banking training academic studies and a degree are very helpful. On the whole, programs in this field (supervised credit and related activities) have been too short and too superficial."

"Some of the training in Puerto Rico has been criticized as inadequate. This may make for poor utilization because the trainee is dissatisfied and feels he is not as well prepared as he should be."

"Technical cooperation training in administration has been good. However, the training should not be for less than six months, and longer if possible."

"I don't approve of short training especially 14 day seminars Practical training is needed when the field of specializatic is specific. Too theoretical training is often difficult to apply."

"There should be more advance planning so the trainee can have better pre-departure preparation. Plans for utilization should be worked out in advance. Unfortunately too

often the training money comes at the last minute or the funds available are changed. The programs, generally, are very good."

"There should be inter-disiplinary training whenever possible."

"The weak points of training are that it is too short and too superficial. Training programs should be longer with more depth. Whenever possible the participant should receive a degree. This is important psychologically as well as academically. With a degree the participant has more prestige, is given more opportunity for training utilization, and he has more self-confidenc Theoretical academic training should be coupled with practical training whenever possible. However, short practical training is of little value unless the traine has the background and experience to profit from it."

Health

"There should be more funds for participant training especially in fields that are directly incident upon economic development as in occupational health and maleria eradication."

IAGS

"The training programs themselves are very satisfactory. The training is basic and gives leaway for the participant to help train others."

Industry

"One should always try for more and better training. It should be improved, be more objective, with better selection of trainees. Training should be under a program rather than under an individual. It should be kept under a program and receive cooperation relative to othe activities of the Mission."

Transportation

"Training is highly beneficial. It is well planned and there is good backstopping in the United States with sufficient variety of programs to meet almost any training need."

"The International Road Federation training is excellent.

Supervisor Opinions. The supervisor was asked if the participant worked for him when training occurred. This was the case for 124 trainees, or 48.1 per cent of those about whom the supervisors were interviewed (258 participants).

Of the 170 supervisors interviewed, 97 said the selection procedures

were "satisfactory", 21 "unsatisfactory" and 52 couldn't rate them. The reasons given for the procedures being unsatisfactory are:

TABLE 39

Why Participant Selection Procedures are Unsatisfactory (Supervisor)

Reasons	No. of Times Mentioned
Participant's knowledge or experience in his field should be an important criterion of selection	8
Participant should be selected by means of competitions, examinations	7
Selection procedures are careless or hasty	2
Selection should be appropriate to the requirements of participant's job, supervisor, employer, needs of country	5
A participant should be selected by his supervisor or another superior at his place of employment	4
	26*

Card 12:13-16. *Total is 26 because some supervisors gave more than one reaso

The supervisors participated in planning the participant's program in only 43 cases (16.7 per cent). In three cases the supervisor planned the entire program. Usually the supervisor's participation was limited to making suggestions or decisions on what subjects should be included, or the type of things to be observed (30 cases).

The supervisor was asked to rate the subject matter covered in the training programs. It was considered "satisfactory" in 134 cases, as compared to 14 "unsatisfactory".

The replies as to why the subject matter coverage was unsatisfactory are scattered and cited by only a few supervisors. However, the supervisors said most frequently that the subject matter was not appropriate to participant, job or country needs; or that it should be more related to the participant's background or knowledge.

The training was rated "worth the cost and the difficulty" in 223 cases and not worth while in only 12 cases.

The replies of the supervisors to the question "How suitable was the participant's training to your organization" were classified as positive, neutral or negative. The most frequently heard positive comment was that "training was excellent" (95 instances); "specifically suitable because participant is applying his training in his work" (80 instances); and "participant is conveying his training to others, teaching" (22 instances).

Negative comments were made regarding the programs of 24 participants. For 14 of these the supervisor claimed he had too little information for a positive evaluation. In 10 cases the supervisor said the training was not suitable because it was "not appropriate" either to the trainee's job, or his background, or that the trainee was not working in the field of training.

Weak positive comments, or neutral comments gave faint praise to training. The supervisor said training had not made any difference in 12 cases.

The number of positive comments among all the replies are important since they are the most numerous, and the negative or neutral comments are few.

In 56 cases the supervisors said they had no changes to suggest because the program was good the way it was. Twenty-six said merely "no further comments".

The changes suggested by supervisors to improve training programs were:

Training should be longer.	43
The content of the program should be more specific; concentrate on fewer subjects.	29
The program should be planned to meet the needs of the participant, his employer, his country.	25
Program should include more practical training, more on-the-job experience.	20

Importance of Training Program

Training was the most important thing they had ever done for 74 per cent

(518) of the participants. Slightly over one per cent (10 cases) found it a "waste of time", and 25 per cent (173 cases) said it was "in between".

Of the 518 trainees who thought their training "most important", 376 had "very satisfactory" programs. The ratio of degree of satisfaction to degree of importance is shown in the following table:

TABLE 40*

How Satisfactory Was That Training Program? by How Important Was Your Program?

	Most Important Thing	Waste of Time	In Between	Total
Very satisfactory	376	-	40	416
Moderately satisfactory	138	3	113	254
Not too satisfactory	4	3	19	26
Not at all satisfactory	-	4	1	5
Total	518	10	173	701

Card 06:52,53. *No answers coded "Don't know" or "Not ascertained".

However, even though training was considered important by 518 trainees, only 195 (27.8 per cent) thought they would not have as good a job as they held (at the time of the interview); had they not gone on training. Four hundred and six (57.9 per cent) said they would have about the same kind of job; and 36 said they would have had a better job. Those with the most satisfactory training considered they would have the same or not such a good job without their training.

TABLE 41

How Satisfactory Was That Training Program?" *1 by Suppose You Had Not Gone on This Training Program, What Kind of Job Do You Think You Would Now Have? *2

	About the Same	Better	Not as Good	Don't Know	Not applicable	Total
Very satisfactory	234	15	137	27	3	416
Moderately satisfactory	151	19	53	25	6	254
Not too satisfactory	18	2	5	1	-	26
Not at all satisfactory	3	-	-	2	-	5
Total	406	36	195	55	9	701

Cards 06:52; 05:42. *1. No answers coded "Don't know" or "Not ascertained". *2. No answers coded "Not ascertained".

The reasons given as to why training was important were classified as to "personal" and "impersonal" gains, "specific" and "non-specific". The personal gain (non-specific) most frequently mentioned (cited 135 times), was "Training was educational, gave me experience". Among the most frequently indicated specific, impersonal gain was that of being able to work more efficiently and make a contribution by transmitting knowledge, (cited 200 times). The acquisition of knowledge, and specific techniques applicable in solving problems in Bolivia were also noted as being of value.

The cases in which training was considered a "waste of time" involved inappropriate programs, either too short, at too low a level, or poorly organized. The other reasons were given relatively few times and are therefore excluded here.

The participant was also asked to indicate what was the most useful and valuable part of his experience. Twenty-five per cent (173) indicated their "studies in general", specific subjects studied, or techniques and procedures observed. Twenty-five (24.7) per cent were impressed with the way in which offices, plants, government agencies etc. were organized, especially the discipline and teamwork.

Seventy-two per cent said that the entire program was useful.

Without exception the U.S. technicians interviewed felt that training played an important role in their division programs and in the economic development of Bolivia. Most of the supervisors were of similar opinions, particularly those who were closely associated with training. One U.S. technician said:

> "Participant training has a high incentive aspect in that it helps attract competent people, and also serves to raise the professional prestige of the candidate because of the attention given to training received abroad."

The belief that training was considered a "tour abroad" or a "junket"

was found true in only a few isolated cases. In many of these cases training failure might be because of other factors such as political influence in selection, and/or lack of preparation of the trainee.

On the whole training was considered of value for its good quality and for its potential contribution to the individual participant, to his job, and to his country.

Summary

The opinions of the participants, supervisors and technicians on whether or not training was "satisfactory", "important", "suitable", are a gauge of training quality and its usefulness.

Ninety-five point six per cent (95.6 per cent) of the trainees were "satisfied" with their programs, of whom 59.5 per cent were "very satisfied", including two-thirds of the participants who went to continental United States and the Canal Zone.

More than 90 per cent of all the participants were satisfied when questioned in relation to specific factors such as type of program, level of their programs, and training "importance". However, 65 per cent considered that their programs were "too short".

Participants expressed some specific criticisms of training programs, selection procedures,and lack of support in training utilization. They felt programs should be more carefully related to Bolivian, job and participant needs. A preliminary analysis of needs should be the basis of the training. This should be accompanied by specific plans and aid for post training utilization. The criticisms of the non-technical aspects of training were relatively minor. They suggested better balance between program and cultural/recreational activities; less hectic training; and improved country-of-training orientation.

Program changes were made for 157 participants who requested them. Asked at the time of the interview if they would suggest program changes should they have an opportunity to go through their training again, the respondents suggested most frequently "longer" programs; and "broader training objectives". The next most often made request was for programs better related to country and job needs.

Few criticisms of training were offered by the technicians. However, they supported the participants' desire for longer training and considered that more specialized training was preferable to general training which is sometimes difficult to apply. On the whole, they found training satisfactory and thought it should be increased.

The supervisors were not always familiar with the participants' trainin and in only 43 cases had participated in planning the training program. They were in fairly close contact with the trainees about whom they were interviewed, had discussed the training experience with them and considered the training satisfactory. Their principal criticism was that the training shoul be more related to the participant's job and Bolivian needs.

Training was the "most important" thing they had ever done for 74 per cent of the participants. Slightly over one per cent found it a "waste of time". There appears to be a high correlation between "very satisfactory" training programs (416 cases) and consideration of training as "most importan (376 cases). Seventy-two per cent said their entire program was "useful".

The concensus of opinion was that training was of good quality and capable of making a high actual and potential contribution to Bolivia.

CHAPTER VI

UTILIZATION OF TRAINING

Technical cooperation training is for use. Training must be a part of a project which in turn has been proposed and accepted within the framework of the USAID program, closely correlated with host country needs, and United States foreign aid policy with particular reference to the region and the country involved. Technical cooperation training, like the projects of the Mission program, must be "requested" by the host country government.

The effectiveness of the training program as a whole may be judged by the degree to which the participants are using their training after their return from abroad. The first requirement is employment; and of equal importance is a job in which the participant can utilize his training-acquired skills.

Each participant, before going on training, signs a statement in the form of a contract, with his employer, in which he agrees to return to Bolivia immediately on completion of training, to use his training in work suitably related thereto for the benefit of Bolivia.*

Neither USAID/Bolivia nor the Government of Bolivia (except as a direct employer) assumes specific responsibility for ensuring job-related training utilization.

Despite some lack of pre-training planning for training utilization and the firm assurance for every participant of a post-training, training-related job, the record of employment and training utilization among Bolivian participants is unusually high.

* It is the custom in Bolivia that for training of between 1 and 3 months, the trainee agrees to work for 12 months; for 3 to 6 months training the work period is 18 months; and for training lasting 6 months to 1 year, 24 months. Recently, agreements were signed for 32 months work related to training for 16 months.

It was found that practically no unemployment existed among the returned trainees. Job advancement had occurred for many participants. Only 9.2 per cent (65 participants) had been unable to use any of their training skills as compared to 89.4 per cent (626) who said they had been able to use at least something of the knowledge acquired during training.

Relatively few are working in fields of activity unrelated to training; and a very high percentage of the trainees can be credited with good "transmission" of training in informal ways.

The supervisors and technicians tended to substantiate the participants' estimate of their use of training.

In this chapter, consideration of the above factors, such as degree of training use assessed through utilization scores, who the trainees are, where they are working, and how they are using their training, information is presented, in addition, on program and job factors which affect utilization.

Training Utilization Scores

To ascertain the degree to which participants have used their training, numerical scores were assigned to specific questions in the participant, supervisor, and technician schedules, on the basis of which total "utilization scores" were developed.

A detailed analysis of the system is given in Appendix B. However, to clarify the data of this section, a brief explanation of scoring is offered.

The numerical scores were based on such factors as employment, job stability, application of training on the job, transmission of training, and plans for future training use. The score range for participants and technicians was: 25 or lower, 26-49, 50-74 and 75 or higher. The supervisor range (due to a difference in the number of questions on which the score was based) was: 19 or lower, 20-80 and 81 or higher. A given score was classified Y, or

PARTICIPANT UTILIZATION SCORES

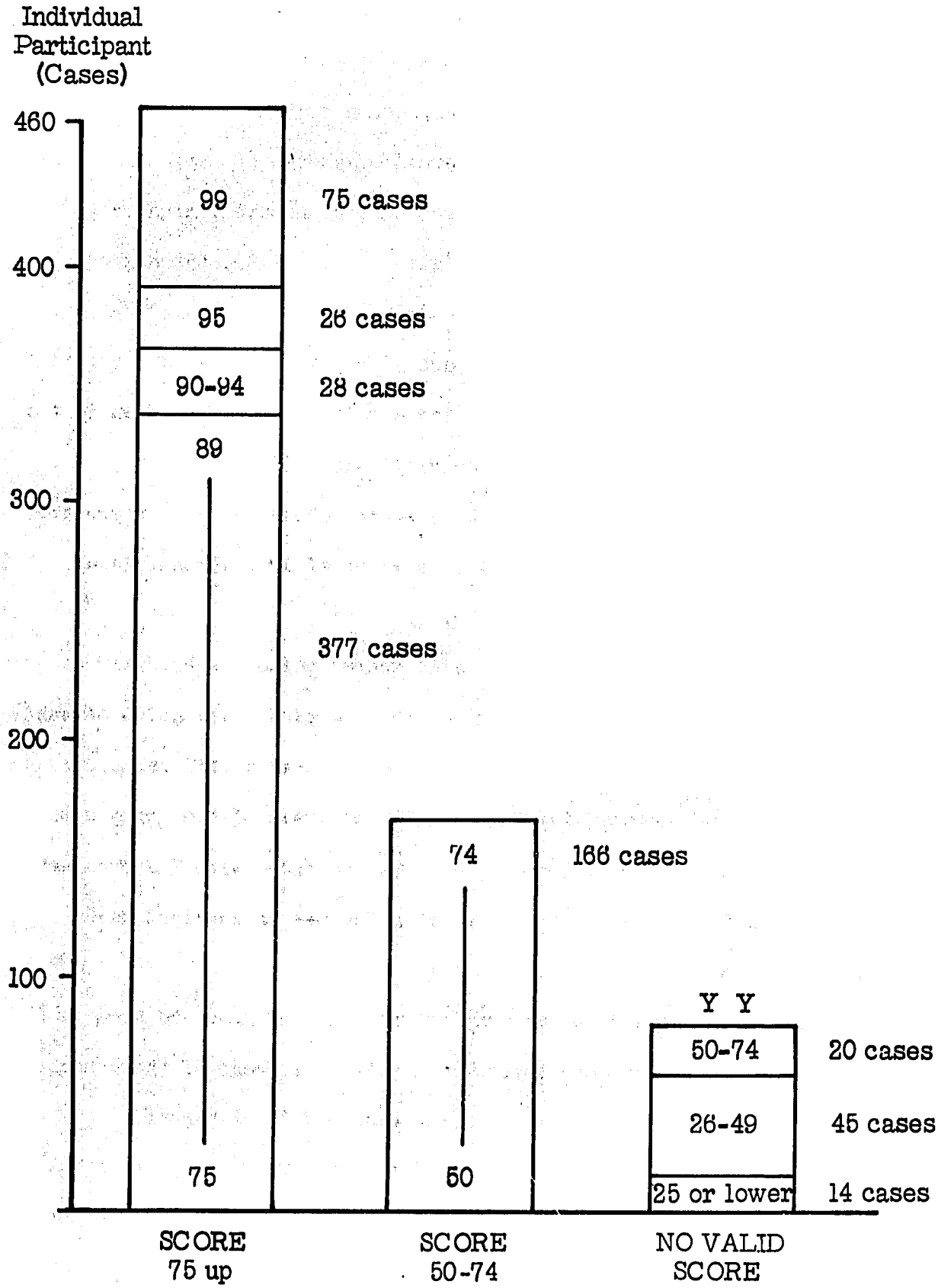


Figure 10

"no score" (invalidated) if any of the questions of the system were coded Y.

The accompanying figure indicates the distribution of the number of cases according to utilization scores. As may be observed from the figure there were no Bolivian participants who received a score below 50, and very few cases (79) coded Y. Instead of an overall breakdown of "high" and "low" utilizers, an analysis was made of the cases having unusually high scores -- 90 and above (and within this group those with scores of 99, the highest possible score) and those who received "no score".

Four hundred and fifty-six participants (65 per cent) had a score of 75 or more, 166 trainees (23.6 per cent) had a total score of between 50 and 74, and 79 persons (11.3 per cent) had no valid score (Y).

Within the group of participants with scores above 75 (456) there are 129 with scores of 90 or above. Within this group of 129, 75 individuals received the highest possible score of 99.

Although 79 cases coded Y (or no valid score) cannot technically be accredited a score, a summation was made of the numerical evaluation of the questions for which a codable reply was received. These artificial scores are also shown on the accompanying figure. The analysis of the group with particularly high scores (90 and above, and 99) and those with Y scores, sought to uncover meaningful training- or job-related factors which might have affected utilization.

The supervisors placed 55 per cent of the trainees known to them (142 cases) in the high utilizer category. Thirty-seven per cent of these high utilizers (84 individuals) had a participant score of 75 or higher.

Sixty-seven per cent, (121 trainees) were considered "high utilizers" by technicians, and 46 per cent (86 trainees) were also in the 75 or higher group according to participant scores.

TABLE 42*

Supervisor and Technician Evaluation of Participants' Utilization of Training In Comparison with Participants' Utilization S...

	Utilization Score Derived From Participant Questionnaire			
Supervisors' utilization score for participants	50-74	75 or higher	No total score (Y)	Total
81 or higher	48	84	10	142
20-80	13	53	7	73
19 or lower	-	7	1	8
No total score (Y)	10	22	3	35
Total	71	166	21	258
Technicians' utilization score for participants				
75 or higher	28	87	6	121
18-74	3	9	2	14
17 or lower	-	1	-	1
No total score (Y)	7	33	3	43
Total	38	130	11	179

Cards 10:51; 11:69; 05:68.
*No scores below 50.
The above table presents three types of scores for comparison: those developed from 1) the participant interview which represents the trainee's estimate of the degree of training application, 2) the supervisors' estimates of the participants' training utilization and 3) the technicians' evaluation of utilization. The same participants are involved, i.e. the 48 cases in which the participants' rated scores of 50-74 were classed 81 or higher by the supervisor; 84 participants whose own rating of training use was 75 or higher were classified 81 or higher by the supervisor, etc.

Very few cases (one for the supervisors and eight for the technicians) were classified as "low utilizers" and the individuals with Y scores, 35 for the supervisors and 43 for the technicians, generally represented cases which could not be rated because of lack of information on the part of the supervisor and technician rather than known deficiencies attributable to the trainee, or his training.

Who Are The Training Utilizers?

The field of activity in which the participant works and the category or status of his job appear to affect training utilization. It is not feasible to offer generalizations about a median level of utilization because of special factors affecting the Bolivian participant. Figure 11 shows the distribution of high to low utilization by numerical score by field of activity. However, the exceptions are discussed in the text.

Field of Activity. Seventy-one per cent of the trainees classified in the "Miscellaneous" category are making fairly good use of their training. A large proportion of this group works for the Inter-American Geodetic Survey where participants usually return to training-related work.

A high percentage of the participants of the "Social Welfare" category work for the National Social Security Agency (Caja Nacional de Seguros). They are doctors, social workers, and some administrators or statisticians, whose training sponsors may have been Health, Public Administration, or the Mission. They are all using their training to a high degree.

Transportation, Industry and Mining, and Public Administration are the fields which show the lowest training utilization. The people in the mining sector are generally working in the same or similar jobs, but many indicated that they had problems in using all of their training because much of their work is technical and they often lack the equipment to put their training to full use.

Some of the Industry participants have relatively low utilization scores. Several industrialists said in explanation, that little they had seen during their observation tours was applicable to the present stage of industrial development in Bolivia. One or two hoped to be able to adapt, partially, in the future a few production methods they had observed.

UTILIZATION SCORE BY FIELD OF TRAINING

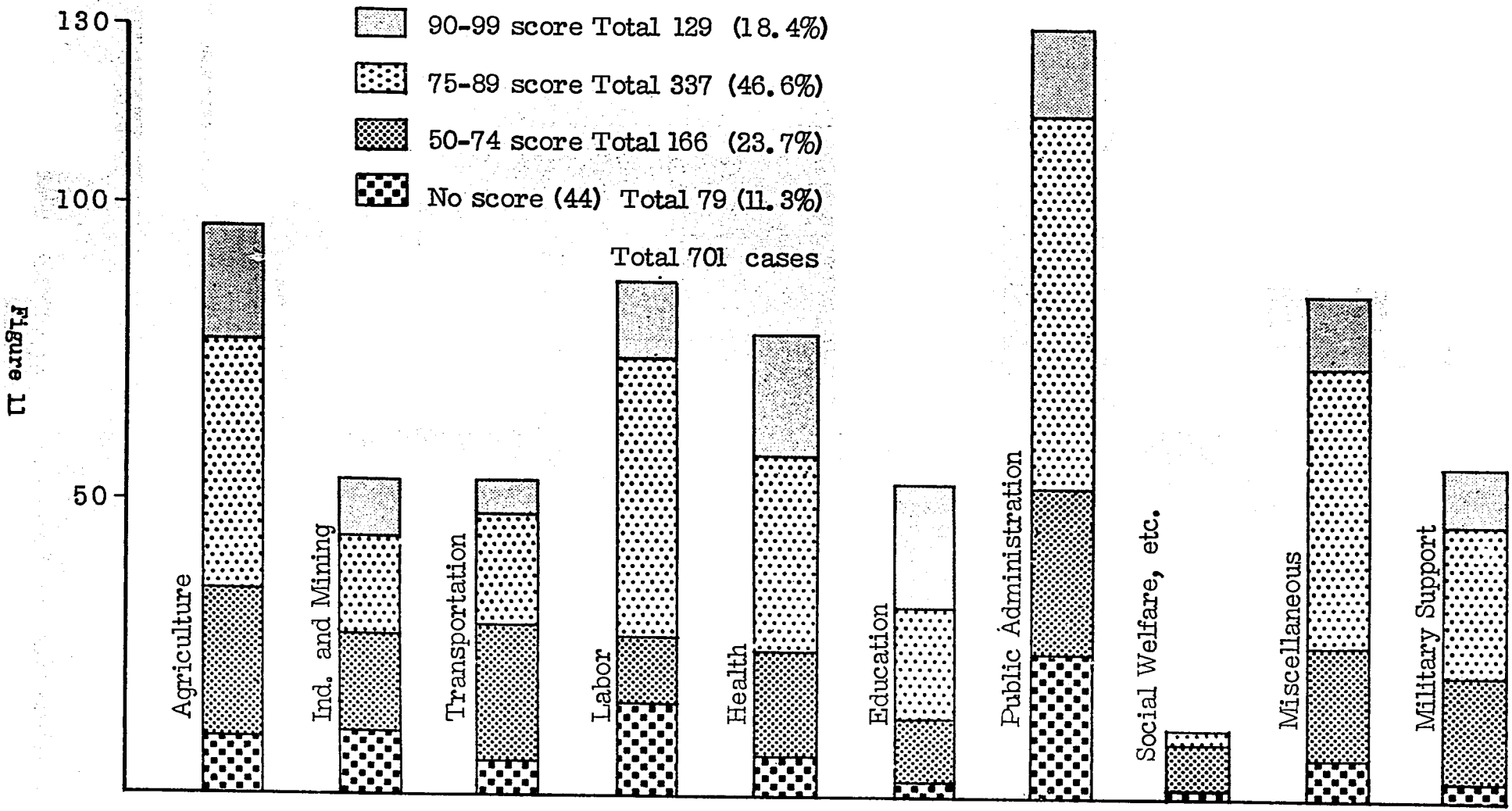


Figure 11

TABLE 43

Major Field of Activity In Which Training Was Given
And Level of Position at Time of Selection
by
Participants' Utilization Scores

	Utilization Scores*			
Field of Activity	50-74	75 or higher	No total score (Y)	Total
Agriculture	24	63	9	96
Industry & Mining	16	27	10	53
Transportation	23	25	5	53
Labor	11	61	15	87
Health	17	55	6	78
Education	10	40	2	52
Public Administration	28	79	23	130
Social Welfare, etc.	1	10	-	11
Miscellaneous	19	60	6	85
Army	17	36	3	56
Total	166	456	79	701
Level of Position at Time of Selection				
Top policy makers, national level and/or national impact	-	6	-	6
Policy makers 2nd level and/or non-national impact	4	11	2	17
Subordinate management line or staff	63	188	38	289
Engineers	10	18	3	31
Professional occupations	27	86	12	125
Sub-professional occupations	23	72	14	109
Supervisors, inspectors, foremen	16	20	4	40
Artisans, craftsmen	16	30	2	48
Not elsewhere classified	7	23	4	34
Inactive	-	2	-	2
Total	166	456	79	701

Cards: 05:68; 01:14,44. *No score below 50.

Most of the participants trained through the Road Service are using their training, and to a fairly high degree. Employees from the bi-national servicio, SCBAC, were transferred to the Servicio Nacional de Caminos, a GOB entity, and appear to be continuing in the same type of work. The Survey was informed by technicians, supervisors and participants that the mechanics and

heavy equipment operators are playing an important role in the use and maintenance of the machinery which is so vital to the Bolivian road program.

The greatest training "loss" is in the field of Civil Aviation. Many of these participants have left Bolivia and those who have remained often are not working in training-related jobs. In some cases this is because the training was too advanced, given too soon, or beyond the stage of development of aviation in Bolivia. The result is a lack of opportunity for these trainees; hence they either have emmigrated or are "low utilizers". The presence of the civil aviation participants in the field of "Transportation" lowers the score level for the entire group.

In Public Administration, both Government Management Assistance and Public Safety participants have been affected by political factors such as job placement and budget limitations which have impeded training use.

It is gratifying that in Health and Education there is a high degree of utilization. Sometimes, as in Health (doctors and nurses particularly), the participants are the only ones in Bolivia trained in their particular field and most have been conscientious not only in using their training, but passing it along to others whenever possible.

Almost without exception the teachers trained under the Education Service (SCIDE), are teaching, and in improved positions, because of their training. A few have advanced to supervisor levels and have greater responsibilities.

Unfortunately, largely due to the loss of records when the Health and Education Services were disbanded, the Survey was unable to reach a 50 per cent sample in these two fields. Many participants of these sponsors seem to have disappeared. Nevertheless, the high rate of utilization among the trainees who are working in Bolivia is encouraging.

Job Level of Training Utilizers. The Survey found that many returned partici-

TABLE 44

Level of Position At Time Of Interview
(Card 01, Col. 34)

Level Of Position At Time Of Selection (Card 01, Col. 44)	Top Policy makers, exec., etc. (1)	Policy makers, second level (2)	Sub. manag., prog., admin. (3)	Engineers (4)	Prof. Occup. (5)	Sub-prof. occup. (6)	Supervs., foremen (7)	Artisans, craftsmen (8)	Occup. not elsewhere class. (9)	Inactive (Y)	Not ascertained (0)	Total	%
Top policy makers, execs., & administrators (1)	6	-	-	-	-	-	-	-	-	-	-	6	0.9
Policy makers, exec., & administrators - second level (2)	1	12	1	-	3	-	-	-	-	-	-	17	2.4
Subordinate management, program & administrative (3)	1	14	235	3	14	2	4	3	7	6	-	289	41.3
Engineers (4)	-	3	11	16	-	-	-	-	-	1	-	31	4.4
Professional occupations (5)	2	3	27	-	85	2	1	2	3	-	-	125	17.8
Sub-professional occupations (6)	2	-	20	4	4	71	2	2	2	1	1	109	15.6
Supervisors, inspectors, foremen (7)	-	1	8	1	3	-	21	3	2	1	-	40	5.7
Artisans, craftsmen (8)	2	1	2	-	-	3	3	37	-	-	-	48	6.8
Occupations not elsewhere classified (9)	-	-	5	2	2	1	4	2	17	1	-	34	4.8
Inactive (Y)	-	-	-	-	2	-	-	-	-	-	-	2	0.3
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	
Total	14	34	309	26	113	79	35	49	31	10	1	701	100.0
%	1.9	4.8	44.2	3.7	16.1	11.3	4.9	6.9	4.4	1.9	0.2		

pants advanced in job status after training. From the time of selection to the time of the interview the percentage of people in the "top policy maker" category increased from 0.9 per cent to 1.9 per cent. The number and percentage of second level policy makers doubled. Subordinate level personnel increased from 41.3 per cent to 44.2 per cent. The number and percentage of engineers, professional and sub-professional people decreased slightly; and the number of supervisors, artisans and other occupations remained almost constant.

The participants who are in positions of authority or working independently appear to be making greater use of training than those in subordinate or non free-decision making categories.

Years of Education and Specialization of Training Utilizers. The trainees with the most years of education are the best training utilizers. Education is not the only factor affecting training use but this further substantiates the assumption that the trainee best prepared gets more out of his training experience and applies it more extensively after his return home than an individual with less preparation.

Age. The age of the trainee has some relation to the degree of utilization although the effects of other factors prevent firm generalizations in this regard. For example, less than five per cent of the participants were over 50 years of age at the time of departure for training; 17 per cent were between 40 and 50, and 68 per cent were between 25 and 39 years old. Seventy-five per cent (40 cases) of Bolivians between 45 and 49 are in the high utilizer group and 66.7 per cent of those over 50 have scores above 75. The majority of the participants are younger than 40 and are also in the high utilizer category.

The trainees with more than 10 years of specialization at the time of training have the highest utilization scores. The percentages are slightly less for those with 5 to 10 years and 2 to 5 years of specialization.

COMPARISON OF LEVEL OF POSITION BEFORE AND AFTER TRAINING

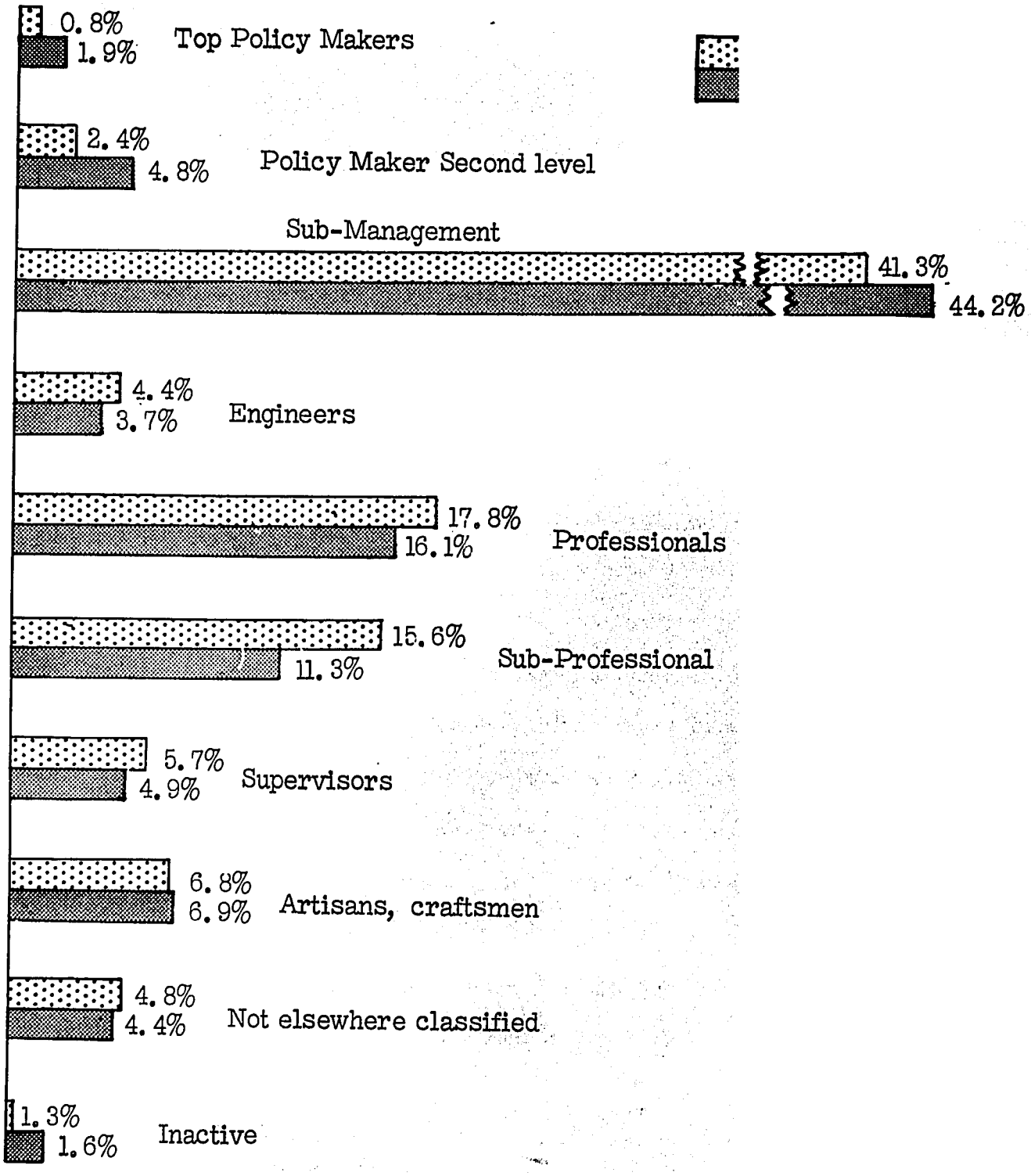


Figure 12

TABLE 45

Comparison of Participant Utilization Scores
by
Education, Age and Specialization

Total Years of Education at Time of Selection	Utilization Score*				
	50-74	75 or higher	No total score (Y)	Total	Per Cent
17 or more years	50	149	28	227	32.4
13-16 years	41	132	18	191	27.3
9-12 years	56	145	30	231	32.9
5-8 years	17	29	2	48	6.8
1-4 years	-	1	1	2	0.3
Not ascertained	2	-	-	2	0.3
Total	166	456	79	701	100.0
Age in Years at Time of Departure					
55 or more years	2	6	1	9	1.3
50-54 years	7	11	4	22	3.1
45-49 years	9	40	4	53	7.6
40-45 years	18	46	5	69	9.8
35-39 years	26	90	12	128	18.3
30-34 years	34	103	23	160	22.8
25-29 years	54	113	21	188	26.8
Under 25 years	15	47	9	72	10.3
Total	166	456	79	701	100.0
Total Time in Field of Specialization at Time of Selection					
10 years	58	168	33	259	36.9
5-10 years	45	147	20	212	30.2
2-5 years	36	80	18	134	19.2
1-2 years	17	40	5	62	8.8
Less than 1 year	8	15	1	24	3.5
None	2	3	-	5	0.7
Not ascertained	-	3	2	5	0.7
Total	166	456	79	701	100.0

Cards 01:57-58,43 & 68; 05:68. *No cases with scores less than 50.

Job-Related Training Utilization (Job Stability)

Unemployment. Of all the cases of the Survey, only one trainee had been unemployed continuously since training. He was a labor participant who had been back less than a year, and whose training did not include acquisition of job-related skills.

Six out of 701 were unemployed at the time of the interview, and three of these were retired. Seven per cent (52) had had periods of unemployment. However, compared with 93 per cent (648) who had worked continuously since their return from training, the number of the unemployed is very small.

Twenty-three people interviewed had been unemployed for periods of up to and beyond a year; but of the others who had been unemployed, the periods when they were not working were only 2 to 4 months.

Thirteen out of 52 of those unemployed at any time since training thought that their unemployment might have had some connection with their having gone abroad on a training program; but 38 said there was no relationship whatsoever.

Job Immediately After Training. The participant interview contained several questions relative to the trainee's employment. A distinction was made between the participant's work immediately following training and his job at the time of the interview. An attempt was made to ascertain whether the individual returned to the same job he had before training, or a different job; and if the job after training was the one he expected to have. The responses to these questions indicated not only job stability (or mobility) but also the relationship of the job to the use of training acquired skills.

A very large percentage, 65.5 per cent, said they returned to the same job after training as they had before (459). Of the 34.3 per cent (241) who had a different job after training only 2.3 per cent (16) had a worse job, at a lower salary. Five (0.7 per cent) said their jobs had been eliminated while they were away and there was no job waiting for them on their return.*

Sixty-four (9.1 per cent) got a better job after they came back from training, with more salary, and 17 had different jobs, but the new job was training related. Only 1.8 per cent (13) had non-training related jobs.

Other job changes were relatively inconsequential for purposes of the study

*This data refers to the job immediately following training and differs slightly from that given in reference to the current job as per table a-43 section 7, page A-42.

TABLE 46

Relation of Participant's Job After Training to Utilization Score And Relation of Job Before and After Training to Major Field of Activity In Which Training Was Given

Utilization Score *	Was the first job you had after you returned the same as the job you had before you left?**				Was it the job you had expected to get on your return? ***				
	Same	Different	Not applicable (Y)	Total	Yes	No	Don't know or don't remember	Not applicable (Y)	Total
50-74	99	67	-	166	34	32	2	98	166
75/higher	307	149	-	456	79	63	11	303	456
No total score (Y)	53	25	1	79	8	15	2	54	79
Total	459	241	1	701	121	110	15	455	701
***Major Field of Activity									
Direct Military Support	30	26	-	56	14	8	4	30	56
Agriculture	73	23	-	96	15	9	1	71	96
Industry & Mining	38	15	-	53	7	8	-	38	53
Transportation	35	18	-	53	12	6	-	35	53
Labor	73	13	1	87	5	8	2	72	87
Health	37	41	-	78	19	20	2	37	78
Education	31	21	-	52	7	11	3	31	52
Public Administration	86	44	-	130	15	29	1	85	130
Comm.Devel.,Social Welfare,Housing,etc.	9	2	-	11	2	-	-	9	11
Miscellaneous	47	38	-	85	25	11	2	47	85
Total.	459	241	1	701	121	110	15	455	701

Cards 01:14; 05:26,27 & 68.
* No cases with scores under 50
** No cases coded "Don't know" or "Not ascertained"
*** No cases coded "Not ascertained".

analysis; there were changes from one government job to another government job, or one private job to another job in private business.

One hundred and fifty-one of those with <u>different</u> jobs worked for the Government, and 63 in nationalized industry, with only 16 in private business and 3 in a profession.

The number of people supervised in these different jobs were more or less

comparable to the numbers supervised at the time of training as shown in other tables and is not particularly significant.

Present Job (At Time of Interview). Of the 98.7 per cent (692 of 701), working at present, 42.4 per cent (297) are in the same job as the one they had following return from training, and 56.4 per cent (395) have changed jobs. Thirty-one point four per cent (220), said their present job is better than the one they had immediately after training. Thirty-nine definitely specified that their job was training-related, although this does not mean that the others are not doing training-related work. Fourteen had worse positions. More had changed from government to private business, than vice-versa. It appears that a few more trainees than previously are supervising greater numbers; though again this figure is not especially meaningful without more data for interpretation.

The accompanying table indicates the relationship of the participant's job after training to his utilization score and field of activity (table 46). Some participants expected to return to a different job after training.

An equally high percentage of those selected for training return to the job they had before training.

Perhaps the training extends the capacity of the participant to do his job, or modifies it to some degree. On the whole, training does not lead to an entirely new field of endeavor.

Training Utilization of High-Low Score Categories

High Score Group. The analysis of the participants having a score of above 90 (129 cases) indicated that 40 per cent (51) of this group are actually working in the same job that they had before training. In 6 per cent of the cases the job after training was that which they had expected, or a job equivalent to the pre-training job, even when it differed slightly. Fourteen per cent (13.9

per cent) changed their jobs but remained working in the same general field. All these cases, whose total is 59.5 per cent, are high utilizers of training, even though their positions have not "improved" in terms of status or salary.

Of the 129 high utilizers, 52 (40.3 per cent) had a better job after training than before, and eight of these cases reported not only having improved jobs but having received two or more promotions. Eleven point six per cent reported that the work they are doing now is more directly related to their training than their previous work.

Twenty-five trainees (19.4 per cent of 129) had changed jobs in one way or another; from one section of the government to another section of the government; from government to private business, or a profession, or from private business to government.

Within the group of high utilizers are four special cases of interest. One participant had a worse job immediately on return from training, and one had a worse job at the time of the interview. Both participants were in positions where they could make direct use of their training acquired skills, and thus although their jobs are worse, their utilization scores are high. Two other trainees with high scores had been back for more than two years and had made creditable use of their training. However, they expected to change to non-training related jobs shortly after the time of the interview. From the standpoint of USAID/Bolivia and the Government of Bolivia, the participants had rendered service for their training; but it is unfortunate that for the immediate present they will not be in training-related work. One individual was going abroad for the Bolivian diplomatic service.

Of the 75 participants who scored 99 (which is 10.7 per cent of the total 701 cases of the Survey), 45 per cent of 75 (34 cases) are in the same jobs they had before training. The jobs are directly related to the training

received, so this accounts in part for the high degree of utilization. In addition, most of the participants with the 99 scores are in top level positions.

The relationship of job level and degree of utilization appears significant. The person with policy making authority can initiate and direct work. Freedom to act seems to increase the degree of training utilization.

All of the "high utilizers" reported that they had encountered problems in their utilization of training. Their problems, however, although similar to problems cited by other participants, seemed associated with the limited development and basic economic difficulties of Bolivia.

Low (Y) Score Group. Of the 79 cases classified Y only one had a score of zero. This was a labor participant - a teacher - who prior to training taught classes and individuals privately. On his return to Bolivia he no longer had any students, and he claimed he was not given any help in getting a government supported teaching position. He also said that inasmuch as his training was not related to his job he had no new techniques to apply, and that he had not had any opportunity to use his labor training in his union. At the time of the interview he was working as a salesman.

Four people who received relatively low partial scores nevertheless claimed to be using their training. Two worked in government jobs - one in the second level category and one at the subordinate management level. A third was a police officer, and the fourth a labor union official. Each said that he had "no difficulties" in applying his training. However, they all considered that the application of training was routine and thus reported no special activities in regard to training utilization.

Seven of the people with partial scores said they had better jobs after training than before. Three had worse jobs. Five were working in fields

unrelated to training, and only one said his job was directly training-related. This apparent contradiction can be explained by the fact that those who claimed to have no difficulty in using their training also did not consider that training made any difference in their jobs in terms of work, status, or pay.

Besides these groups, just discussed, with especially high scores and Y scores, there is the large group which constitutes 70.4 per cent of the Survey (493 cases) whose scores are above 50. Within the 493 are 327 (46.8 per cent) whose scores are between 75 and 89. Their problems and achievements are similar to those of the high and low utilizers and their job, education and specialization levels cut across the entire segment of the Survey participant population. The problems and achievements of training utilization for all the participants reflect the difficulties found in many other developing countries. The accomplishments of the trainees individually and collectively represent an encouraging contribution to Bolivia's progress.

Problems of Training Utilization

Being unemployed, or having a job which for one reason or another limits the degree of training application, frustrates the returned participant in fulfilling his training goals.

Almost every individual has been confronted with obstacles in training use. Only 99 (14 per cent) said they had had "no difficulties" in using the skills learned, or conveying them to other people. The rest of the participants, as per table 47 on following page, had difficulties related to conditions of the country, their jobs and their training programs. The primary difficulties are lack of money and equipment.

TABLE 47 *

What Do You Find To Be The Major Difficulties In Using The Skills You Learned Or Conveying Them To Other People?

	No.of Replies	Per Cent
Difficulties related to resources or conditions of country		
Lack of money	206	29.4
Lack of equipment, machinery, facilities, materials,books.	226	32.3
Lack of transportation	5	0.7
Government and general organization of the country are not amenable to application of things learned on training program.	87	12.4
Difficulties related to other people		
Government, ministers, heads of departments, "bosses" do not want to accept new ideas, do not cooperate.	56	8.0
Lack of help from supervisor, supervisor does not know enough, misunderstanding on the part of the supervisor	47	6.7
Colleagues, employees, the general public do not want to accept new ideas	44	6.3
Superiors do not think much of ICA program	1	0.2
Lack of trained staff	43	6.1
Lack of educational preparation among people with whom I would deal or work.	102	14.6
USOM does not help ex-participants; I need or my organization needs help from a technician.	12	1.7
Difficulties related to participant's job		
The job I am in is not related to the field I was trained in, am in a job different from the one I was trained for	31	4.4
I am not in a position of sufficient authority to apply or teach what I learned	24	3.4
I am not holding a job where I could use or transmit information. I have no opportunity to apply the training	46	6.5
I lack the time to use or teach what I learned	16	2.3
Difficulties related to the training program		
The things learned were too different, too advanced for application in home country	44	6.3
Did not learn anything which I could use or transmit to others	5	0.7
All other difficulties not included above	27	3.8
Don't know	3	0.4

Card 06:36-41.* Totals exceed 701 and 100 per cent because many participants gave more than one answer. Percentages are based on 701 cases.

After "lack of money" and "equipment" the trainees complained most bitterly about the economic conditions of their country, and expressed their dissatisfaction in terms somewhat stronger than the generalizations given in the code book as shown in the preceding table. The influence of politics was lamented in various sectors: Agriculture, Education, Health, Public Safety, as well as in the specific government departments. Quite typical expressions of dissatisfaction were:

> "Politics is the principal obstacle to training utilization. Too few people who are in a position to initiate or support action care (in relation to training-use)."
>
> "The instability in public office, and the lack of understanding and cooperation on the part of supervisors is an obstacle to good public administration and government reform."
>
> "Politics affect the appointment of technicians (Bolivian). Often those who are completely unprepared are chosen over those who are 'trained' but who are without a political sponsor."
>
> "State controlled institutions require that employees participate in politics. This is especially difficult for an individual who is trying to do a good job and is mainly interested in his work."
>
> "Political contacts too often affect the selection of a person to go on training, and whether or not he can apply what he has learned after he comes home. One has to have friends of influence and also in some cases be a member of the party."
>
> "Political recommendations are required to get a 'good' job."
>
> "When I came back from training I found my pre-training job occupied by two political appointees. I had a contract but I was given an inferior bureaucratic position."
>
> "In some agencies (Government of Bolivia) the centralization of funds has resulted in these funds being more 'available' to a few people for private expenditures. Consequently the person who needs even a small amount of money to carry on his work can't get it to perform his regular job."

The participants criticized the "way of life" in Bolivia. They said:

> "The low cultural level of Bolivia prevents progress."
>
> "The illiteracy and social mediocrity of the Bolivian people is a great obstacle to progress."

"The illiteracy of the majority of the Bolivians and cultural inequalities make it difficult to develop the country."

"The indifference and lack of understanding of most Bolivians of their own limitations and that of their country (my country) make it difficult to explain what are the needs and possibilities of development and how to go about it."

"People cling to their old ways. There are many traditions which limit the development of Bolivia."

The participants' complaints "related to other people" were generally directed toward their supervisors or colleagues. Several trainees deplored the professional jealousy which prevented sharing knowledge. Sometimes those who had not gone on training refused to accept the new ideas the trainee brought back. In a few cases colleagues, and superiors who had some training but in a slightly different field (not necessarily U.S.-sponsored training) refused to collaborate and share their special skills for the benefit of the work or the country. One labor participant said he hasn't been able to use much of his training in his union work because of the "rival ideologies" within the union.

Difficulties related to the training program were quite specific. Some pointed out that the training had been "too advanced" for the present state of development of Bolivia. One trainee, a lawyer, said that what he had learned was difficult to apply because it was "based on Anglo-Saxon concepts", and in Latin America "judicial and administrative systems are more closely related to Europe".

Several trainees (in geology, minerals, ground water) said that to apply what they had learned they should have the support and guidance of a national organization dedicated to research and investigation; and that such an organization was essential in developing plans for Bolivia's future.

Many trainees on their return to Bolivia had hoped to receive some recognition of the fact that they were better prepared, whether to do their

pre-training jobs, or a new type of work. They felt that they should have some kind of guarantee that they would be able to use at least a small amount of their training. A participant trained in hospital administration has never been able to utilize anything from his program. When he returned he was given an inferior position. He later transferred, for economic reasons, to a field completely unrelated to his training, where he is now working. Several people trained in aviation medicine, air traffic control, airplane maintenance, had low utilization scores because they said Bolivia was "not ready", or "lacked the equipment" necessary for training utilization. One or two participants whose training was related to projects of the Mission at the time they went abroad have used little of their training because these particular projects were phased out either while the participant was absent in training or shortly after his return, or never implemented. (The projects were the seed improvement program in Agriculture and a ground water project in Geology).

Quite a few participants who previously worked for the Health and Education services could not be located partly due to the transfer of the activities of the servicios to the Government of Bolivia, and the fact that some jobs and workers (in this case, trainees) were dropped. Others who previously worked for the servicios showed good training utilization in their servicio jobs immediately following training, but were currently working in jobs only partially related to their training.

The special problems of the utilizers with scores of 99 were similar to those of most of the other trainees. Twelve individuals (9.3 per cent of the group of 129 with a score between 90 and 99) attributed their difficulties to lack of cooperation on the part of the Government and the generally low economic and social level of Bolivia.

Eleven (8.5 per cent) said their difficulties were caused by lack of specialized personnel; and 24 (18.6 per cent) said the people with whom they worked were poorly prepared.

Thirty-four per cent (44 participants) said lack of equipment, machines, and financing limited training utilization.

The difficulties indicated by the 75 trainees with scores of 99 are as follows:

TABLE 48

Difficulties of Training Utilization
High Utilizers (Score 99 - 75 Cases)

	No. of Participants
Lack of money	24
Lack of equipment	22
Lack of transportation *	4
Lack of trained staff	10
Lack of educational prepara among people with whom I	15

Card 06:36-41. *Four out of a total of five cases with this complaint are in the 99 score group.

The distribution of difficulties among the non-utilizers (Y score) are:

TABLE 49

Difficulties of Training Utilization Non-Utilizers

	No. of Participants	Per Cent*
Lack of money	18	22.8
Lack of equipment	20	25.3
Government and/or organization not amenable	14	17.7
Government, ministries don't want to accept new ideas	7	8.8
Lack of help from supervisor	8	10.1
Colleagues, employees, don't accept new ideas	10	12.7
Supervisors don't think much of ICA program **	1	1.2
Lack of trained staff	5	6.3
Lack of education among the people	10	12.7
USOM doesn't help ex-participants	3	3.8
Present job not related to training field	11	13.9
Not in a position of sufficient authority	4	5.0
Not holding a job where I could use training	19	24.0
I lack the time to use training, to teach	1	1.2
The things I learned were too different	6	7.6
I didn't learn anything I could use	1	1.2
All other difficulties	6	7.6

Card 06:36-41.
*Percentages based on 79 cases. Totals add to more than 79 and 100 per cent because some cited more than one difficulty. ** This was the only case expressing this opinion.

The somewhat negative character of the comments of the non-utilizers (apart from lack of money and equipment) are of particular interest for they suggest that many difficulties lie within the individual: he was not able to adapt his training; he didn't grasp what his training was about (considered he already knew enough) in relation to his work; resistance of other people, etc. The high utilizers relate their difficulties to more general problems, and in terms of utilization seem to be making every effort to use as much of their training as possible within the overall limitations of the economic conditions of Bolivia.

Achievements in the Utilization of Training

Field of Economic Endeavor of Activity of Training Utilization. Only 7.1 per cent (50 participants) reported no special activity in relation to training utilization. Six hundred and fifty-one reported one or more utilization activities with a total of 991 activities listed.

The interview questions and coding system provided for distinguishing somewhat the degree of initiative displayed by the participant. Seventy-nine per cent (78.7 per cent) - 514 trainees, said that the training utilization activities - such as the planning, organizing, or changes made in relation to training acquired skills - were initiated by the trainees themselves. In 475 cases (72.9 per cent), the trainee said the activity was initiated by others, or by him in connection with someone else.*

The fields of Economic Endeavor of the activities were quite well balanced in proportion to the number of trainees in the various fields.

* Total is more than 100 per cent because some trainees initiated activities themselves as well as initiating activities in connection with others. There were two cases "not ascertained".

TABLE 50

Field of Economic Endeavor of Activity of Training Utilization

Field	No. of Activities	Per Cent
Agriculture and natural resources, including any branch of agriculture, land and water resources, agricultural extension, home economics, rural youth, forestry, and fisheries.	154	23.6
Industry and Mining, including any phase of industry, power, communications, engineering, construction and marketing.	90	13.8
Transportation, including highways, railways, ship operations, air transport, ports, harbors, waterways, and urban transit	71	10.9
Labor	106	16.3
Health and Sanitation	126	19.3
Education	91	13.9
Public Safety and Public Administration, including government organization and management, public budgeting, taxes, census and other government statistics.	170	26.0
Community development, social welfare and housing	18	2.8
All other fields, including mass communications, atomic energy, other. (Mainly IAGS).	164	25.2
Insufficient information given to determine in what fields the participant performed the activity	1	0.2
No activity reported	50	7.1

Card 06:45 & 50.

* Percentage based on 651 cases with the exception of those reporting no activity, i.e. 50 out of 701 cases. Some reported more than one activity so percentages total more than 100 per cent.

Nature of Activity of Training Utilization. As in the case of difficulties of training utilization the interview coding system provided for classificatio of these activities in a general manner. The types of activities named by the participants and the number of times these were indicated is shown in table 51 on opposite page.

TABLE 51*

Nature of Activity of Utilization of Training

	No. of times cited	Per Cent
Changed or improved procedures, reorganized an organization, introduced new procedures, changed curriculum, changed or recommended changes in law.	205	31.4
Wrote a book, manual, article, pamphlet, report.	39	5.9
Taught others, lectured, demonstrated.	261	40.0
Conducted research, survey, or census	21	3.2
Made formal plans for future development (presumably the plans had not been put into effect at the time of the interview, but would be in the future).	52	7.9
Introduced, purchased, or installed new equipment	28	4.3
Constructed something - dam, bridge, building, irrigation system.	23	3.5
Instituted a new organization or service or school curriculum, (for example: 4 H-club, clinic, air traffic control system, nursing school).	48	7.4
Continued own studies, wrote thesis, obtained higher degree	1	0.2
Obtained a better job	1	0.2
Performed regular occupation, farming, practiced medicine, performed occupation in a superior way, took on additional responsibilities, etc.	287	44.1
All other types of activities not included in above categories	24	3.7
The information given is insufficient to determine the nature of the activity performed by the participant	1	0.2
No activity reported.	50	

Card 06:43,44,48 & 49.

* Six hundred and fifty-one people reported 991 activities, thus 340 reported two activities, so the percentage is more than 100 per cent. Only 50 participants reported no activity.

The use of training in improved job performance was cited the most frequently. Teaching of others was the activity with the second largest number of participants citing it in training use.

The particular activities of the Bolivian trainees were very interestin and in some instances indicated considerable initiative on the part of the trainee. It was not possible to verify the effectiveness of the activities. But, it should be remembered that in many cases the trainees are pioneers in their fields of endeavor and have many obstacles to overcome such as those indicated in the section on "Difficulties of Training Utilization". Consequently, an activity that seems very modest in itself may actually represent an achievement in Bolivia.

Only a few, and the most typical, activities are cited. They are grouped by field of sponsorship.

Agriculture

"I learned a great deal about human relations in my training and I have been able to teach others in Agriculture Extension about this and thus establish more effective relationships in work with my colleagues and in the work I do with farmers."

"I attended a seminar in irrigation. The people there were very 'high level' in their positions and their technical capacities and I got a great deal out of being able to meet them and talk with them. Since I returned I have given many conferences in which I told in detail what happened at the seminar. The training was short but it was very effective for me and my associates."

"I have given courses for agriculture extension agents and campesinos. The teaching I have been able to do, based on what I learned in training has helped 'up-grade' extension personnel and farmers."

Civil Aviation

"I studied aviation medicine and as a result I presented a plan to the Dirección General de Aeronautica Civil for regular physical check-ups for pilots."

Another participant who also studied aviation medicine has made efforts to insist on regular and more exacting pilot check-ups, especially relative

to vision (eye) defects. The doctor, who is practicing privately, said he felt his experience was very broadening and made him a better doctor even though he has not had much opportunity to use his special training.

Education

An individual who was a teacher before training was promoted to a supervisory position after training. He said he had introduced the use of tests and although the use was not yet widespread he felt this and other ideas he was presenting, little by little, would contribute to educational reform.

Another teacher, in industrial education, reported working out a new school curriculum. An industrial education teacher brought back instruments from the United States and set up a model workshop in his garage. Both teachers said they had introduced new texts.

Geology

Most of the trainees in various fields of geology and mineralogy despite lack of equipment are making especially effective use of their training in teaching at the university level. Like doctors and some other specialists, they often represent the only people in Bolivia trained in a particular field. They begin immediately to transmit their training on a high technical level, and as a result their knowledge has been spread systematically. Several have worked on geology mapping projects which, according to the U.S. technician, is very well done and represents a great saving, i.e. the cost of making the maps is relatively low and much less than the commerical cost; it is also less than the costs of training.

Health

Doctors and nurses seemed to be making good use of their training. A doctor who began as the head of a provincial city health center has advanced

to a very high position in the Ministry of Health in La Paz. He has been in charge of several disease eradication campaigns including an effective smallpox vacination project. The physician who studied chest surgery, the first and only in this field, said he has not only used (in the TB hospital) the techniques he learned but has given demonstrations, taught others, and has developed plans for heart and lung research. A U.S.-trained nurse reported taking considerable initiative in establishing a TB out-patient department. Another doctor said he had been active in preventive medicine, a field almost unknown in Bolivia. A trainee who studied specialized laboratory techniques reported being active in the fight against TB and using in the health centers many techniques not previously known in Bolivia. Several nurses said they had done as much as possible to share their training and to encourage more training for nurses. One participant teaches regularly and has introduced public health courses in the curriculum. A doctor who attended a symposium on nuclear energy said he learned many new things at the conference. He has pursued special studies on endocrinology, and was instrumental in bringing to La Paz a specialist to study endocrinology and altitude.

Public Administration

Several public administration trainees have relatively high and important positions. Most said they had not been able to do as much as they would have liked in using their training. One said he has made good progress in setting up a purchasing system; another told of instituting some preliminary steps to establish the merit system for personnel in his section. All reported they had learned more efficient administrative methods which they are trying to apply.

Future Plans. Sixty-six point two per cent (464 cases) reported having plans for training utilization which they had not yet been able to carry out. Often

these plans are in addition to current use of training. However, lack of money and equipment as well as authority to put the plans into effect tend to postpone realization of the projects somewhat to the distant future.

Several industrialists have plans for their factories which include general reorganization and special training for their workers. They hope, by efforts of varying degrees of specificity, to increase productivity. An industrial education teacher wants to set up a modern garage for car repairs based on knowledge he acquired during his training. An administrative official of one of the banks has an accounting/control system which he thinks would greatly increase the efficiency of his department. A customs official said he has detailed plans for organizing the customs warehouses and for mechanizing the operations, in the degree he can obtain needed equipment.

Numerous labor participants have given lectures to members of their unions concerning their basic trade union training. One participant is preparing a booklet telling about the labor movement in the United States. An official of a farmers' union cooperative said he was organizing a conference to tell his union about his experiences and that he had learned many practical things, among which the most important is how to take democratic action.

Transmission of Training

The interview question on how much of the training the participant had been able to transmit to other people was graded by the degree and manner of transmission. Three specific ways were indicated in which this might be done: "gave formal training programs, lectures", "informal discussions", "wrote articles, other publications". Such transmission might be considered in the light of the "multiplier" effect of a training program for herein the

participant shares with other people the fruits of his out-of-country experience in a broader sense than that of skill sharing on-the-job, or by instituting new methods. The respondents, in answering this question, often interpreted it to mean telling others about the non-technical aspects of their training. Giving demonstrations or individual lectures on the subject field of training was also considered transmission.

Of the total 701 participants interviewed, 689 or 98.3 per cent had been able to convey to other people something of what they had learned through their training. The distribution of these replies is shown in the accompanying table. It is encouraging that 65.3 per cent claimed to have transmitted "quite a bit" or "almost everything".

TABLE 52

About How Much Of That Training Have You Been Able to Transmit to Other People?

	No.of Participants		Per Cent	
Practically none	-			
Only a little	53	33.0	7.7	
Some	177		25.3	
Quite a bit	266	65.3	37.8	
Almost everything, everything	193		27.5	
Don't know or don't remember	-			
Not ascertained	-			
Not applicable (Y)	12		1.7	
	701		100.0	

Card 05:55.

Four hundred and eighty-eight trainees indicated that they had conveyed training in more than one form of activity. The ways in which they went

about these activities are indicated in the table immediately following:

TABLE 53

Transmission of Training

	No. of Participants	Per Cent
Number of Ways		
One checked	201	28.7
Two checked	274	39.1
Three checked	190	27.1
Four or more checked	24	3.4
Not applicable (Y)	12	1.7
	701	100.0
Ways in which Training is Being Conveyed to Others		
Gave formal training programs, lectures	448	63.9 *
Informal discussions	589	84.0
Wrote articles	203	28.9
On-the-job teaching	147	20.9
Consultant (formal) to organizations, businesses, industries or individuals	21	2.9
Organized or reorganized industry, business, research project, etc.	2	0.3
Orientation (formal or informal) for persons going abroad	-	
Other activities not included above	8	1.1
Don't know, don't remember	-	
Not ascertained	4	0.6
Not applicable	44	6.2

Card 05:58-62. * Total exceeds 100 per cent because some respondents listed more than one activity.

Almost every participant considered as significant one or more non-technical aspects of his out-of-country experience. Those who went to the United States (even when they had been there before) saw much of interest and many things to adapt. These are the things about which they tell their colleagues and friends in "informal conversations". Bolivians said they were impressed by:

"the simplicity and informality of the American people"

"the respect for law in the United States and the organization of the Government offices."

"the discipline of the U.S. people/"

"worker-employer relations, their cordiality and their non-political character."

"the magnificence and constant growth of American technology."

Some trainees who went to third countries also had gratifying experiences. A police officer and two doctors who went to Chile said they particularly appreciated the opportunity to learn first hand about the Chilean character, Chilean history and to form personal friendships. They thought this important because they said they had misunderstood, and previously thought ill of the Chileans on account of long-standing differences between Chile and Bolivia.

Many labor and other trainees who visited Mexico found encouragement in the progress made by Mexico after its revolutions. The Bolivians saw some parallel between the conditions and aspirations of their country and those of Mexico.

Occasionally a participant was negatively impressed by what he observed, and apparently has not hesitated to talk about this as well as about the things he liked. An agriculture trainee who went to Colombia several years ago found the unsettled internal conditions (banditry and crime) very detrimental to his training. A few participants who went to Puerto Rico and other Latin American countries were dissatisfied. They down-graded their training because they found conditions of under-development comparable to those of their own country. These cases were exceptional however.

Evaluation of Participant's Training Utilization by Others

The questions of the technician and supervisor schedule used to evaluate participant training and the use of training by participants were not identical. Nor, as explained earlier, were the numerical scores. However, both of the above questionnaires provided an occasion for polling United States

and Bolivian officials concerning their opinions of the Bolivian participant program.

U.S. Technician Opinions. It is sometimes difficult to find any technician whose tour of duty coincides or overlaps the selection, training and post-training utilization of participants in his division. Several U.S. technicians had recently arrived in Bolivia and were not particularly well acquainted with trainees in their fields of activity. There was no technician in Education in La Paz, and two technicians were absent on leave. One or two said they had no knowledge of Bolivian training or trainees. The nineteen U.S. technicians who were interviewed knew very well some of the trainees in their respective fields and worked closely with them. This was particularly true of the U.S. technicians at the Inter-American Geodetic Survey and several technicians of the Agriculture Division.

Rating of Participant. The U.S. technicians were asked to rate as "adequate", "inadequate" or "can't rate" several factors concerning the participant and his training. They were also questioned concerning the contribution of the training to the participant's job performance in terms of the satisfaction of the trainee himself, his supervisor and the ministry of the Government of Bolivia under which the participant operated, (this latter connection was sometimes extremely indirect), and his ability to do his job without outside help. Finally, the technician was asked to evaluate the participant's performance, and the contribution of the participant's job to economic development as "major", "minor" or "can't rate".

Some technicians complained that the three-step category for rating did not allow sufficient leaway. The result was that a few were classed "adequate" when they might have been considerably more or less than what the word implies. For some participants the job contribution was termed

"minor" when actually according to the technician it was not "major" but rather "average". All the technicians, however, made a careful effort to rate the participants correctly. The numerical evaluations, for example, for purposes of scoring depended on whether or not the technicians said the supervisor, ministry and/or participant were "satisfied" or "dissatisfied"; or the job contribution was "major" or "minor".

By major field of activity, 67.5 per cent (121 out of 179 cases) were rated with scores of 75 or higher and only 7.8 per cent (14) were in the low utilizer group (18-74). The 43 cases with no score represent instances when the technician considered himself too unfamiliar with the trainee or some aspect of training to be able to give a rating. The highest number of cases as can be noted from table 54 occur in "Miscellaneous" (IAGS). However, in other fields the ratio is 50 per cent or better of trainees in the high utilizer group. It is gratifying and also somewhat surprising that participants from the earlier years were known to the technicians now serving in Bolivia. These cases represent high continuity of job and training utilization.

TABLE 54

Technician Evaluation of Training (Utilization Score)
By Major Field of Activity And Year of Training

Part I of table.

Participant Questionnaire - Major Field of Activity in Which Training was Given.	Technician Questionnaire - Utilization Score				
	75 or higher	18 - 74	17 or lower	No total score (Y)	Total
Direct military support	2	-	-	2	4
Agriculture	29	6	-	14	49
Industry & Mining	9	2	-	7	18
Transportation	4	-	-	1	5
Labor	-	-	-	11	11
Health and Sanitation	12	1	-	2	15
Educatic	-	-	-	-	-
Public Administration	12	1	-	3	16
Comm. Dev., Social Welfare, Housing	-	-	-	-	-
Miscellaneous	53	4	1	3	61
Not ascertained	-	--	-	--	-
Total	121	14	1	43	179

Table continued on the following page.

Part II of table.

Participant Questionnaire - Year Participant Left for Training Program.	Technician Questionnaire - Utilization Score				
	75 or higher	18 - 74	17 or lower	No total score (Y)	Total
1949 and earlier	1	-	-	1	2
1950	-	-	-	-	-
1951	2	-	-	-	2
1952	-	-	-	-	-
1953	5	1	-	3	9
1954	3	-	-	2	5
1955	5	1	-	3	9
1956	12	1	-	-	13
1957	10	1	-	2	13
1958	12	1	-	4	17
1959	6	1	-	1	8
1960	-	-	-	2	2
1961	10	-	-	4	14
1962	43	7	1	16	67
1963	12	1	-	5	18
Total	121	14	1	43	179

Cards 11:69; 01:14,24 & 25.

The technicians' rating of the participants' qualifications run rather high as shown in the table following:

TABLE 55

Technicians' Rating of Participant Training Utilization
In Relation to Participants' Qualifications

	17/lower	18-74	75/higher	No Score	Total
Educational Qualifications					
Adequate	1*	11	119	41	172
Inadequate	-	2	2	1	5
Can't rate	-	1	1	-	2
Intelligence					
Adequate	1	13	122	40	176
Inadequate	-	-	-	2	2
Can't rate	-	1	-	-	1

Table continued on the following page.

* The single case of the participant rated "low" on utilization (17/lower) but "adequate" in terms of his intelligence, language knowledge and both training and job attitudes is that of a trainee whose training related project was cancelled during the time he was abroad.

	17/lower	18-74	75/higher	No Score	Total
Language Knowledge					
Adequate	1	12	118	38	169
Inadequate	-	2	2	4	8
Can't rate	-	-	2	-	2
Attitude toward Training					
Adequate	1	9	120	40	170
Inadequate	-	4	-	1	5
Can't rate	-	1	2	1	4
Attitude toward Job					
Adequate	1	12	122	36	171
Inadequate	-	1	-	4	5
Can't rate	-	1	-	2	3

Card 11:69,34-38.

Program Factors and Utilization. The technician's degree of contact with the trainee and involvement in the training and its application appears to affect training utilization and the technician's evaluation thereof.

The following table indicates several factors related to the technician's estimate of the participant's training utilization score.

TABLE 56

Comparison of Various Factors of Technician's Relationship to Participant and His Training with Technician's Evaluation of Participant's Utilization of Training

Technician contact with participant before training:	No. of Participants of a total of 179	No.of Participants with utilization score 75/higher
Helped select	56	42
Helped plan program	53	41
Coordinated program with employer	51	44

Card 11:69.73.74.78.

Program related factors also appear to affect utilization in the technicians' opinions, i.e. better training results in better utilization.

TABLE 57

Comparison of Technicians' Rating of Program Factors as Satisfactory with Participant High Utilization Score

Factor	No.of participants whose programs were rated satisfactory	No. of participants with utilization score 75/higher
Pre-departure preparation	130	103
Type of program	146	109
Subject matter coverage	144	110
Level of program	141	109
Length of program	137	106
Country of training	150	111
Appropriate materials, techniques, (used in training).	145	111

Card 11:69,39,42,45,48,50,52,57.

Evidence of Participants' Training Utilization. The technicians were asked to compare the participant under consideration with others "with respect to his ability to do his job without outside help". This question provides an evaluation not only of the trainee but also of his contribution to his country's development.

TABLE 58

Technicians' Rating of Program Factors as "Satisfactory" In Relation to "Participant's Ability To Do His Job Without Outside Help"

"Satisfactory" Program Factor**	Participant's Ability				
	Low	Average	Fairly High	High	Total Cases Rated*
Pre-departure preparation	1	27	38	64	130
Type of program	2	32	40	72	146
Program level	2	30	41	68	141
Program length	2	28	38	69	137
Country/countries of training	2	32	43	73	150
Appropriate materials/ techniques	2	31	41	71	145

Card 11:71.39,42,48,50,52,57.

*The totals exclude cases when the technician was unable to rate the participant.

** Program factors were rated "unsatisfactory" as follows: Type of Program 4; Program Level 7; Program Length 10; Material/techniques 3.

This data is further evidence of the fact that good training leads to good utilization. The technicians rated as "high" more than 50 per cent of the participants known to them. The ratings of "low" reflect some criticisms made by the technicians regarding training programs in which the technician felt that pre-departure preparation, the level, and the length of the programs were not of top quality.

The majority of the trainees (99 cases) were rated "high" to "fairly high" in terms of the importance of the participant's job and its contribution to economic development. This represents the technicians' judgement of the importance and value of the training to country development and the capacity of the participant to contribute thereto.

TABLE 59

Technician Questionnaire: Compare This Participant With Others With Respect to Importance of His Job To Over-All Economic Development Of His Country * by Technician Questionnaire: Utilization Score

	17 or lower	18 - 74	75 or higher	No total score (Y)	Total
High	-	2	50	17	69
Fairly high	-	6	49	13	68
Average	1	5	22	12	40
Low	-	1	-	1	2
Total	1	14	121	43	179

Card 11:69,70. *No cases coded "Don't know" or "Not ascertained".

The individual technicians questioned regarding the effectiveness of the training considered it satisfactory in most cases. There were only a few cases when the technicians were critical of the utilization of training. Specific opinions are of interest however.

Agriculture.

There is a high degree of utilization of training because the people

are trained for specific jobs, and the jobs are waiting for them when they come back. They go right into the job and begin using their training.

The servicio, SAI, has made good use of the people who are trained. Generally those who are trained are the only ones who can do their jobs properly.

The servicio provides job opportunities after training and makes every effort to extend its effect by providing greater challenges to the participants.

On the whole training utilization has been high and relatively few trainees have been "lost".

The major responsibility for supervised agriculture credit rests on the participants who have been trained under Mission sponsorship.

Generally training is channelled towards its possibilities of application. Better advance planning for the use of training on the part of the host country would ensure improved utilization and the accrual of more benefits to the host country.

The technician in agriculture generally has an extensive post-training conference with the participant concerning plans for training utilization. This is very effective. It helps the trainee develop ideas for adapting his new skills and increases the trainee's confidence in himself and his usefulness to his organization.

Sometimes trainees go to other jobs but often as a result of training and in a related field so that the value of the training is not lost to Bolivia.

Army

The U.S. officers of the Engineering corps of the U.S. Army Mission keep in close touch with their Bolivian counterparts. They go on periodic inspection trips and can see first-hand the results of out-of-country training.

The Bolivian army trainees are of very high calibre. Several times the School of the Americas (in the Canal Zone) has asked specifically for some of the Bolivian officers to serve as instructors. (Permission has not been granted to serve because of lack of financing to pay expenses of the Bolivians).

A problem of training utilization is to keep trained people in the field. Too often they are kept at headquarters after they are trained.

Geology

Relatively few people have been trained. But these are key people who have passed training along and have taught others. The value of the maps produced is far in excess of the costs of training. There is an $8 return for every training dollar invested.

Health

In certain areas training has the highest priority in order to form a cadre of highly capable and adequately trained personnel who can assure the future development on a local basis of given projects and similar training. A specific case is that of a participant who has developed a career in occupational health. If it were not for this trainee, or someone like him, specifically trained, the rapid development of the occupational health program could not have materialized.

Sanitary engineers have been well trained (under Mission sponsorship) and thus there is a good corps of people who are competent to undertake and carry on projects, such as community water supply systems.

Industry

Team visits (Industry teams on observation tours) are useful from an inspirational point of view and sometimes this directly stimulates improvements in the local situation.

Inter-American Geodetic Survey

Very few IAGS people are "lost" because they are trained for a specific job.

Training utilization would be improved if there was a free flow of funds to enable more long-range planning. There should be a few special grants for outstanding people to "up-date" their training.

Labor

The participant interview form (Form A) used in the Survey doesn't give sufficient opportunity for the labor trainees to show how they are using their training. Often training utilization depends on the "inspiration" the trainee receives from his experience, though he must develop initiative on his own part in adapting and using what he learns from his out-of-country experience.

Public Administration

Sometimes well trained people are "dumped" for political reasons; and sometimes, for political reasons a less than well prepared candidate is put forward for training. These are weaknesses for good training utilization; but it's not the trainee's fault.

Public Safety

The weakest part of training and its utilization is the inability of the trainee to extend himself. Too often the trainee doesn't have sufficient opportunity to use his training because of politics. Members of the police force are moved frequently and this is especially hard on a young officer who after training hopes to put into practice what he has learned.

Transportation

Most of the trainees in "roads" come back to the jobs for which they were trained and are working in them. Having a job to which the training is geared helps ensure utilization.

Government policy sometimes prevents the most effective utilization of training; positions are abolished, are open to those who have political recommendations, are poorly paid. The Engineering Division gives preference to those who have been trained and thus tries to ensure utilization insofar as possible.

The training of mechanics and operators for the heavy machinery of the road department has helped keep the machinery in the best order possible and ensure its correct and continuous use.

Technicians' Criticisms. A few trainees of whom the technicians were critical were people trained before the technician arrived at the post. The technician thought the training was poorly planned or not coordinated with country needs. Several individuals were political selections sent on training over the protest of the U.S. technician. These people, according to the technician, didn't profit greatly from the training (some approached their training as tourists); on their return to Bolivia they had made no effort to use anything from their training programs. One or two of the "politically selected" participants were in key positions and could have contributed greatly to Bolivia's progress if they had been sincere in their desire to learn and apply the out-of-country experience. Fortunately, the total number of such cases is under 10.

Supervisor Opinions. Slightly more than half the trainees rated by the supervisors were considered high-utilizers (score 81 or higher). This distribution of high utilizers roughly correlates with the percentages of high utilizers

by field of activity according to the participants own ratings (table 43, page 104). The low utilizers, including a few cases with scores below 19 have a similar parallel.

This distribution of high utilizers by year of training as rated by the supervisors also has parallel with the ratings, by year of training, of the U.S. technicians (compare table 54, page 132).

TABLE 60

Existence of Pre-Training Plans for Training Utilization, And Supervisors' Evaluation of Training Utilization In Relation To Fields of Activity and Year of Training

Participant Questionnaire - Major Field of Activity In Which Training Was Given.	Supervisor Questionnaire - Before Participant Left On His Program, Did This Org. Have Plans As To How His Training Would Be Utilized.					Supervisor Questionnaire - Utilization Score.				
	Yes	No	Don't know	(Y)*	Total	81/ higher	20-80	19/ lower	(Y)*	Total
Direct Military Support	9	1	-	21	31	16	11	-	4	31
Agriculture	11	3	-	8	22	10	9	1	2	22
Industry & Mining	10	2	1	6	19	9	5	-	5	19
Transportation	4	2	3	10	19	10	5	-	4	19
Labor	4	7	1	7	19	7	3	1	8	19
Health	4	1	1	10	16	14	2	-	-	16
Education	13	1	1	5	20	14	6	-	-	20
Public Administration	21	4	2	25	52	28	15	2	7	52
Comm.Dev.,Social Welfare, Housing, etc.	-	-	-	-	-	-	-	-	-	-
Miscellaneous	39	6	-	15	60	34	17	4	5	60
Total	115	27	9	107	258	142	73	8	35	258
Year Participant Left for Training										
1949 or earlier	1	-	-	1	2	2	-	-	-	2
1950	2	-	-	-	2	2	-	-	-	2
1951	1	-	-	-	1	1	-	-	-	1
1952	-	-	-	-	-	-	-	-	-	-
1953	6	-	-	4	10	6	3	1	-	10
1954	2	-	-	4	6	4	1	-	1	6
1955	2	1	-	5	8	4	4	-	-	8
1956	6	3	-	5	14	8	3	-	3	14
1957	7	2	1	12	22	12	9	-	1	22
1958	13	1	-	31	45	26	11	-	8	45
1959	8	1	1	13	23	12	9	-	2	23
1960	8	2	-	2	12	8	3	1	-	12
1961	13	1	3	6	23	13	4	1	5	23
1962	34	13	4	18	69	31	22	4	12	69
1963	12	3	-	6	21	13	4	1	3	21
Total	115	27	9	107	258	142	73	8	35	258

Cards 01:14,24 & 25; 10:24 & 51. *(Y) - not applicable.

Pre-Training Plans for Training Utilization. It might be assumed that when utilization of training was planned for in advance the rate and effectiv ness of utilization would be higher than if no plan existed. The replies of the supervisors to the question indicate that such plans existed for roughly 50 per cent of the cases in the field of Agriculture, Industry and Mining, Education, Public Administration and Miscellaneous. Plans for training utili zation existed for about 50 per cent of the participants according to the year the participant left for training.

However, as has been demonstrated through various preceding tables, there is considerably higher than 50 per cent utilization of training. It is possible that plans for utilization of training existed in more than 50 per cent of the cases, even though for only 115 participants pre-training plans for post training use are indicated. Also, the supervisors rate 142 cases (as compared to the 115 just mentioned) as high utilizers. This number might be slightly larger if it were possible to separate from the "low utilizers" (with scores of 20-80) those with ratings of above 50 or above 75.

The fact that there are 107 cases in which the supervisor was not familiar with any aspects of the training program suggests that pre-training utilizatio plans might have existed of which the supervisor was unaware.

For 27.9 per cent (72 cases) of the participants with a score of higher than 75, pre-training utilization plans were made. This number (72) plus the 38 with scores of 50 to 74, suggests that better utilization was assured by advance planning for training use.

The supervisors also rated high a greater number of participants for whom pre-training utilization plans existed.

TABLE 61

Supervisor Questionnaire: Before Participant Left On His Program Did This Organization Have Plans As To How His Training Would Be Utilized?	by Participant Questionnaire: Utilization Score* 50-74	75 or higher	No total score (Y)	Total
Yes	38	72	5	115
No	2	21	4	27
Don't know or don't remember	3	6	-	9
Not applicable - supervisor was not familiar with any aspects of participant's training program before he left.	28	67	12	107
Not ascertained	-	-	-	-
Total	71	166	21	258

Cards 10:24; 05:68. *No cases with scores below 50

TABLE 62

Supervisor Questionnaire: Before Participant Left On His Program Did This Organization Have Plans As to How His Training Would Be Utilized?	by Supervisor Questionnaire: Utilization Score 19/ lower	20-80	81/ higher	No score (Y)	Total
Yes	1	30	78	6	115
No	5	9	8	5	27
Don't know, don't remember	-	1	3	5	9
Not ascertained	-	-	-	-	-
Not applicable	2	33	53	19	107
Total	8	73	142	35	258

Card 10:24,51.

Who initiates the training appears to affect its utilization. According to the data of the Survey, when the training request originated in the participant's organization, the degree of utilization was higher than when the training was initiated by a ministry, U.S. official, the participant himself, or someone else. Actually, training was initiated most frequently by the participant's organization (121 times). Many of these cases relate to servicio activities where the work was closely integrated with the projects of the U.S. Mission.

TABLE 63

Supervisor Questionnaire: Who Actually Initiated Participant's Training Program? by Supervisor Questionnaire: Utilization Score

	19/ lower	20-80	81/ higher	No score	Total
Participant	2	2	3	1	8
Someone in this organization	4	28	76	13	121
Ministry or other home gov.official	-	4	2	-	6
USOM or ICA personnel	-	3	5	-	8
University official, professor, department head, student adviser, etc.	-	1	1	-	2
Other (not included above)	-	1	2	2	5
Don't know or don't remember	-	-	-	1	1
Not ascertained	-	-	-	-	-
Not applicable (Y)	2	34	53	18	107
Total	8	73	142	35	258

Card 10:20,51

In more than half of the applicable cases the supervisor had recommended that the participant be sent for training (80) and of these cases more than half (50) were high utilizers.

TABLE 64

Supervisor Questionnaire: Did You Recommend That Participant Be Sent On A Training Program? by Supervisor Questionnaire: Utilization Score

	19/ lower	20-80	81/ higher	No Score	Total
Yes	2	21	50	7	80
No	3	11	25	5	44
Don't know or don't remember	-	-	-	-	-
Not ascertained	-	-	-	-	-
Not applicable (Y)	3	41	67	23	134
Total	8	73	142	35	258

Card 10:18,51

Supervisor's Evaluation of Training Use. The supervisors interviewed, when asked to evaluate the contribution of training to the participant's job performance, said that training made a "major" contribution for 136 trainees, "minor" for 26 participants, and was of "no importance" for three.

The supervisor was also asked if the participant had been able to convey

any of his training acquired knowledge to others. The reply was "yes" for 194 cases and "no" for 39 cases.

The ways in which this transmission of training was done is indicated in table 65. The supervisors, as did the participants, indicated most frequently the use of training via formal teaching, lectures, training sessions, etc. and informal discussions.

TABLE 65

How Has The Participant's Training Acquired Knowledge Been Conveyed To Others?

(Supervisor Questionnaire)

Activity Cited	No. of Times	Per Cent*
Formal teaching, lectures, seminars, training sessions, radio or television broadcasts, made or showed slides or films	101	51.8
Informal discussions on job, conversations	107	54.9
Wrote articles, books, manuals, other publications	8	4.1
Reports given in meetings	2	1.0
Demonstrations of techniques, equipment	9	4.6
Supervision, guidance, or direction of other workers, subordinates, employees.	41	21.0
Other, not included above	3	1.5
Not applicable	63	24.4 **

Card 10:32,33. *Totals exceed 258 and 100 per cent because more than one activity is given for some participants.
This table is based on the replies of the supervisors in relation to 258 participants of whom 195 were said to be conveying training acquired knowledge to others. The percentages of the first seven items are based on the 195 cases using training.**Sixty-three cases classed "not applicable" are those whom the supervisor said were not conveying training knowledge (39) or the supervisor replied "Don't know" (24); the percentages for this figure are based on the total of 258 participants.

Less than half the participants (124 participants, 48.1 per cent) about whom the supervisors were interviewed were working for these supervisors at the time of training. In only 16.7 per cent (43 out of 258 cases) did the supervisor participate in planning the training program. Actually, the

relationship is somewhat better when the number of inapplicable cases (10 per cent) are not considered. The result is that 35 per cent of the training programs considered here were planned with the participation of the supervisor.

The supervisors worked quite closely with the trainees, indicating that they spent 16 hours or more per week with most of the trainees, (171 cases). They also appear to have had extended acquaintance with the participants and thus should be able to judge the trainee and his work quite accurately.

TABLE 66

Supervisor Contact with Participant

	No. of participants
About how many hours a week do you spend with the participant?	
16 hours or more	171
8-15 hours	33
4-7 hours	24
Less than 4 hours	30
	258
About how long have you known the participant?	
Less than one year	21
1-5 years	98
6-10 years	72
11-20 years	45
More than 20 years	18
Not ascertained	4
	258
Since the participant has been back from training have you discussed with him the things he studied?	
Yes	218
No	40
	258
Have you discussed with the participant any of his experiences that were not connected with his training?	
Yes	190
No	68
	258

Card 10:25-28

In 84.5 per cent of the cases (218), the supervisor had discussed the participant's training program with him (what he studied) and in 73.5 per cent (190 cases) had discussed the non-technical aspects of the out-of-country

experience. Twenty-four per cent (172) of the participants rated their supervisors as "very helpful" in assisting them to utilize their training. There was no question exactly comparable relative to technician helpfulness, but data on frequency of contact, and the U.S. technician's rating of the participant also revealed close collaboration in work situations.

Supervisors and technicians were interviewed concerning 72 identical participants. This represents 10.3 per cent of the total participants concerning whose training and utilization corroborative information was given by the technicians and supervisors.

Factors Affecting Training Utilization

Program-Related Factors. Selection. Who selected the trainee seems to affect not only training but post-training activities. High utilizers (75 or above) were selected as follows: 65 per cent by supervisors, 66 per cent by a U.S. official, and 60 per cent by "other", i.e. ministry, special board, etc. Being "selected" and having someone familiar with the participant and his work apparently helped increase utilization.

TABLE 67

Supervisor/Participant Pre-Training Contact by Participant Utilization Score

	Utilization Score					
Who Selected You?*	25/higher	26-49	50-74	75/higher	No total score (Y)	Total
Supervisor	-	-	78	216	36	330
USOM	-	-	53	150	22	225
Other	-	-	47	114	29	190
Don't know	-	-	4	12	-	16
Not applicable	-	-	150	420	71	641
Total	-	-	332	912	158	1402
Did You Have The Opportunity To Take Part In The Planning Of Your Program?						
Yes	-	-	39	141	15	195
No	-	-	127	315	63	505
Don't remember	-	-	-	-	1	1
Total	-	-	166	456	79	701

Cards 02:17-20 & 37; 05:68. * the percentages represent the relation between those with scores "75 or higher" to total for each "selector" i.e. 215 of 330 - 150 of 225 etc. Total exceeds 701 because of multiple answers.

Participation in Program Planning. Since 505 participants did not have the opportunity to take part in planning their programs, the number who participated is relatively small (195). However, of this number 141 (72 per cent) are in the 75 or higher score group.

Participant Utilization Scores In Relation To Various Program Factors. The participants who were best informed in advance about their training, both program and non-technical aspects, are the highest training utilizers.

There are also interesting correlations between satisfaction with the program and the degree of utilization. Two hundred and sixty-four participants (68.5 per cent) out of a total of "satisfied" participants are high utilizers.

A comparison of the relevant cross tabulations show very minor variations in the actual number of cases between those "well satisfied" with their training and those who have made good use of that training.

The table which follows (compiled from the cross tabulations) gives data on those "very satisfied" with their programs and those with a utilization score of 75 or higher. The totals involved in each case (which are less than the total interviewed - 701) is indicated first so that the reader may observe the relationship.

TABLE 68

Selected Program Factors (Information and Satisfaction) In Relation to Participant Utilization Scores

	Utilization Score 50-74	75/higher	No score (Y)	Total
Before you left home did you get enough information about the program? a) what you would be learning b) where you would be going c) when you would be going d) length of program e) other aspects of the program	(Scores for replies to these questions are on the following page.)			

Table continued on the following pa

	50-74*1.	75/higher	No score (Y)	Total
All questions yes	64	217	28	309
Four yes	29	101	22	152
Three yes	40	78	13	131
Two yes	24	45	12	81
One yes	8	10	4	22
All no	1	5	-	6
Total	166	456	79	701
In addition to information about the program, did you get enough information about how to get along in the country of training? For instance: *2.				
a) how to use restaurants and public facilities				
b) colloquial speech and idioms				
c) religious practices				
d) use of money				
e) manners and customs generally				
All five questions yes	99	295	52	446
Four questions yes	21	52	8	81
Three questions yes	18	36	4	58
Two questions yes	10	25	5	40
One question yes	9	18	5	32
All five no	9	30	5	44
Total	166	456	79	701
Before you left to go abroad how satisfied were you with your training program?				
Well satisfied	81	265	39	385
Not very satisfied	25	49	6	80
Don't know, don't remember	60	142	34	236
Total	166	456	79	701

Cards 02:66 & 36; 03:34; 05:68.

*1. No cases below 50
*2. Those with most information did best.

TABLE 69

Comparison of Numbers of Participants "Very Satisfied" with their Training Programs With Participants Having a Utilization Score of 75 or Higher

Program Factors	Total Cases	No.of Participants"very satisfied".	No.of Participants with 75/higher
Country of Training			
United States	315	190	199
Canal Zone	130	81	86
Puerto Rico	89	49	61
Other (Third Country)	167	96	110
Type of Program			
Observation	449	261	293
On-the-Job	439	260	289
University	232	144	162
Length of Program			
Too long	10	4	5
About right	254	168	161
Too short	437	244	290
Level of Program			
Too simple	178	72	116
About right	483	318	316
Too advanced	40	26	24
Difficulty with English			
No difficulty at all	103	72	68
In being understood	53	26	35
In understanding others	60	35	43
Both	156	87	98

Cards 05:68; 02:68-70; 03:61,63,65; 05:18; 04:32,35.

Sixty-six per cent (331 cases) of the participants whose program was complete in detail are in the high utilizer group. Since 500 programs (71.5 per cent) were completely arranged in advance a logical assumption is that completeness of program contributes to improved post training utilization.

However, it is possible that increased participation in program planning (which might also result in as many or more programs being complete before training) would further improve training utilization. Participation in program planning plus the advantages of having the program complete in advance are undoubtedly important factors affecting training utilization.

Sixty-nine point five per cent (342 cases) of the participants with high scores said they "received enough attention". This is 48.8 per cent of the total participants (701). Only 2.1 per cent (15 cases of 701) who did not receive sufficient attention are in the high utilizer category.

The largest number (371 cases) spent 2 months to 2 years in training Actually, as per table 70, the rough average of 90 cases in the "above 75" score group is distributed rather evenly along the total training time-spa The table indicates the number of high utilizers of the total interviewed in relation to the length of training.

The relationship of utilization score to the factor of program chang (table 70) does not establish whether those who required, and received program changes became high utilizers as a result of these changes nor how many of the high utilizers were "satisfied" with their programs.

Those who completed their programs are more frequently than not "hig utilizers" (table 70). Actually, there are very few (25) who did not complete their training. Non-completion of training was usually due to personal reasons and is not associated with training-related difficulties. Several trainees of the Survey who did not complete their programs, having had to return early to Bolivia because of illness, femily or job difficult seem to be utilizing what they gained from the time spent in training.

Seventeen out of 31 cases whose programs were "not too satisfactory" or "not satisfactory at all" are in the group with scores of 75 or higher. However, 440 participants (96.5 per cent out of 456) with scores of 75 or higher were very satisfied or moderately satisfied with their programs.

TABLE 70

Selected Program Factors
In Relation To Participants' Utilization Scores

When you arrived in the country of training was your program arranged in detail? *2.	Utilization Score			
	50-74	75/ higher	No score (Y)	Total *1
Program complete in detail	120	331	49	500
Program in partial detail	25	79	19	123
Program not set up at all	20	45	11	76
Don't know, don't remember	1	1	-	2
Total	166	456	79	701
Do you think he (the person who discussed your program with you) gave enough attention or guidance to you during the course of the program? *3.				
Received enough attention	97	342	52	491
Did not receive enough attention	10	15	4	29
Not applicable, when he arrived participant says he did not meet anyone who discussed his program with him	59	99	23	181
Total	166	456	79	701
Total amount of time spent in training				
3 years or more	-	-	-	-
2-3 years	-	3	1	4
1-2 years	25	91	7	123
6 months to 1 year	45	93	17	155
4-6 months	34	90	9	133
2-4 months	44	97	19	160
1-2 months	14	64	20	98
Less than 1 month	4	18	6	28
Total	166	456	79	701
Did you follow your program as originally planned? *2				
Followed program as originally planned	128	351	65	544
Important changes made	38	105	14	157
Total	166	456	79	701
Did you complete your training program?				
Completed program	159	441	76	676
Did not complete program	7	15	3	25
Total	166	456	79	701

Table continued on following page.

How satisfactory was that training program?	50-74	75/ higher	No score (Y)	Total*1
Very satisfactory	86	296	34	416
Moderately satisfactory	70	144	40	254
Not too satisfactory	8	15	3	26
Not satisfactory at all	2	1	2	5
Total	166	456	79	701
Did you receive a degree or diploma? *3.				
Yes, received an academic degree	12	40	6	58
No, received a certificate or other non-academic citation	38	123	14	175
No, received nothing	-	-	-	-
Not applicable - did not attend a university	116	293	59	468
Total	166	456	79	701

Cards 03:51&55; 02:80; 04:38,46&20; 05:68.
*1. No cases lower than 50
*2. No cases "not applicable" or "not ascertained".
*3. No cases "not ascertained".

Sixty-nine per cent (40 cases out of 58) of the trainees who received an academic degree are "high utilizers", and 70.5 per cent (123 out of 175) of those who received a certificate or some type of academic recognition have scores above 75. There is a very large number, 62.6 per cent (or 293 out of 468) who did not attend a university, where this factor is inapplicable.

Seventy-one point five per cent (370 out of 518) of those who considered their training "the most important thing" they ever did are high utilizers. This is also 81.0 per cent (370 of 465 cases) of the total of high utilizers. Only 83 (18.2 per cent of 456 high utilizers) of those who thought their program something "in between", a "waste of time" and the "most important thing" are high utilizers, (table 71).

The Survey data clearly indicates a high correlation between "satisfaction" with, and "importance" of the training program and high utilization.

Job-Related Factors. In 81 out of 258 cases, the supervisors indicated that the participant's training was "essential". For 94 participants training was considered "most important", by the supervisors (as distinguished from the

participants' evaluation). One hundred and ten participants (out of 175) were in the participant high score group.

TABLE 71

Factors of: Importance of Training; Supervisor Recommendation and Helpfulness; And Trained Associates In Relation To Participant Utilization Scores

Factor	Utilization Score *1. 50-74	75/ higher	No score (Y)	Total
How important was your program? (participant questionnaire)?				
Most important thing	112	370	36	518
Waste of time	3	3	4	10
In between	51	83	39	173
Total	166	456	79	701
How important was participant's training? (supervisor question.)				
Essential	25	54	2	81
Very important	28	56	10	94
Helpful but not very important	17	41	7	65
Not useful	-	8	1	9
Better off without it	-	2	-	2
Don't know or don't remember	1	5	-	6
Not ascertained	-	-	1	1
Total	71	166	21	258
Did you recommend that participant be sent on a training program? (supervisor questionnaire)				
Yes	24	52	4	80
No	10	29	5	44
Don't know or don't remember	-	-	-	-
Not applicable *2.	37	85	12	134
Not ascertained	-	-	-	-
Total	71	166	21	258
Does your supervisor on your current job help you to utilize that training? (participant questionnaire)				
Very helpful	31	140	1	172
Somewhat helpful	54	110	5	169
Not helpful	32	50	29	111
Neither helpful nor unhelpful	15	50	14	79
Has no supervisor	32	106	21	159
Don't know or don't remember	-	-	-	-
Not applicable *3.	-	-	9	9
Not ascertained.	2	-	-	2
Total	166	456	79	701

Table continued on the following page...

Is there anyone with whom you work who has been trained abroad? (participant questionnaire)	50-74	75/ higher	No score (Y)	Total
Yes	119	345	31	495
No	46	109	39	194
Don't know or don't remember	-	1	-	1
Not applicable *3.	1	1	9	11
Not ascertained	-	-	-	-
Total	166	456	79	701

Cards 06:53; 10:46&18; 05:49,50&68.
*1. No participants with score below 50. *2. Participant did not work for this supervisor, doesn't know, doesn't remember, etc. *3. Not employed at time of interview.

Two hundred and fifty (73.4 per cent of 341) participants whose supervisors were "very helpful" or "somewhat helpful" had high scores.

The role of the supervisor in helping select the participant, planning the training program or for its utilization, and/or coordinating it with the employer or host country government, while perhaps not crucial, is important. The knowledge, support, and degree of association of the supervisor with the trainee affects positively or negatively training utilization.

It also appears helpful to have others in the trainee's organization who have been trained abroad. Lack of personnel with special preparation and/or knowledge seems to impede utilization of training. Three hundred and forty-five out of 495 (69.6 per cent) who had associates trained abroad were themselves high utilizers.

The data of table 72 appears on the surface somewhat contradictory. Four hundred and six participants (57.9 per cent) say that they would have "about the same job" they now have, had they not gone on training, and only 195 (27.8 per cent) said they would not have as good a job without their training. Presuming that training improves the skill of an individual, it would be logical to expect that training would lead to a better job. It should be remembered that 220 (31.4 per cent) participants reported that at the time of the interview their current job was better than the one immediately after

training and 64 said their first job after training was better than their pre-training job. Of 406 who did not consider training had improved their job status, 261 have scores above 75.

TABLE 72

Suppose You Had Not Gone On This Program, What Kind Of Job Do You Think You Would Now Have? by	Utilization Score*			
	50-74	75/higher	No score (Y)	Total
About the same	101	261	44	406
Better	9	21	6	36
Not as good	42	147	6	195
Don't know	14	27	14	55
Not applicable - not employed at time of interview	-	-	9	9
Not ascertained	-	-	-	-
Total	166	456	79	701

Card 05:42&68. *No scores below 50.

A possible explanation is that many participants were trained for the jobs they now hold, and that without training they would not have as good a job, nor be doing their work as effectively. This is certainly true of a high percentage of IAGS trainees, and probably of Agriculture Extension participants, some nurses, doctors, teachers and others.

Summary

Utilization of training -- the degree and the ways of use -- is a valid measurement of training effectiveness. The study plan provided a yardstick for evaluating training use in terms of a total score compiled from replies to various interview questions:

1) whether or not the returned participant was employed
2) in the same or a different job, and if the job was training-related
3) the activities in which training was being used
4) whether or not it was being transmitted to others

Additional information on the ways (activities) in which training was being used, and the difficulties involved in utilization contributed to an understanding of the overall problem of applying training acquired knowledge.

The influence of program-related and job-related factors in facilitating or impeding training was also investigated.

The training utilization records of the Bolivian participants are high:
89.4 per cent are using training acquired skills (626 cases)
65.0 per cent scored "75 or higher" (456 cases)
10.7 per cent scored 99 (75 cases).

The breakdown of the scores for 701 trainees is:
18.3 per cent (129 cases) scored 90-99
46.7 per cent (327 cases) scored 75-89
23.7 per cent (166 cases) scored 50-74
11.3 per cent (79 cases) did not score.

High training utilization is fairly evenly distributed among the various fields of specialization.

The highest percentage of utilization is in Education and related activities under which agricultural extension work was coded.

The lowest percentage of utilization is in Transportation, 47.1 per cent

Top policy makers, engineers and professionals scored highest.

The more the years of education and specialization, the higher the score.

The employment record of the trainees is good.

98.7 per cent were employed at the time of the interview.
65.5 per cent returned to the same job after training as they had before.
42.3 per cent were still in the same job at the time of the interview.
40.3 per cent of the high utilizers had better jobs than previously and 11.6 per cent said their work was increasingly training-related.

The achievements of the Bolivian participants in using their training were varied and spread across the fields of economic endeavor represented in the sponsorship and specialization. Teaching, giving demonstrations, improved practices were the most important avenues of training use.

98.3 per cent said they had been able to "convey to others" something from their training experience.
59.6 per cent has used their training in more than one activity.

44.0 per cent said they were doing their regular work better
40.0 per cent said they had given demonstrations and taught others
31.4 per cent said they had improved procedures, made changes or reorganized their work or job activity.

Problems of training utilization most frequently mentioned were:

Specific	General
Lack of equipment	Political influence in selection and post training support (or lack of it).
Lack of money	The low level of economic development of Bolivia.
Lack of trained personnel	Bolivian cultural and educational limitations.

Supervisors and technicians tended to corroborate the participants' estimate of training utilization.

67.5 per cent of the trainees were rated high utilizers by the technicians.
75.0 per cent of the participants were conveying training according to the supervisors' estimates, and more than half were classed as high utilizers.

Factors which appear to affect training utilization are:

being selected
having programs complete before training
receiving sufficient attention from the person in charge of the training program.
being "very satisfied" with the training program
receiving the support of the supervisor, GOB or USAID .

There is a high correlation between "satisfaction" with the various aspects of the training (country of training, type of program, length, level) and good training utilization.

CHAPTER VII

THE IMPORTANCE OF FOLLOW UP IN TECHNICAL COOPERATION TRAINING

For at least 10 years AID/Washington training officials have been urging upon U.S. Missions overseas, the importance of "follow up" of returned participants. The Missions have been left free to devise their own most appropriate methods of keeping in touch with trainees, such as assisting them in their work; using former trainees' services for in-country training, or pre-departure orientation; eliciting the advice and collaboration of participants on Mission projects; regular interviews with participants at the Training Office.

The Survey collected data from the participants and technicians on:the existence and the degree of post training contacts; whether or not the participant had worked for a U.S. Mission project; or had requested, and received U.S. aid.

A final separate sheet was provided on which the participant could offer comments or requests, and to which he signed his name.

Contact with U.S. Mission or U.S. Technician

The participants were asked if they had had any contact with the U.S. Mission and/or technicians since their return from training. Slightly over half, 54.8 per cent, said they had had some contact. There are no details, however, as to when the contact occurred, how long it lasted or how productive it was. Of the 384 participants who claimed contact, 69.4 per cent (266 trainees) are high utilizers (scored above 75).

Forty-seven point one per cent (330 trainees) said there was a U.S. technician available to them. Thirty-eight point one per cent said they had worked for the Mission on a joint project, (in most cases in the past with a servicio).

TABLE 73

Program Factor:
Contact Between Participant And U.S. Technician/Mission
In Relation To Participant Utilization Score

Since Your Return Have You Had Any Contact with USOM? *1.	Utilization Score (Participant Questionnaire) *2.			
	50-74	75/ higher	No score (Y)	Total
Yes	90	266	28	384
No	76	190	51	317
Total	166	456	79	701
Do You Have Frequent Contact With Him? (USOM Technician) *1.				
Frequent	38	138	8	184
Occasional	30	90	16	137
Never met	4	4	2	10
Not applicable - no USOM technician is available, or participant does not know or does not remember whether one is available.	94	224	53	370
	166	456	79	701
Technician Questionnaire: How Much Contact with Participant Since His Return?*1.				
Regularly	10	33	2	45
Frequently	12	56	5	73
Occasionally	14	39	2	55
Once or twice	2	2	2	6
Never met or only social contact	-	-	-	-
Total	38	130	11	179
Technician Questionnaire: Interference with Contact: Nothing Interfered				
Checked	27	95	8	130
Not checked	11	35	3	49
Total	38	130	11	179

Cards:05:68,73,76; 11:30&29.
*1. No cases coded "don't know" or "not ascertained" *2. No cases with scores below 50.

Twenty-six per cent of the trainees interviewed said they had "frequent" contact with the U.S. technicians (184 cases) and 19.4 per cent (137) claimed to have "occasional" contact with the technician. This total of 46 per cent (321 individuals) still leaves more than half the returned trainees with

little or no regular contact with the U.S. assistance activities in Bolivia. One hundred and thirty-eight out of the 184 who had frequent contact with a U.S. technician are high utilizers (75 per cent of the trainees with a known contact with a U.S. technician).

The 19 technicians interviewed were asked how much contact they had had (since the period of training) with the participants known to them. The technicians had regular or frequent contact with 118 of the total of 179 participants. Eighty-nine of the 118 were high utilizers of training in terms of participant scores. The technicians rated 91 of the 118 as high utilizers, indicating a correlation of agreement on training use.

TABLE 74

Technician Questionnaire: How Much Contact With Participant Since His Return? by Technician Questionnaire: Utilization Score

	17/ lower	18-74	75/ higher	No total score (Y)	Total
Regularly	-	3	35	7	45
Frequently	-	1	56	16	73
Occasionally	1	9	28	17	55
Onee or twice	-	1	2	3	6
Never met or only social	-	-	-	-	-
Don't know or not ascertained	-	-	-	-	-
Total	1	14	121	43	179

Card 11:30&69.

Less frequent post-training contact exists between a U.S. official and the trainees in the field of Direct Military Support. This is possibly due to the nature of the training operation, its transfer from the USAID/Bolivia Training Office to the U.S. Military Mission, and the activities of the former trainees. (Table 75).

The greatest degree of contact is in the field of Agriculture, where 74 out of 96 participants said they had contact with the U.S. Mission. The contact between the trainee and the Mission averages approximately 50 per cent in the other divisions (as per table 75). This is not a low average

considered in the light of local circumstances -- the present stage of development in Bolivia, and the trends of U.S. aid and the current Mission program. Nevertheless, it should offer a challenge for improvement, if for no other reason than mutual benefits that might be obtained with relatively small additional effort.

TABLE 75

Major Field of Activity In Which Training Was Given. by Since Your Return, Have You Had Any Contact With USOM? *

	Yes	No	Total
Direct Military Support	19	37	56
Agriculture	74	22	96
Industry and Mining	27	26	53
Transportation	26	27	53
Labor	42	45	87
Health	42	36	78
Education	32	20	52
Public Administration	76	54	130
Com. Devel.,Social Welfare,Housing	6	5	11
Miscellaneous	40	45	85
Not ascertained	-	-	-
Total	384 (54.8)	317 (45.2)	701 (100.0)

Cards 01:14; 05:73. *No cases coded "don't know" or "not ascertained".

As stated earlier, the USAID/Bolivia Training Office has little or no contact with the participant after the latter's return from training. The "follow up" that exists is carried on between some U.S. technicians and participants in their divisions. Several technicians said they always discussed the training experience with the returned participant in order to develop plans for maximum use of the training. These technicians were in IAGS and the Agriculture Division where the degree of frequent and regular contact was greatest (as per table 76 on the following page).

The technicians said they had almost no contact ("once or twice") with only six participants, and in only 55 cases was the contact merely "occasional". However, it must be recalled that the 19 technicians interviewed knew only

179 out of 701 participants and that the other Mission technicians did not know any of the trainees of the Survey.

TABLE 76

Participant Questionnaire: Major Field of Activity in Which Training Was Given. by Technician Questionnaire: How Much Contact With Participant Since His Return? *

	Once or twice	Occasionally	Frequently	Regularly	Total
Direct Military Support	-	2	-	2	4
Agriculture	1	18	22	8	49
Industry & Mining	3	6	6	3	18
Transportation	-	2	3	-	5
Labor	-	7	3	1	11
Health	-	5	3	7	15
Education	-	-	-	-	-
Public Administration	-	6	9	1	16
Comm.Dev.,Social Welfare,Housing	-	-	-	-	-
Miscellaneous	2	9	27	23	61
Not ascertained	-	-	-	-	-
Total	6	55	73	45	179

Cards 01:14; 11:30
*No cases coded "never met", "only social", "don't know" or "not ascertained".

The technicians said "nothing interfered" with contact with the participants in 130 out of 179 cases. Of these 130 individuals, 95 were rated high utilizers of training, and 27 had scores of 50 to 74. This degree of utilization is probably not a coincidence though additional research would prove the validity or fallacy of the assumption.

U.S. Assistance Rendered to Participants

Only 16.4 per cent (115) of the participants said they had requested help at any time from USAID/Bolivia. Most frequently (48 times) the trainees asked for technical advice, aid or information on a particular problem or project. Equipment, machinery, materials and financial assistance for a special project were requested 27 times each. On 23 occasions the trainees asked for books, pamphlets or printed materials.

Aid was granted completely 108 times; and partially given on 21 occasions. Fifty requests were refused.

Specific requests were written into the interview form and an analysis of them shows that some of the requests which were rejected did not lie within the province of U.S. aid. Often the money or support requested was beyond the scope of Mission or Embassy facilities. A few participants said they had gone to the United States Embassy after being turned down by the Mission; but on no occasion did the Embassy give aid after it was refused by the Mission.

On the other hand it is possible that some of the requests might not have been fully investigated. The participants to whom aid was refused were usually very discouraged by the rejection.

Many participants asked for further training for themselves or for someone in their organizations. These requests were attached to the interview and signed. Other requests were for general or technical publications.

Frequently the participants used the final interview white sheet to express interest and appreciation that a Survey of their opinions and training experience was being made. One individual said he had been back from training over six years and this was the first occasion anyone had ever contacted him or asked him for a report on his training.

Quite a few participants complained because they had not had any contact or received any help from the Training Office. Several thought the Training Office had been delinquent in not securing for them technical materials, or not delivering more promptly the books and personal papers sent by the trainee (apart from baggage) from the country of training to Bolivia. In such cases the Survey made special efforts to follow up the case and each time found that the Training Office was not at fault. Trainees' papers and

books are dispatched through regular agents and almost without exception there are long delays and occasional losses.

The Survey compiled lists of the requests of the "white sheets". Some of the requests were sent directly to U.S. technicians who might have a possible avenue for complying with the request. Lists of people requesting training for themselves or others were sent to the Training Office and to the division involved. Requests for publications were sent to the United States Information Service (USIS) and to the Bolivian representative of the Regional Technical Aids Center*.

Membership in a U.S. Society and Use of U.S. Publications

Several years ago Washington made available, through payment of fees, membership in United States societies as related to the training and interests of participants. One hundred and fourteen Bolivians, (16 per cent of 701) either through this offer or their own efforts, claimed membership in a U.S. society. Slightly more, 220, received U.S. publications. One hundred and seventy-five said the publications were "somewhat useful" and most frequently said the publications served to "keep them up to date". The 23 who said the publications were "very useful" used them in developing bibliographies for teaching, as background for lectures and articles, and through applying in their work practical ideas and suggestions. It appears that the effort made by the International Training Division in the past to encourage continuance of participant-U.S. professional contacts is not being carried forward effectively. The desire for technical publications, their use in keeping the trainees up to date, and in teaching, exists and points to a field of follow up that has been neglected.

* No word was received, except from USIS, of action taken. USIS placed the names of the trainees on their lists to receive regularly distributed pamphlets, leaflets and books, but was unable to fill requests for special publications.

TABLE 77

Major Field of Activity In Which Training Was Given. by Are You Now A Member Of A U.S. Professional Society? *

	Yes	No	Total
Direct Military Support	2	54	56
Agriculture	19	77	96
Industry & Mining	8	45	53
Transportation	3	50	53
Labor	9	78	87
Health	22	56	78
Education	12	40	52
Public Administration	25	105	130
Comm.Dev.,Social Welfare,Housing	3	8	11
Miscellaneous	11	74	85
Not ascertained	-	-	-
Total	114 (16.2)	587 (83.8)	701 (100.0)

Cards 01:14; 06:25. *No cases coded "not ascertained".

The comments of the trainees quoted earlier concerning the significance of their out-of-country experience and the things that impressed them most should not be disregarded, for they were made in sincerity and signify the presence of a group of Bolivians psychologically receptive of many United States' values. Such a group is not one that can be purchased or propagandized yet they are available and prepared to cooperate in Bolivian-United States projects. These trainees, and probably others, who have visited the United States seem prepared to communicate more fully to their fellow countrymen non-technical as well as technical training acquired learning.

Summary

Although 54.8 per cent of the trainees claimed to have had some contact with USAID or a U.S. technician since return from training, frequent or regular contact has existed for only 46 per cent of the participants. Among the group of trainees who said they had had contact with the Mission, 69.4 per cent were high training utilizers.

Assistance from the Mission was requested by only 16.4 per cent of the

participants (115 cases). Such aid included technical advice, equipment, materials and financial support. The requests were fully granted on 78 occasions; partially given 21 times. Fifty requests were refused primarily because they were not within the scope of U.S. assistance programs.

Requests for further training for the participants themselves or for others were forwarded by the Survey to the respective divisions and the Training Office. The names of participants desiring to receive publications were forwarded to the United States Information Service.

Only 16 per cent of the participants interviewed are members of U.S. professional societies. Those who received U.S. publications (220 trainees) use them to "keep up to date" and in teaching and writing.

The interest and friendship of the participants for the United States expressed in their comments about their training experience, and their appreciation of the opportunity of receiving training, suggests that they constitute a group of people psychologically prepared to collaborate in Bolivian-United States projects.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The purposes of the world-wide training evaluation survey are stated in the Introduction of this report. The conclusions of the Bolivian Survey are presented here as answers to questions raised by the six study objectives.

1. Training Utilization and Transmission

Question: Are the Bolivian participants returning to the jobs for which they were trained, effectively using the training and transmitting it to others?

Answer: A high percentage of the Bolivian participants return immediately after their training to the jobs for which they were trained. Some mobility was found among the trainees, in that about 40 per cent had subsequently shifted from the first job held after training. Over half the participants were still in training related jobs however, and are effectively using their training as evidenced by the fact that 65 per cent had high utilization scores (75 and higher). The degree of transmission of training of the Bolivian participant is unusually high (98 per cent). Almost no unemployment exists among the returned participants of the Survey.

The distribution as to job categories and the number of participants in each category is significant in terms of Bolivia's need for trained manpower. Approximately two-fifths of the returned participants are working in subordinate management, program or administrative jobs, and about one fourth are engineers or professionals. Roughly seven per cent are first and second level policy makers. Almost all of these people work for the Bolivian Government.

The Bolivian participant program is not designed to, and does not, provide a sufficient number of qualified people to fill adequately Bolivia's

actual and potential need for trained manpower. Bolivia, like many other countries in similar stages of development, is short of well prepared professionals (doctors and engineers for example), technicians, leaders, management and administrative specialists. Nor does it appear that the special talents of the Bolivian trainees are being utilized to capacity. Despite the fact that the trainees themselves appear to be making almost every effort to put their training to use, and the fact that they are operating in many important fields of economic endeavor, they are often limited by lack of opportunity, lack of money and equipment, and the need for additional trained people.

The transmission of training, though generally informal, is extensive. It might be of greater value if ways could be found of channelling it into specific activities. A concrete example would be the use of the trainees' teaching capacities in programs of in-country training in special fields, or in general adult education.

It must also be acknowledged that the difficulties encountered in locating the individuals of the Survey sample suggest the need for further study of the total participant universe to determine whether those not selected or contacted by the Survey are in Bolivia and in training-related work. A projection of the Survey sample, taking into consideration the number of individuals of the sample who could not be located or were known to be living abroad at the time of interviewing, indicates that between a fifth and a fourth of all the participants sent for training may not be in Bolivia or using their training directly. However, the size of this percentage becomes less significant if special factors currently present are taken into consideration. These factors include the time lapse during which training has been given (over 20 years, with little or no follow-up), and the unusual historical events represented in the Bolivian revolution of 1952 with its attendant and inevitable political, social, and economic changes.

2. Factors Contributing To Or Hindering Training Utilization

Question: What are the factors contributing to or hindering utilization of training and communication of training acquired skills?

Answer: The factors contributing to or hindering utilization of training are present in the Bolivian participant program in varying degrees.

Among the factors hindering training utilization, the first factor is poor selection of the candidate who is to receive training.

The second factor, and perhaps the most basic, is poor preparation for training and less than excellent training programing.

The third factor is lack of opportunity and the required facilities for training utilization and/or its transmission.

The absence of established standards of selection against which to match trainee qualifications leaves the U.S. Mission without leverage to reject candidates whose selection may be based on political considerations, personal contacts, or other non-competitive or disqualifying factors. Proficiency in the use of English, within the framework of existing procedures, is not given sufficient priority, as essential for training in the United States when interpreter service is not provided.

Although most of the training programs planned for the Bolivian participants are of satisfactory quality, the fact that many were too short and some were not adapted to Bolivian, participant, or job needs, indicates a weakness not only in terms of training but in its utilization. Training programs sometimes appear planned as isolated items within a single division project and not always coordinated with other projects or within the Mission program. There are almost no pre-training plans for training utilization which could be taken into consideration in program planning, particularly with reference to supervisor and/or GOB collaboration. It is left to the U.S. technician and subsequently to the participant to adapt the training to the circumstances

of the work to which the training was supposedly related in the first place. AID/Washington has pointed out the difficulties of providing programs which correspond to Mission and participant requirements, dependent on the information available in the PIO/P, when relatively little additional data is provided through the Training or other Mission offices. Thus it must be concluded that preliminary planning is insufficiently extensive and intensive to result in programing of maximum effectiveness.

There are too few specific plans for post training utilization. Admittedly, there are limits on how far the Mission, a participant, or his supervisor can go, in delineating definite steps as to how the training is to be applied; or foreseeing obstacles that may arise when the participant returns to his work. Nevertheless, inadequate advance planning for training utilization and failure to verify that the training is being used (whether or not as planned) and to offer whatever support is feasible to expedite training utilization,are significant impediments to training application.

There are many positive factors which account for the high degree of training utilization in Bolivia.

The high calibre of the Bolivian participant and the conscientious and efficient efforts of the U.S. technicians have considerably facilitated training utilization. Most of the Bolivian participants (judged on the information available to the Survey), whether or not "selected" according to established standards, are well educated, experienced, dedicated individuals who appreciate the opportunity for further specialization which is given through training. Almost without exception the trainees are sincere in wishing to do their jobs well and to accelerate Bolivian progress.

Program-related factors found to exist in the Bolivian participant program and which contribute to good training utilization are: completeness of

program prior to training; sufficient attention to the participant himself and his technical and non-technical problems during training; and specificness of the training program. However, since two-thirds of the trainees complained that their programs were too short it is logical to assume that more attention should be paid to allowing sufficient time for the training, and that probably program length generally should be extended.

The U.S. technician who has played an important role in the participant program should be given the credit for much of its success. The technician usually envisages the part training will play in his own projects and is aware of country needs and the ways in which they may be met, in whole or in part, through training. Insofar as he is able to assist in participant selection and to collaborate in pre-training programing and post-training utilization, the U.S. technician performs an indispensable service for the participant program.

Survey findings show that almost without exception the assurance of a job to which the participant can return, and in which he can apply his training is the best guarantee of training utilization.

The participants who received support from their supervisors, other trained personnel, and U.S. officials, were best able to put their training into practice. Undoubtedly, additional support from GOB officials would increase training utilization.

3. Quality of the Training

Question: Is the training at an appropriate level, of good quality and relevant to the needs of the participant and his country?

Answer: The training programs of the Bolivian participants are of an appropriate level according to the testimony of more than two-thirds of the participants. The quality of the training is high judged by the extent of satisfaction of the participants, supervisors and technicians. There is,

however, sufficient lack of relevancy of some training programs as to warrant greater efforts for developing procedures that will result in programs more pertinent to participant and host country requirements.

4. Adequacy of Non-Technical Program Factors

Question: Are the non-technical aspects of the program (orientation, extra-curricular activities) being carried out adequately?

Answer: Evidence strongly supports the adequacy of non-technical program factors. Participants liked the orientation they received and enjoyed their extra-curricular activities. However, both orientation and extra-curricular activities could profitably be sharpened up and extended. Facilities for orientation before departure for training and in third countries are still too limited. The participants need more help in making the adjustments of daily living so that they will be freer to devote their energies and attention to their training programs. In many cases, although training itself can be intensified (as per the trainees' own requests), the technical aspects of the program might be better balanced with a few more social, cultural, and sporting events.

5. Weaknesses in Administrative Practices and Procedures

Question: What are the weaknesses in administrative practices and procedures?

Answer: On the whole the participant program, both in Bolivia, Washington and elsewhere (third countries) is well administered. This is particularly notable since training is often a step-child in foreign aid despite the number of people and the amount of money involved in the program.

Improvements of communications at all levels would be a first step in correcting such weaknesses as exist. Maintenance of up-to-date records on training at the country level and the availability of these records to incoming technicians would not only improve the entire training operation but

would provide a continuity of contact for extended training utilization. Providing AID/Washington with as much information as possible, in addition to the data of the PIO/P, would assist the International Training Division and the backstopping agencies in their programing activities, and facilitate adapting individual programs to participant and country needs.

Insofar as Bolivia is concerned, the limitations of the Training Office, the lack of coordination between the divisions in programing training, and th absence of systematic follow-up weaken the effectiveness of the participant program.

6. Other Aspects of Training

Question: Are there other aspects of the planning and management of participant training, such as the relative merits of U.S. vs. third-country training, the relevance of the participant's age to his success etc. that might be strengthened or changed for the improvement of the participant program?

Answer: The information collected by the Bolivian Survey did not reveal any positive or negative special areas of significance other than those already mentioned. For example, the Bolivians did not consider third country training less desirable than U.S. training provided the program itself met the training needs. The fact that many Bolivian participants are young-middle-age, and that the record of training utilization is high suggests that this may be an optimum age for training. Moreover, the position-level-distribution of the Bolivian participants appears to be good in relation to present Bolivian requirements.

General Conclusions Related to the Participant Program in Bolivia

Based on the extensive information collected by the Training Evaluation Survey, the participant program in Bolivia is a good program. It is making a positive contribution to Bolivian development and is a constructive element in United States' assistance efforts. However, there is much that could be

done to improve the participant program to render it more valuable for USAID/1 and Bolivia.

Training has low priority in the Mission program. Although 11 per cent of the total Mission expenditures for technical assistance are for training, this figure is low in relation to overall program costs. Granted that the circumstances of the USAID Program in Bolivia differ from those of many other countries, it still must be concluded that the role of training in economic development has received almost no consistent attention in Bolivia.

Earlier it was mentioned that quite a few Bolivian trainees could not be located and that some had emmigrated. This fact is often used as an argument against further training and may be the basis of a rather widely circulated assumption that training is "not worth while". Actually according to a recent study on problems of manpower planning it was pointed out that "the Bolivian labor market is unable to absorb the relatively few professiona technical, and craft persons who are trained domestically and abroad", and that many of these people are forced to migrate, with the result that Bolivia may be "at the present time a net exporter of skilled manpower".*

The same report also pointed out that Bolivia has neglected to articulat a manpower policy in connection with its plans for economic and social develo ment. This is undoubtedly one explanation of the fact that some trainees are no longer in Bolivia using their training for the benefit of their home count

The lack of consistent support or follow-up of returned trainees by either USAID or the Government of Bolivia has been mentioned several times. This, coupled with lack of a manpower policy, tends to nullify the positive

* Sanford Cohen, "Assessment of the Employment Situation and Problems of Manpower Planning", Report to the Secretaría Nacional de Planificacion y Coordinacion, Bolivia. July, 1964.

effects of a good training program. Almost no information is available as to what skilled manpower is available in the labor market or how and to what degree it can be capacitated at present or in the future.

There is no question but that Bolivia must have trained manpower for its economic development. The data collected by the Training Survey relative to a small segment of Bolivian manpower might profitably be used in evaluating the larger situation. The Bolivian participants who are prepared, because they are working, and are ready to make an increasing contribution to Bolivian development, might serve as a nucleus for future Mission and Government of Bolivia manpower planning.

Recommendations

The recommendations flow from the conclusions and some of the most basic recommendations have already been implied or stated. The attempt here is to set them forth as succinctly as possible. Some of the recommendations may involve action beyond that which is feasible at present. However, it is hoped that they may serve as a guide for future development of training.

Pre-Training Procedures

Selection. The existing committee on selection should be enlarged to include permanent and ad hoc members. The permanent members should represent the program and training offices, plus possibly a representative of the Centro Boliviano-Americano. The ad hoc members should be the U.S. technicians involved in the field of specialization of the trainees whose qualifications are under review, plus at least one representative of the Government of Bolivia,and/or the agency interested in the training.

A set of minimum standards on selection should be established which will serve as guidelines. These may have flexibility, depending on the case.

Consideration should be given to: the amount of time in the field of specialization of the candidate; an established job related to the training; and an adequate English grade score if use of this language is a training requirement.

Participation in Program Planning. Extensive information regarding the job and training needs must be collected and stated for the benefit of the Mission and the backstopping agencies. The concepts of the supervisor and trainee are as important as the statement which is formulated by the U.S. technician and Training Office for use in the PIO/P.

When programs are standardized, as they frequently are, the trainee and his supervisor should be consulted to see if there are feasible modifications which will "personalize" the program. It is assumed that the U.S. technician will continue to play an important role in program planning and selection. Inclusion of the trainee and supervisor in program preparations should not in any way diminish the contribution of the technician.

Pre-Training Plans for Training Utilization. Plans for training utilization should be outlined in as much detail as possible at the time the program is being planned. Here the role of the trainee and his supervisor can be especially strategic for they are aware of the potentialities and limitations of putting the training into practice. At this point too it would be helpful to include a GOB official who would thereby have complete knowledge of the training and be committed, at least psychologically, to training utilization. It is recognized that contracts and guarantees for utilization are generally not legally valid documents. Nevertheless, the Mission might assume some responsibility in helping the trainee have a job where he can fulfill the obligations he assumed before undertaking training.

Pre-Training Information. Although the Bolivian trainees appear to be quite well informed about their programs, orientation information could be

extended as per the country of training. The participant might also be given information about Bolivia, and his particular fields of interest in order that he may have something to contribute to those he meets abroad.

English Language Training. The entire English language program could be firmed up. The lack of adequate records should be remedied. Facilities should be extended to aid both the Training Office and the Centro Boliviano Americano for better coordination. These might include, additional personnel to keep records, or further implementation of the role of the Centro in pre-departure orientation, and post-training follow-up in helping keep in touch with returned participants.

The Training Period

The Program. Programs should be fitted as specifically as possible to trainee, job, and country requirements. The greater the detail of information to Washington on program needs, the easier it is for ITD to provide "custom" programs.

In general, training should be longer.

Whenever possible the trainee should be permitted to secure a degree if he follows a full academic program.

Observation type programs should be combined with some type of experience that will solidify and particularize what the participant observes.

The country of training is less important than a well planned program. However, training in Puerto Rico and third countries should be more fully related to training requirements and should be better organized and administered.

In-Country Training facilities should be explored and in some cases (as when there are no special technological requirements) should be set up in Bolivia. This would extend training facilities for Bolivians and might even

provide opportunities for others to come here.

Non-Technical Aspects. Orientation in the country of training should be more specialized and should be extended, especially in third countries. The type of attention given by the project managers should be provided whenever possible.

More extra-curricular activities should be included in most programs although this should still be limited since the objective of the visit is learning and not sight-seeing or recreation. If at all possible, all participants should be entertained in private homes, and perhaps should have the opportunity to choose whether or not to assist at some sporting or cultural events.

Special funds might be made available to trainees when extra costs are involved. Since the United States already pays generously for training, these funds should come from the participant's home country and might be made available on a "status" basis, particularly for top level participants. Frequently it is difficult to have even the trainee's salary paid while he is away so perhaps there is little hope of getting "extra" funds.

The more ways in which the participant's country can be involved in the training the greater may be the appreciation of the value of the training.

Too few Bolivian participants attended the communications seminar or used its materials to recommend that all attend. However, if trainees do not attend such a seminar, a comparable activity should be provided after the trainee's return home. This will help round out the training experience and assist the trainee in developing ways and means of training transmission. To some degree this has been done for Agriculture Extension trainees by the Communications Media Division (formerly the Audio-Visual Center). The aid has been welcome and effective.

Post Training

Follow-Up is essential. The trainee should be in contact with the U.S. technician and the Training Office immediately on his return from training and at regular intervals thereafter of no less than six months. The trainee's final report should be more than a perfunctory document which may or may not be seen by his supervisor or the U.S. technician. A personal conference involving all interested parties on what the trainee learned and how he means to apply it would extend the information about the range of application and of the training.

The Training Office and the technician should maintain systematic and complete records on all participants so that this information may be available to incoming technicians and to the GOB. This should facilitate advantageous trainee placement and maximum training utilization.

A follow-up committee similar to the selection committee might be a channel for organizing and coordinating trainee activities. For example, the services of the trainees could be utilized to assist in orientation and in-country training.

Trainees should be given the opportunity of joining a participant association and/or a U.S. professional society. Possibly associations built around the professional interest of the trainee might prove more successful than a single general association which thus far in Bolivia has received scant support.

A Directory of former participants would be of use both in providing up-to-date records of addresses and fields of training for manpower statistics.

The role which training might play in a manpower program should be investigated if only to make the fullest use of people who are already trained.

Few, if any, of the foregoing recommendations can be implemented with the existing facilities.

Although training is a long range investment it will pay immediate dividends if the seed capital it represents is carefully exploited.

APPENDIX A

Tables Supplementary to and Supporting Data of the Text of the Report

Arranged According to Chapters

TABLE a-1

Major Field Of Activity In Which Training Was Given (Card 01, Col. 14)

Economic Activity In Which Participant Was Employed At Time Of Interview (Card 01, Cols. 36-38)	Direct Military Support (0)	Agriculture (1)	Industry & Mining (2)	Transportation (3)	Labor (4)	Health (5)	Education (6)	Welf., Housing Public Administration (7)	Com. Devel., Social (8)	Miscellaneous (9)	Not ascertained (X)	Total
Agriculture, forestries, and fisheries (X01 - X09)	-	50	1	1	2	-	-	3	-	-	-	57
Mining and quarrying (X11 - X19)	-	-	3	-	12	-	-	2	-	-	-	17
Manufacturing, maintenance and repair (X21 - X39)	8	4	17	9	6	-	4	-	-	3	-	51
Engineering and construction (X41 - X49)	1	-	2	22	-	2	1	1	-	1	-	30
Electricity, water, gas, and sanitary services (X51 - X59)	1	-	-	-	1	3	-	-	-	-	-	5
Transport, storage, and communications serv. (X61 - X 69)	3	2	2	10	14	1	-	4	-	4	-	40
Commerce, banking, and insurance (X71 - X79)	-	28	9	3	13	-	-	6	-	2	-	61
Educational services (X83 - X86)	1	3	1	1	9	3	44	4	1	3	-	70
Medical services (X87 - X88)	-	-	1	-	2	59	-	-	2	1	-	65
Community Devel., social welfare, housing (X90, X91, 100)	-	1	-	1	5	4	1	5	8	1	-	26
Other (gov't. and non-gov't.) (X81, X82, X89, X92-X99, 101-106)	41	7	14	6	20	6	1	103	-	69	-	267
Inactive (Y)	1	1	3	-	3	-	1	2	-	-	-	11
Not ascertained (0)	-	-	-	..	-	-	-	-	-	1	-	1
Total	56	96	53	53	87	78	52	130	11	85	-	701

TABLE a-2

Summary of Participants Trained by Sponsor and Fiscal Year

Fiscal Year	Agriculture	Civil Aviation	Education	IAGS	Health	Industry & Mining *	Labor	Public Admin. **	Public Safety	Roads	U.S. Army	Miscellaneous ***
1943	-	-	1	-	1	-	-	-	-	-	-	
1944	-	-	-	-	3	-	-	-	-	-	-	
1945	-	-	3	-	6	-	-	-	-	-	-	
1946	-	-	2	-	13	-	-	-	-	-	-	
1947	-	-	2	-	10	-	1	-	-	-	-	
1948	-	-	1	-	5	-	1	-	-	-	-	
1949	-	1	-	-	4	-	1	-	-	-	-	
1950	-	6	2	-	5	-	-	-	-	-	-	
1951	-	-	2	-	7	4	-	-	-	-	-	
1952	-	2	6	-	9	-	-	-	-	-	-	
1953	15	8	17	7	7	-	-	-	-	-	-	
1954	7	-	10	10	11	-	8	1	-	-	-	
1955	18	7	17	3	16	5	18	18	-	4	-	
1956	33	15	32	5	23	3	22	4	-	7	-	
1957	26	5	16	13	30	3	22	11	22	8	29	
1958	25	4	13	8	18	6	8	14	39	11	85	
1959	21	1	8	-	-	10	4	6	28	2	38	
1960	1	2	10	-	2	2	-	11	10	4	15	
1961	13	-	2	-	13	11	-	8	10	1	-	
1962	50	4	-	44	12	11	77	15	11	17	-	
1963	40	-	9	20	16	19	114	9	37	3	-	
TOTAL	249	55	152	110	211	74	276	97	157	57	167	

* 29 cases of Industry and Mining were Mineral Survey
** 10 cases the University of Tennessee contract
*** Miscellaneous includes: Audio Visual, Mission and Technical Support.

Source of information: USAID/Bolivia Training Office.

Major Field of Activity In Which Training Was Given	by Sex					
	Male	Per Cent	Female	Per Cent	Total	Per Cent
Direct Military Support	56		-		56	
Agriculture	90		6		96	
Industry & Mining	53		-		53	
Transportation	53		-		53	
Labor	82		5		87	
Health	59		19		78	
Education	47		5		52	
Public Administration	127		3		130	
Comm. Dev., Social Welfare, Housing	6		5		11	
Miscellaneous	71		14		85	
TOTAL	644	91.86	57	8.14	701	100.0

Card 01:14.56

TABLE a-4

Marital Status of the Bolivian Participant

Status	No. of Participants	Per Cent
Married	573	82.0
Not married	128	18.0
	701	100.0

Card 01:59.

TABLE a-5

Major Field of Activity In Which Training Was Given (Card 01, Col. 14)

Age In Years At Time Of Departure For Training (Card 01, Col. 55)	Direct Military Support (0)	Agriculture (1)	Industry & Mining (2)	Transportation (3)	Labor (4)	Health (5)	Education (6)	Public Administration (7)	Com. Devel., Welfare Housing (8)	Social Miscellaneous (9)	Not ascertained (X)	Total	%
Under 25 years (1)	17	3	1	4	10	4	5	7	2	19	-	72	10.3
25 - 29 years (2)	9	25	14	19	19	19	20	36	6	21	-	188	26.8
30 - 34 years (3)	10	21	12	15	17	16	9	35	1	24	-	160	22.8
35 - 39 years (4)	9	23	11	4	22	15	9	20	-	15	-	128	18.3
40 - 44 years (5)	3	10	8	6	13	7	5	12	1	4	-	69	9.8
45 - 49 years (6)	5	10	3	1	6	10	1	14	1	2	-	53	7.6
50 - 55 years (7)	3	2	4	3	-	3	3	4	-	-	-	22	3.1
55 years and older (8)	-	2	-	1	-	4	-	2	-	-	-	9	1.3
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-	-	
Total	56	96	53	53	87	78	52	130	11	85	-	701	100.0
%	7.9	13.7	7.6	7.6	12.4	11.1	7.4	18.5	1.6	12.2			

TABLE a-6

Level Of Position At Time Of Selection (Card 01, Col. 44)	Age In Years At Time Of Departure For Training (Card 01, Col. 55)									
	Under 25 (1)	25 - 29 (2)	30 - 34 (3)	35 - 39 (4)	40 - 44 (5)	45 - 49 (6)	50 - 54 (7)	55 and older (8)	Not ascertained (0)	Total
Top policy makers - National level and/or national impact (1)	-	-	-	1	1	1	3	-	-	6
Policy makers - Second level and/or non-national impact (2)	-	1	2	4	1	6	3	-	-	17
Subordinate management - Line or staff (3)	14	65	77	56	37	25	11	4	-	289
Engineers (4)	-	6	13	7	2	2	1	-	-	31
Professional occupations (5)	10	34	28	26	14	7	1	5	-	125
Sub-professional occupations (6)	22	38	20	18	7	2	2	-	-	109
Supervisors, inspectors, foremen (7)	2	14	8	7	3	5	1	-	-	40
Artisans, craftsmen (8)	14	18	6	6	3	1	-	-	-	48
Occupations not elsewhere classified (9)	9	11	6	3	1	4	-	-	-	34
Inactive (Y)	1	1	-	-	-	-	-	-	-	2
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-
Total	72	188	160	128	69	53	22	9	-	701

TABLE a-7

Age In Years At Time Of Departure For Training (Card 01, Col. 55)

Total Years Of Education At Time Of Selection (Card 01, Cols. 57-58)	Under 25 (1)	25 - 29 (2)	30 - 34 (3)	35 - 39 (4)	40 - 44 (5)	45 - 49 (6)	50 - 54 (7)	55 and older (8)	Not ascertained (0)		Total	
17 or more years (17, 18, etc.)	10	48	59	47	29	17	10	7			227	32.2
13 - 16 years (13, 14, 15, 16)	15	65	51	28	11	12	8	1			191	27.2
9 - 12 years (09, 10, 11, 12)	38	58	40	47	25	18	4	1			231	33.1
5 - 8 years (05, 06, 07, 08)	9	16	9	6	3	5	-	-			48	6.9
1 - 4 years (01, 02, 03, 04)	-	-	1	-	1	-	-	-			2	0.3
No formal education (XX)	-	-	-	-	-	-	-	-			-	
Not ascertained (00)	-	1	-	-	-	1	-	-			2	0.3
Total	72	188	160	128	69	53	22	9			701	100.0
%	10.3	26.8	22.8	18.2	9.8	7.5	3.1	1.4				

TABLE a-8

Education Prior to Training

	No.of Participants	Per Cent
Attended University and Received a Degree		
Below bachelor level	6	1.0
Bachelor level	48	7.0
Master's level	93	13.0
Doctorate level	3	0.4
All law degrees	32	5.0
All degrees in dentistry	44	6.0
Doctor of veterinary medicine	2	0.2
All medical degrees	3	0.4
	231	33.0
Attended university but did not receive a degree	104	15.0
Did not attend university	366	52.0
	701	100.0
Attended a Special School and Type of School		
Military School	61	9.0
Agriculture School	11	1.5
Engineering School	25	4.0
Industrial School	64	9.0
Schools in Public Health	23	3.2
Nursing Schools	10	1.4
Normal Schools	54	8.0
Public Safety Schools	36	5.1
Business and Commerical Schools	48	10.5
Schools teaching Public Administration	15	
Secretarial Schools	11	
Mass communication	5	0.7
Schools in Community Development	9	1.2
Special Language Schools	15	2.1
All other types of special schools	8	1.1
Not ascertained	2	0.2
Did not attend a special school	304	43.0
	701	100.0

Card 01:63,70,71,60,62.

TABLE a-9

Occupational Category*
According to Coding Classification

	No. of Participants**
Top Policy Makers, Executives and Administrators National Level and/or National Impact	
Cabinet ministers, agency heads, commission members, chief secretaries.	2
National legislators, high court jurists	-
Presidents, vice presidents, deans - leading universitie	1
Presidents, directors, executive secretaries - national non-profit institutions	2
Presidents, directors, executive secretaries - national impact, profit making enterprises and farm, business and trade organizations	2
Presidents, vice presidents, executive secretaries - national labor federations and nationally significant trade unions	2
Other top policy makers, executives and administrators national level and/or national impact, not elsewhere classified	5
	14
Policy Makers, Executives and Administrators - Second Level and/or Non-National Impact	
Regional or local legislators, provincial governors, mayors, jurists, (other than high court), other elected officials	-
National agency deputies or assistant directors, bureau chiefs, program directors and deputies	12
Regional or local government agency directors and deputy directors	1
Presidents, vice presidents, deans - colleges, technical institutes, district superintendents of education	2
Presidents, directors, executive secretaries and chief operations officers - local or non-profit enterprises, farm and business associations	11
Presidents, vice presidents, executive secretaries - regional trade union councils and local unions	1

Table continued on following page...

	No.of Participants
Other policy makers, executives and administrative officials second level and/or non-national impact	7
TOTAL	234
Subordinate Management, Program and Administrative Officials - Line or Staff	
Program or project superintendents, production managers, program division chiefs, field office directors, chief inspectors, deputies to foregoing	91
Staff planners and management analysts	1
Personnel and welfare officers, finance (budget, fiscal, accounting and audit) officers, procurement, property and supply officers, legal officers, administrative officers	41
Executive assistants, technical advisors (non-scientific or engineering) marketing specialists, public relations and press officers	23
School principals, inspectors of education, hospital and clinic administrators, subordinate public safety officials, etc.	85
Union organizers, other subordinate local union official	8
Other subordinate line and staff management, program and administrative officials	60
TOTAL	309
Engineers, Professional-Operating and Research and Development	
Civil engineers	15
Chemical engineers	-
Electrical and electronic engineers	1
Mechanical engineers	-
Metallurgical engineers	2
Mining engineers	--
Agricultural engineers and	-
Engineers, Other	8
TOTAL	26
Professional Occupations-Operating and Research and Development	
Agricultural scientists	11
Biological and life scientists	3
Medical scientists	19

Table continued on following page..

	No.of Participants
Economists	2
Social scientists, except economists	20
Physical scientists	-
Teachers, university level, sciences other than social sciences	8
Teachers, university level, social science and other	5
Teachers, not elsewhere classified	36
Other professional occupations	9
TOTAL	113

Sub-Professional Occupations-Operating and Research and Development

Engineering aides	18
Surveyors	-
Draftsmen	4
Laboratory testers	3
Laboratory assistants	1
Research assistants	1
Technical aides	18
Nurses	6
Medical and public health technicians and other sub-professional occupations	28
TOTAL	79

Supervisors, Inspectors, Foremen-Operations or Shop

Occupations concerned primarily with carrying out program or production objectives by laying out, supervising, directing, instructing, checking and inspecting the product or output of clerical, manual or service workers engaged in staff, service, sales, production, construction or maintenance activities. Examples: supervisor-office, supervisor-shop, supervisor-sales, foreman-shop, foreman-gang, charge hand, inspector, etc.

Artisans, Craftsmen

Occupations concerned primarily with carrying out manual activities which require the possession of acquired skills or techniques and/or the effective use of hand or mechanical tools or equipment as a result of a fairly long learning period. Examples: skilled textile and apparel workers, handicraftsmen, woodworking and metal working craftsmen, building and construction craftsmen, food processing operators, printing and bookbinding operators, electricians, auto and diesel mechanics, etc.

Table continued on following page.

	No. of Participants
Occupations not Elsewhere Classified	
Clerical workers	12
Unskilled workers	5
Students. (Only those participants not designated for a specific position upon return home).	12
Other	12
TOTAL	31

*Distribution of cases is shown for time of interview only.
** 10 cases inactive and 1 case not ascertained. Grand total 701

TABLE a-10

Total Time in Field of Specialization at Time of Selection

Total Time	No. of Participants	Per Cent
None	5	1.0
Less than 1 year	24	3.0
1 to 2 years	62	9.0
2 to 5 years	134	19.0
5 to 10 years	212	30.0
10 years or more	259	37.0
Not ascertained	5	1.0
Total	701	100.0

Card 01:43

TABLE a-11

Number of People Supervised in Position Held and Work Done at the Time of Selection for Training

Number of People	No. of Participants	Per Cent
None	181	26.0
One to five	142	20.0
Six to nineteen	174	25.0
Twenty to forty-nine	111	16.0
Fifty to one hundred and ninety-nine	63	9.0
Two hundred to four hundred and ninety-nine	15	2.0
Five hundred to nine hundred and ninety-nine	7	1.0
One thousand or more	5	0.7
Not ascertained	3	0.3
	701	100.0

Card 01:51

Chapter IV

TABLE a-12

Participation in Program Planning

	No.of Participants	Per Cent
Did You Have the Opportunity to Take Part in the Planning of Your Program?		
Yes	195	27.8
No	505	72.0
Don't know or don't remember	1	0.2
Total	701	100.0
Was Your Program Based Mainly On Your Ideas or the Ideas of Others?		
My ideas	68	9.7
Those of others	30	4.3
Both equally	97	13.8
Not applicable (did not participate in program planning)	506	72.2
Total	701	100.0
Did You Take Part in the Planning of Your Program to the Extent You Wanted?		
Yes	164	23.4
No	31	4.4
Not ascertained	-	-
Not applicable	506	72.2
Total	701	100.0
Do You Think It Would Have Helped Your Program If You Had Participated in the Planning		
Yes	456	90.1
No	39	7.7
Didn't care, don't know, or don't remember	8	1.6
Not ascertained	3	0.6
Total*	506	100.0

Card 02:37-40

*Corresponds to inapplicable cases.

Do You Think He (The Person Who Discussed Your Program With You) Gave Enough Attention or Guidance to You During the Course of the Program, or Not?
(Card 03, Col 55)

Where Did the Official Who Managed Your Program Work?
(Card 03, Col 56)

	Received enough attention (1)	Did not receive enough attention (2)	Don't know or don't remember (9)	Not ascertained (0)	Not applicable (Y)	Total	
At ICA (1)	242	18	-	-	2	262	37.4
At a government agency other than ICA (2)	176	5	-	-	-	181	25.8
At a university (3)	44	3	-	-	-	47	6.7
At a private organization (4)	9	-	-	-	-	9	1.3
At a Union (5)	2	-	-	-	-	2	0.3
All other organizations not included in the above categories (8)	5	2	-	-	7	14	1.9
Don't know or don't remember (9)	-	-	-	-	7	7	0.9
Not applicable (Y)	13	1	-	-	165	179	25.7
Not ascertained (0)	-	-	-	-	-	-	
Total	491	29	-	-	181	701	100.0
%	70.0	4.1			25.9		

TABLE a-13

TABLE a-14

When Your Program Was Being Planned Did Anyone At Your Place of Employment Or School Give You Information About It?

	No. of Participants	Per Cent
Did you receive information?		
Yes	438	62.4
No	263	37.6
Total	701	100.0
Who gave you the information?		
Supervisor	240	
Colleague or friend	4	
ICA/USOM personnel	135	
Former participant	-	
Special board	7	
Ministry or other home gov. official	17	
Labor union or trade assn. official	11	
University official, professor	1	
Employer - if not represented above	11	
Other organization or person not above	26	
Don't know, don't remember	8	
	460*	

Card 02:21-25

*Total exceeds 438 because some participants received info. from more than one source.

TABLE a-15

Advance Information on Program

	No. of Participants	Per Cent
Did you find out all you needed to know about what you would be learning?		
Yes	422	60.0
No	279	40.0
Total	701	100.0
What information didn't you get about what you would be learning that would have been useful?		
Should have had more information about training program	122	
Needed to know more about subjects, the type of work I would do or the things I would see on my program	145	
Needed to know more about university requirements, procedures, etc.	20	
Needed more information on the level of training program	17	
Needed information on how to apply my training on return	4	
Needed background information about my field of work as it is carried on in the country of training	14	
Information was not timely, received too late	14	
Other (concepts not covered above)	7	
Don't know or don't remember	-	
Not applicable	422	

Table continued on following page...

	No. of Participants	Per Cent
Did you get enough information about where you would be going?		
Yes	522	74.5
No	179	25.5
Total	701	100.0
What information didn't you get about where you would be going?that would have been useful?		
Needed to know details about where I would be going, universities or schools I would attend, plants, factories I would visit	126	
Needed background information about the universities, plants, factories, etc. I would see, their size, complexity, etc.	29	
Information was not timely, received too late	19	
Other (concepts or items not covered above)	25	
Don't know or don't remember	1	
Not applicable	522	
Did you get enough information about when you would be going?		
Yes	618	88.0
No	83	12.0
Total	701	100.0
What information didn't you get about when you would be going that would have been useful?		
Information on departure data too uncertain	26	
Needed to know about red tape, security, passports, visas, customs, medical examination, etc.	2	
Information not timely, received too late to prepare for proper departure	57	
Other not included above	1	
Inapplicable	618	
Did you get enough information about the length of the program before you left?		
Yes	655	94.0
No	46	6.0
Total	701	100.0
What information would have been useful in regards to the length of the program?		
Needed to know total length of program	23	
Needed to know length of time in each place	17	
Information not timely, received too late	5	
Other	2	
Inapplicable	655	

Table continued on following page...

	No. of Participants	Per Cent
Did you get enough information on any other aspects of the program that was being planned for you?		
Yes	511	73.0
No	190	27.0
Total	701	100.0

What information on other aspects didn't you get that would have been useful?	
Needed more specific information (all general non-specific statements)	94
Information on administrative details of program travel (financial arrangements, mailing address, etc.)	21
Information on subject matter aspects of training, language difficulty, type of associations to be made, group relations	52
Information about manners and customs in country of training	8
Information not timely, received too late to prepare properly for journey	5
Other, not included above	28
Don't know, or don't remember	3
Not ascertained	3

Card 02:46-65

TABLE a-16*

In Addition to Information About the Program, Did You Get Enough Information About How to Get Along in the Country of Training? For example: a. How to use restaurants and public facilities? b. Colloquial speech and idioms? c. Religious practices? d. Use of their money? e. Manners and customs generally?	Did the Ministry That Sponsored You Give You Any Information About the Program Being Planned for You? Yes	No	Ministry was Employer	Don't know Don't remember	Total
Participant answered:					
All 5 "no"	2	42	-	-	44
1 question "yes"	7	25	-	-	32
2 questions "yes"	6	33	-	1	40
3 questions "yes"	4	54	-	-	58
4 questions "yes"	7	73	1	-	81
All 5 "yes"	38	405	1	2	446
Total	64	632	2	3	701

Cards 03:34; 02:29

*No answers coded "Not ascertained".

TABLE a-17

Advance Information on Non-Technical Aspects of the Program

	No. of Participants	
Did you get enough information on how to use restaurants and public facilities?		
Yes	529	76.0
No	172	24.0
Total	701	100.0
If you did not get enough information about restaurants and public facilities, what information would have been useful?		
Location and use of restaurants; how to find, opening, closing hours, how to read menus, etc.	74	
Types of food available, dietary habits in country of training, availability of food I am used to.	34	
Information on tipping: how much to tip, to whom, when to tip	22	
Information on means of transportation, how to use buses, taxis, rail transit, information on fares, reservations	85	
Information on housing arrangements: hotel, motel, accommodation, on how to find housing, suitable inexpensive lodgings	44	
Information on etiquette, how to conduct one's self in restaurants, hotels, while travelling	6	
Information on cost of living, money arrangements, prices of food, lodging.	26	
Other (not included above)	26	
Did you receive enough information on colloquial speech and idioms?		
Yes	544	78.0
No	156	22.0
Not ascertained	1	
Total	701	100.0
What information should you have had regarding colloquial speech and idioms?		
Should have had more information, did not get enough, was not told much.	60	
Should have had training, or more training in language of country	21	
Needed to know more about phrases, words, idioms, commonly used in restaurants, or public eating places	34	
Needed to know more about phrases, words, idioms commonly used in travelling within country of training, while using taxis, buses, asking directions	48	

Table continued on following page.

	No. of Participants	
Needed more information about number and kind of languages which are actually spoken in country of training, information on re: dialects, patois, slang, argot.	31	
Other	11	
Not ascertained	3	
Did you get enough information on religious practices?		
Yes	590	84.0
No	110	16.0
Not ascertained	1	
Total	701	100.0
What information on religious practices didn't you get that you needed?		
Should have had more information, did not get enough, was not told much (general, non-specific)	32	
Needed more information on location of places of worship of my religion, how would locate church, mosque, temple	35	
Role of religion in life of country of training, its importance, number of worshipers, etc.	17	
Number and kinds of religions (denominations, sects, etc.) in country of training, rituals and practices of various kinds, holydays, etc.	24	
How to behave, accepted roles of conduct while in places of worship	2	
Other, not included above	13	
Not ascertained	3	
Not applicable	59	
Did you get enough information on the use of money?		
Yes	603	86.0
No	98	14.0
Total	701	100.0
If not, what information on the use of money did you need?		
Should have had more information, was not told enough (all general, non-specific)	27	
Needed information on what money looks like, denominations of currency, names of coins, sizes, relative value	31	
Needed information on exchange rates, equivalents of money in country of training to money in my own country, etc.	39	
Other, not included above	6	
Not applicable	603	
Did you get information regarding manners and customs generally?		
Yes	574	82.0
No	127	18.0
Total	701	100.0

Table continued on following page...

Type of information lacking on manners and customs	No. of Participants
Should have had more information, did not get enough (all general, non-specific)	61
Needed information about behavior of people in country of training, what to expect from them, how they react to foreigners, etc.	37
Needed information on university system, academic institutions, rules/procedures, how they test students, what guidance is available, etc.	4
Needed information on discriminatory attitude towards various races, minority groups	4
Needed information on what to do when you are a guest, how to conduct yourself in your host's home, customs related to hospitality, how to return hospitality, etc.	8
Needed information on etiquette in general, rules of conduct, behavior	7
Other	25
Not applicable	574

Card 03:14-34

TABLE a-18*

Is There Anything Else You Would Have Liked to Know More About Before You Left?

	No. of Replies
Content of program	195
Background information about the program	72
Scheduling of program	77
Future application of training	5
Restaurants and food	16
Transportation	20
Housing	8
Languages	56
Etiquette	15
Customs and conditions in country of training	209
Miscellaneous	13
Comments relating to way in which information was received	39

Card 03:35-40

*Each of the factors of this table included several specific categories which were very similar to those listed in detail in Table a-17. Therefore only the totals as per replies are given.

Before You Left Home, Did You Get Enough Information About the Program?

a. What you would be learning?
b. Where you would be going?
c. When you would be going?
d. Length of the program?
e. Other aspects of the program?
(Card 02, Col. 66)

Total Years of Education at Time of Selection (Card 01, Cols. 57-58)	No questions "Yes" All 5 "No" (0)	One question "Yes" (1)	Two questions "Yes" (2)	Three questions "Yes" (3)	Four questions "Yes" (4)	All 5 questions "Yes" (5)	All 5 questions Not ascertained (X)	Total
17 or more years (17, 18, 19, etc.)	1	9	29	35	45	108	-	227
13 - 16 years (13, 14, 15, 16)	1	7	18	35	45	85	-	191
9 - 12 years (09, 10, 11, 12)	2	5	26	49	50	99	-	231
5 - 8 years (05, 06, 07, 08)	2	1	7	11	11	16	-	48
1 - 4 years (01, 02, 03, 04)	-	-	1	-	1	-	-	2
No formal education (XX)	-	-	-	-	-	-	-	-
Not ascertained (00)	-	-	-	1	-	1	-	2
Total	6	22	81	131	152	309	-	701

TABLE A-20

In Addition to Information About the Program, Did You Get Enough Information About How to Get Along in the Country of Training?
a. How to use restaurants and public facilities?
b. Colloquial speech and idioms?
c. Religious practices?
d. Use of their money?
e. Manners and customs generally?
(Card 03, Col. 34)

Total Years of Education at Time of Selection (Card 01, Cols. 57-58)	No questions "Yes" All 5 "No" (0)	One question "Yes" (1)	Two questions "Yes" (2)	Three questions "Yes" (3)	Four questions "Yes" (4)	All 5 questions "Yes" (5)	Not ascertained (X)	Total
17 or more years (17, 18, 19, etc.)	9	10	16	10	21	161	-	227
13 - 16 years (13, 14, 15, 16)	10	10	8	17	16	130	-	191
9 - 12 years (09, 10, 11, 12)	19	10	14	25	33	130	-	231
5 - 8 years (05, 06, 07, 08)	5	2	2	6	9	24	-	48
1 - 4 years (01, 02, 03, 04)	1	-	-	-	1	-	-	2
No formal education (XX)	-	-	-	-	-	-	-	-
Not ascertained (00)	-	-	-	-	1	1	-	2
Total	44	32	40	58	81	446	-	701

TABLE a-21

Participant Opinion of Program Level
by
Selected Factors

Part I of table.

	How Did You Find the Level of Your Program? *1			
	Too Simple	About Right	Too Advanced	Total
Attendance at University Prior to Training *1				
Attended university	94	226	15	335
Did not attend university	84	257	25	366
Total	178	483	40	701
Total Time in Field of Specialization at Time of Selection				
None	1	3	1	5
Less than 1 year	8	14	2	24
1 - 2 years	18	42	2	62
2 - 5 years	31	96	7	134
5 - 10 years	52	150	10	212
10 years or more	65	176	18	259
Not ascertained	3	2	-	5
Total	178	483	40	701
Had You Been Told Anything About the Level of your Program Before You Left Home? *2				
Yes	53	205	12	270
No	125	278	28	431
Total	178	483	40	701

Cards 04:35 & 36; 01:43. *1. No cases coded "Don't know" or "Not ascertained". *2. No cases coded "Not ascertained".

This table shows 10 cases more of those who found their programs "too simple" than "about right"; and 10 cases of those who did not attend a university prior to training who found their programs too advanced. The number of cases of difference is too small to draw any conclusions.

Table continued on the following page (Part II)...

TABLE A-21

Participant Opinion of Program Level by Selected Factors (continued)

Part II of table.

	How Did You Find the Level of Your Program? *1			
	Too Simple	About Right	Too Advanced	Total
Participant Went On An Observation Tour During His Program *2				
Yes	107	317	25	449
No	71	166	15	252
Total	178	483	40	701
Participant Had On-the-Job Training During His Program *2				
Yes	109	306	24	439
No	69	177	16	262
Total	178	483	40	701
Participant Attended a University During His Program *2				
Yes	45	174	14	233
No	133	309	26	468
Total	178	483	40	701
If You Had Any Difficulty at all with Your English, What Was It? *3				
No difficulty at all	20	78	5	103
Difficulty in being understood	11	39	3	53
Difficulty in understanding	13	44	3	60
Both	40	104	12	156
Not ascertained	-	1	-	1
Not applicable	94	217	17	328
Total	178	483	40	701
Did You Have the Opportunity to Take Part in the Planning of Your Program? *3				
Yes	32	151	12	195
No	146	331	28	505
Not ascertained	-	1	-	1
Total	178	483	40	701

Cards 04:35; 03:61,63 & 65; 05:18; 02:37. *1. No cases coded "Don't know" or "Not ascertained". *2. No cases coded "Not ascertained". *3. No cases coded "Don't know".

TABLE a-22

Age in Years at Time of Departure for Training

Total Amount Of Time Spent In Training (Card 02, Col. 80)	Under 25 (1)	25 - 29 (2)	30 - 34 (3)	35 - 39 (4)	40 - 44 (5)	45 - 49 (6)	50 - 54 (7)	55 and older (8)	Not ascertained (0)	Total	%
Three years or more (8)	-	-	-	-	-	-	-	-	-	-	
Two years	-	2	1	1	-	-	-	-	-	4	0.6
One year to just under 2 years (6)	10	39	31	26	10	6	1	-	-	123	17.6
Six months to just under one year (5)	13	50	45	25	13	6	2	1	-	155	22.1
Four months to just under 6 months (4)	31	35	25	19	10	8	3	2	-	133	18.9
Two months to just under 4 months (3)	11	45	29	30	23	13	6	3	-	160	22.9
One month to just under 2 months (2)	6	13	23	23	9	14	7	3	-	98	14.0
Less than one month (1)	1	4	6	4	4	6	3	-	-	28	3.9
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	
Total	72	188	160	128	69	53	22	9	-	701	100.0
%	10.3	26.8	22.8	18.3	9.8	7.5	3.1	1.4			

TABLE a-23

When You Arrived in The Country of Training, Did You Attend Any General Orientation Sessions that Took More Than One Day?

Orientation	No.of Participants	Pe Ce
Yes	420	60.
No	281	40.
Total	701	100.

Card 03:41

TABLE a-24

Participant Opinion of Money Made Available by Selected Factors

	What Is Your Opinion of the Mone Made Available to You? *2		
	Too Little	About Right	Tot
Participant went on an Observation Tour *1			
Yes	100	349	44
No	90	162	25
Total	190	511	70
Participant had on-the-job training during his program *1			
Yes	140	299	43
No	50	212	26
Total	190	511	70
Participant attended a University during his program *1			
Yes	38	195	23
No	152	316	46
Total	190	511	70

Cards 03:61,63,65; 04:54. *1. No cases coded "Not ascertained". *2. No cases coded "More than needed", "Don't know" or "Not ascertained".

TABLE a-25

Why Do You Think The Money Was Insufficient?

Reason	No. of Replies
Could not maintain standard of living to which I am accustomed	11
Cost of living too high in country of training, food expensive, personal items too costly, etc.	30
Hotel and/or travel expenses too high	27
Could not take advantage of cultural activities	4
Extra expenses due to nature of training, could not buy books,etc.	9
Not enough money so had to pay out of own pocket	11
Money not received at proper time, came too late	3
Amount of money should be adjusted to meet individual needs, more for my type of program, higher for higher status, etc.	20
Not enough money, general statements	73
Other concepts not included above	1
Not applicable	511

Data from Card 04:55.56.

TABLE a-26

Major Field of Activity In Which Training Was Given (Card 01, Col. 14)

Were You Entertained in Private Homes? (Card 04, Col. 58)	Direct military support (0)	Agri. & natural res. (1)	Industry & mining (2)	Transportation (3)	Labor (4)	Health & sanitation (5)	Education (6)	Public administration (7)	Welfare & housing (8)	Comm. develop., social	General and miscellaneous (9)	Not ascertained (X)	Total
Yes (1)	19	59	32	32	55	57	39	69	6	42	-		410
No (2)	37	37	21	21	32	21	13	61	5	43	-		291
Don't know or don't remember (9)	-	-	-	-	-	-	-	-	-	-	-		-
Not ascertained (0)	-	-	-	-	-	-	-	-	-	-	-		-
Total	56	96	53	53	87	78	52	130	11	85	-		701

TABLE a-27

Entertainment in Private Homes

	No.of Participants	Per Cent
Were You Entertained in Private Homes?		
Yes	410	58.5
No	291	41.5
Total	701	100.0
Did You Like the Visits to Private Homes?		
Very much	392	55.9
Fairly well	16	2.3
Did not like	2	0.3
Inapplicable	291	41.5
Total	701	100.0

Card 04:58 & 59

TABLE a-28

At the End of Your Training Did You Attend a Communications Seminar?

	No.of Participants	Per Cent
Yes	75	11.0
No	624	89.0
Don't know or don't remember	2	
Total	701	100.0

Card 04:69

TABLE a-29*

Who Ran The Communications Seminar? by Have You Used Any of the Materials Or Ideas From the Seminar In Your Work?

	Yes	No	Not applicable	Total
Michigan State University	33	6	-	39
Department of Agriculture	10	2	-	12
St. John's College	1	1	-	2
Other (Sponsors not listed above)	14	6	-	20
Don't know or don't remember	2	-	-	2
Not applicable	-	-	626	626
Total	60	15	626	701

Card 04:75,76. *No cases coded "Not ascertained".

TABLE a-30

Have You Used Any of the Materials or Ideas from the Seminar in Your Work?

What and How	No. of Participants
Used principles in teaching others	24
Used materials, booklets, etc.	14
Used seminar ideas in suggesting changes	8
Written articles, reports on basis of seminar	1
Ideas helped in dealing with people, improved human relations	15
Non-specific: "used ideas", "applied knowledge".	10
Other, not included above	5
Inapplicable	641
Total	718

Why Did You Not Use the Materials or Ideas from Seminar?

Reason	
Have not had opportunity	5
There was nothing I could use	2
Ideas cannot be used in present work	2
Did not use because of problems related to government procedures	2
Added nothing to what already know	2
Other concepts	2
Not ascertained	2
Not applicable	686
No concept	11
Total*	714

Card 04:77-80.

* Total is more than 701 because some respondents gave more than one answer.

Chapter V

TABLE a-31

Participant Education
Factors Relating to University Degrees

	No. of Participants	Per Cent
Did You Receive a Degree?		
Yes	58	8.1
No, received a certificate	175	25.1
No, received nothing	-	-
Not applicable	468	66.8
	701	100.0
Which Degree Was That?		
Bachelor level	23	3.3
Master's level	26	3.7
All other academic degrees not included above	9	1.0
Not applicable	643	92.0
	701	100.0
Do You Think the Degree Will Help Your Future Career?		
Very much	48	6.8
Somewhat	8	1.1
Not at all	2	0.3
Not applicable	643	91.8
	701	100.0
Why Do You Think the Degree or Diploma Will Or Will Not Be of Help To Your Future Career?		
Positive Answers		
Degree or diploma will mean more money	1	0.2
Degree leads to advancement in job or to getting a different or better job	8	1.2
Degree will enable me to gain more prestige	24	3.1
Degree will enable me to gain more knowledge	18	2.5
Degree will permit me to teach	4	0.6
Other positive comments not above	7	0.9
Qualified Answers		
Degree valuable but not advanced enough	1	0.2
Degree valuable but not specialized enough	-	
All other answers indicating a qualification on whether a degree is valuable or not	4	0.6
Negative Answers		
Degree does not lead to a better job	1	0.2
Degree does not lead to greater prestige	2	0.3
Degree program too elementary	-	

Table continued on following page...

	No. of Participants	Per Cent
Degree not relevant to work I am doing	-	
Degree not important, political influence more important	-	
All other comments indicating degree is not helpful	1	0.2
Not applicable	643	

Do You Think a Degree Would Have Helped Your Career? *

	No.of Participants	Applicable	Per Cent
Very much	117	66.5	16.7
Somewhat	33	18.7	4.7
Not at all	21	11.9	3.0
Don't know/not ascertained	5	2.9	0.7
Not applicable	525		74.9
	701		100.0

Why Do You Think A Degree or Diploma Would or Would Not Have Helped Your Career? **

	No.of Participants	Per Cent
Positive Answers		
Degree would have meant more money	-	
Degree would have lead to advancement in job or getting better job	28	3.9
Degree would have meant more prestige	83	11.9
Degree would have enabled me to gain more knowledge, improve my ability, etc.	20	2.9
Degree would have permitted me to teach	7	0.9
Other positive comments not included above	16	2.3
Qualified Answers		
Degree would have been valuable but it is not advanced enough	3	0.4
Degree would have been valuable but was not specialized enough	-	
All other answers indicating degree valuable	11	1.6
Negative Answers		
Degree would not have led to a better job	5	0.7
Degree would not have led to greater prestige	3	0.4
Degree was too elementary	4	0.5
Degree not relevant to my job	7	0.9
Degree not important, other connections more important	4	0.5
Degree program too advanced	1	0.2
All other comments indicating degree not helpful	8	1.0
Don't know or don't remember	2	0.3
Not applicable	525	74.9

Card 04:20-31.

* Based on total of 175 participants who attended a university but received only a certificate. ** Totals exceed 701 and 100 per cent because some respondents gave more than one answer.

TABLE a-32

If You Were To Go Through That Program Again
What Changes Would You Like To Have Made In It?
Why? Any Additional Ideas?

	No.of Re
No Changes	37
Change in Emphasis of Training Program	
I would have liked more training, longer training, more general training, broader training objectives, to visit more places or study additional subjects.	319
My entire program should have been shorter, was too repetitious, was taught the same things over and over again	6
I would have liked more specialized training; would have preferred to take fewer subjects or visit fewer places and gain a better understanding of the things I did observe. My program was too general	174
I would have liked a more leisurely training program, my program was too intensive, paced too fast; I would have liked more free time	11
The program should have been more specifically related to my needs, the needs of my job, of my country	273
The program was too difficult	13
The program was too elementary, at too low a level	43
Changes in type of Training Program	
I would have liked some, or more, practical work; the program was too theoretical; would have liked some on-the-job training; program should have been more practical; I would have liked more laboratory work.	148
I would have liked to obtain an academic degree	40
I would have liked some academic training (university attendance) or more academic training; more theoretical training	55
I would have liked some observation or more observation, more visits.	42
I would have liked less practical training or no practical training	4
I would have liked less academic training or no academic training; certain subjects or courses could have been eliminated.	9

Table continued on the following page...

	No.of Replies
I would have liked less observation or no observation, certain visits should have been eliminated.	17
Change in Arrangement of Training Program	
My program should have been better planned and organized; I should have had more guidance from my adviser; my program should have been planned by someone other than the individuals who did plan it; time was wasted.	6
I should have had a chance to plan my own program. Participants should be allowed to plan their program. I should have been allowed to select the places I would go. Participants should be consulted when the program is being planned or changed.	5
I would have liked to receive training at a different place. It would have been better if I had been trained in a different country. I would have liked being trained in a different state, a different geographic area, a different climate. I would have liked to receive training at different factories, hospitals, etc. I would have liked a different university.	5
There should have been more emphasis on knowledge of the language of the country of training. Participants should be selected on the basis of their knowledge of the language. Some training or more training in language should have been given either in my country or in the country of training.	5
I would have liked more advance information about my program or about conditions in the country of training. Information about training should have been received in my home country in time for some planning to take place there. I would have liked more orientation either in my own country or in the country of training. I should have had definite information about my program before I left my country.	68
More planning should have been done in regard to the job I would come back to. USOM should have arranged for me to have a job in which I could use my training. My own government or my employer should be sure that participants are placed in a job where they can use their training. Participants should be selected on the basis of the needs of their job or their country.	50
Study teams or groups of participants should be selected so that they have the same background and interests	65
I should have had more help in daily living expenses - food, housing, transportation, money.	4

Card 06:28-35.

*Attention is called to the fact that only 53 participants said they should have participated in planning their programs compared to 456 who said it would have helped if they had participated before training in program planning, (Table a-12, page A.13).

TABLE a-33

Supervisor Relation to Participant and Training Program Factors

(Data from Supervisor Questionnaire)

When the participant left on his training program was he working for you?	No. of Participants	Per Cent
Yes	124	48.1
No	133	51.5
I wasn't here then	1	0.4
Procedure by which participants are selected*		
Satisfactory	97	57.1
Unsatisfactory	21	12.3
Can't rate	52	30.6
Before the participant left for his training were you familiar with any aspects of his training program?		
Yes	27	10.4
No	107	41.5
Not applicable	124	48.1
Did you help in planning participant's training program?		
Yes	43	16.7
No	108	41.8
Not applicable	107	41.5
Subject matter covered in the training programs*		
Satisfactory	134	78.7
Unsatisfactory	14	8.3
Can't rate	22	13.0
Why is subject matter of training program unsatisfactory?	**No. of Replies**	
Subject matter not appropriate to participant's background, knowledge, past experience.	2	
Subject matter not appropriate to needs of participant's job, employer, or country	7	
Subject matter too narrow, should cover more subjects, more details	1	
Subject matter includes too much practical work or experience, not enough theory	1	

Table continued on the following page...

*Total and percentages based on cases (170) when supervisor commented on selection and subject matter procedures.

	No. of Replies
Other comments relating to subject matter, not included above	3
Not applicable	156

Cards 10:17,19,21; 12:12,17-21.

TABLE a-34*

What Kinds of Things Did You Do In Planning Participant's Program?
(Data from Supervisor Questionnaire)

	No. of Participants	Per Cent
Planned entire program	3	1.1
Made suggestions or decisions on what subjects should be included in program; types of things to be observed, etc.	30	11.7
Made suggestions or decisions on place of training, country in which training should be given; university, organization or company to which participant should go, etc.	2	0.7
Discussed program with other people; helped plan program, advised on program (nature of help not specified).	8	3.1
Other	4	1.5
Not ascertained	4	1.5
Not applicable	215	83.3

Card 10:22,23.
*Total exceeds 258 because some supervisors named more than one activity.

TABLE a-35 *

Do You Think The Participant's Program Was Worth The Cost and The Difficulty?
(Data from Supervisor Questionnaire)

Yes	223	86.5
No	12	4.6
Don't know, don't remember	23	8.9
	258	100.0

Card 10:34. *Based on the replies of 258 supervisors.

TABLE a-36

How Suitable Was Participant's Training For His Usefulness to Your Organization?
(Data from Supervisor Questionnaire)

Positive comments	No. of Replies
Training was excellent, very good, (strong positive comments).	95
Training was fair, suitable, (weak positive comments).	26
Training was specifically suitable because participant is applying his training in his work, is valuable to employer, doing better work, etc.	80
Training was suitable because participant has introduced new methods, techniques, equipment.	4
Training was suitable because participant is conveying his training to others, teaching.	22
Training was suitable because participant has received a promotion, better job, salary increase	6
Positive comments on participant's characteristics; has more confidence, greater sense of responsibility, etc.	3
Other positive comments	5
Neutral comments	
Training made no difference; it was neither suitable nor unsuitable, didn't matter.	12
Negative comments	
Training was not suitable because it was bad, inadequate, inappropriate, etc.	3
Training was not suitable because it was not appropriate to work participant is doing; cannot be applied; participant is not working in field in which he was trained; training not appropriate to participant's training and ability	10
Training was not suitable because participant is not using it; not applying it in his work; not teaching others	1
Negative comments on participant's personal characteristics; is too arrogant, self-centered, uncooperative, etc.	4
Other negative comments	3
Don't know, can't evaluate suitability of program, didn't know participant, or program, etc.	14

Card 10:36-39.

TABLE a-37

If You Had To Send Another Person On A Training Program Would You Like To See Changes Made?
(Data from Supervisor Questionnaire)

	No. of Replies
No changes suggested, no further comments	26
No changes suggested because program was good the way it was.	56
Changes related to program planning	
Supervisor should have more important role in selecting participants.	2
Supervisor should have more important role in program planning: selecting subjects to be studied, country of training, school or place of training, timing of program, etc.	7
Program should be prepared in participant's home country.	6
Program should be planned to meet needs of participant, his employer, his country.	25
Other comments related to planning of program.	9
Changes related to content of program	
Content of program should be more general; more subjects studied.	11
Content of program should be more specific; concentration on fewer subjects.	29
Program should include more practical training, more on-the-job experience.	20
Program should include more theoretical or academic work	4
Program should be more advanced	5
Programs for future participants should include different aspects of the field of specialization.	1
Contents of the program should be different (in any respect not specified above).	3
Other comments in relation to content of program.	12
Changes related to length of program.	
Training should be longer	43
Other comments related to length of program.	1
Other, not included in above categories	3
Don't know, can't evaluate program, don't know enough about program or participant, etc.	53

Card 10:42-45.

TABLE a-38

How Important Was Your Program?

	No.of Participa	
Most important thing	518	[illegible]
Waste of time	10	1.4
In Between	173	24.7
	701	100.0

Card 06:53

TABLE a-39*

Why Do You Feel Training Was The Most Important Thing You Ever Did?

	No.of Participants	Per Cent
Non-specific personal gain:		
Training gave me broader insight, now see; matters from different angle.	25	3.5
I met people, made friends.	5	0.7
I learned how to treat others, how to handle people	2	0.3
It was educational, gave me experience.	135	19.3
Gave me a chance to know country with highly developed technology and her people, developed mutual understanding, intelligent viewpoint.	44	6.3
Was useful to my employer or country	45	6.4
Gave me a chance to compare home situation with situation abroad.	28	3.9
Specific, personal gain		
I obtained a degree	4	0.6
I improved my position, have better job, gave me chance for advancement, status, etc.	41	5.8
It gave me self-confidence, courage, confirmed my convictions, etc.	19	2.7
I am able to work more effectively in my field, make greater contribution to applying and transmitting knowledge, ideas, etc.	200	28.6
I acquired knowledge and ideas, observed systems, methods which were new and applicable in solving problems in my country.	181	25.8
It gave me a chance to learn about labor unions, labor laws, importance of labor or power of labor.	57	8.1
Other, not covered above	15	2.1
No reason given, not ascertained	4	0.6
Not applicable (Y)	183	26.2

Card 06:54-57. *Totals exceed 701 and 100 per cent because some participants gave more than one answer.

TABLE a-40

Why Do You Feel Training Was A Waste of Time?

	No.of Participants	Per Cent
Training was at too low a level, did not add anything to what I already knew.	3	0.4
Training was not appropriate to my needs	4	0.6
Program lacked organization, was poorly handled	2	0.3
Program too short	2	0.3
Money allowed inadequate	1	0.2
The job situation I am in makes it impossible to use training (uncooperative supervisors, different job, etc.)	3	0.4
Did not get training as scheduled to get	1	0.2
Inapplicable (Y)	691	98.0

Card 06;58-61

TABLE a-41

What Was The Most Useful And Valuable Part Of Your Experience?

	No. of Participants	Per Cent
General Comments		
Everything was useful and valuable	17	2.4
Nothing was useful or valuable	5	0.7
Studies in general, specific subjects studied, specific techniques or procedures observed.	173	24.7
Observation tours, visits to industrial firms	65	9.2
On-the-job training, practical work	54	7.7
University attendance	15	2.1
The high quality of instructors, university, etc.	40	5.7
Obtaining an academic degree	1	0.1
Meeting and working with professional counterparts	33	4.7
All general miscellaneous	16	2.2
Comments on Conditions Seen		
Way in which offices, plants, government agencies, scientific centers etc. are organized; discipline, teamwork.	171	24.4

Table continued on the following page ..

	No. of Participants	Per Cent
Good facilities for work or study	29	4.1
Procedures and equipment are advanced, modern	30	4.2
Comments on People, Customs		
Obtained a better understanding of other people, greater knowledge of way of life in country of training.	14	1.9
Characteristics of people in country of training, honesty, cooperation, friendliness, respect for labor and hard work, punctuality.	22	3.1
Meeting participants, students from other countries	8	
Other		
Travel, visiting a foreign country, being on my own	3	
Learned more English	1	
Other, non-program related comments	4	

Card 04:48,49. Percentages given only for replies received more than ten times.

TABLE a-42

What Was The Least Valuable Part Of Your Experience?

	No. of Participants	Per Cent
Positive Comment:		
Nothing, entire program was useful	505	72.0
Negative Comment, program-related		
The entire program was not useful, not valuable	6	0.8
Visits to specific places	46	6.5
My on-the-job training	6	0.8
The university or school I attended, specific courses	35	4.9
My orientation program	1	0.1
The time I spent in Washington	2	0.3
My study of the English language	4	0.5
All other general, miscellaneous parts of program	77	10.9
Negative Comments not program-related		
The discriminatory attitudes towards the various races, or nationality groups that I experienced, observed, read about	5	0.7
The social and recreational activities	2	0.3
My living conditions, such things as food, housing, living allowance, climate	3	0.4
Customs, culture, practices, attitudes, which appeared strange, queer, embarrassing, uninteresting or to have no relevance to me or my country	3	0.4
All other non-program related comments	5	0.7
Not ascertained	1	0.1

Card 04:50,51.

Chapter VI

TABLE a-43

Employment Since Training

1. Since you have been back from your training program have there been any periods when you were unemployed?		
Yes, never had a job since return	1	0.2
Yes, gives periods	52	7.4
No	648	92.4
	701	100.0
2. If Unemployed for periods, for how long was that?		
Less than one month	1	0.2
1-2 months	6	0.9
2-3 months	9	1.3
3-4 months	4	0.6
4-6 months	5	0.7
6-12 months	4	0.6
12-24 months	12	1.7
2 years or more	11	1.6
Don't know or don't remember	-	-
Not applicable (Y)	649	92.4
	701	100.0
3. If unemployed for periods, do you think that your unemployment had any connection with your participation in that training program?		
Yes	13	1.8
No	38	5.6
Don't know or don't remember	1	0.2
Not applicable (Y)	649	92.4
	701	100.0
4. Are you employed at present?		
Yes	692	98.7
No	8	1.1
Not ascertained	-	-

Table continued on the following page.

	No. of Participants	Per Cent
5. Was the first job you had after returning the same as the job you had before you left?		
Same	459	65.5
Different	241	34.3
Not ascertained	-	-
Don't know or don't remember	-	-
Not applicable (Y)	1	0.2
	701	100.0
6. Is your present position the same as the one you had when you first returned?		
Same	297	42.3
Different	395	56.5
Not ascertained	-	-
Not applicable (Y) (unemployed at time of interview)	9	1.2
	701	100.0

	*No. of Replies		Per Cent
7. If current job is different, in what respects is it different?			
My present job is better than the first job after return	220		31.4
My present job is worse than the first	14		1.9
I changed from one part of the government to another	26		3.7
I changed from one non-government organization to another	18		2.6
I changed from private business to a government position	23	8.4	3.3
I changed from a government position to private business	36		5.1
My present job is in the field in which I was trained	39	20.1	5.5
I changed to a different job in the same general field	102		14.6
I changed to a completely different profession to the one I was in when I returned	13		1.8
When I first returned I had no job	1		1.4
Other differences not included in the above categories	9		
Not ascertained	-		-
Not applicable (Y) (not in a different job)	306		43.6
My present job is not in the field in which I was trained	58		8.3

	No. of Participants	Per Cent
8. What type of employment did you have immediately after training?		
Government	151	21.5
Private business	16	2.3
Profession	3	0.5
Trade union	-	-

*Totals exceed 701 and 100 per cent because of some multiple replies.

Table continued on the following page...

	No. of Participants	Per Cent
Student	-	-
Nationalized industry	4	0.6
Non-local government: USOM, foreign etc.	63	8.9
Other	6	0.7
Not ascertained	1	0.2
Not applicable (Y)	457	65.3
	701	100.0

9. In your current job what type of employment do you have?

Government	257	36.6
Private business	54	7.7
Profession	23	3.3
Trade union	1)	0.5
Student	1)	
Nationalized industry	13	1.8
Non-local government: USOM, foreign, etc.	36	5.1
Others, not included above	10	1.4
Not ascertained	-	-
Not applicable (Y)	306	43.6
	701	100.0

10. How many people do you supervise?

a) In first job after training

None	53	7.6
One to five	51	7.3
Six to nineteen	65	9.3
Twenty to forty	40	5.7
Fifty to one hundred and ninety-nine	24	3.4
Two hundred to four hundred and ninety-nine	4	0.6
Five hundred to nine hundred and ninety-nine	1	0.2
One thousand or more	-	-
Not ascertained	4	0.6
Not applicable (Y)	459	65.3
	701	100.0

b) On current job

None	89	12.7
One to five	65	9.3
Six to nineteen	96	13.7
Twenty to forty-nine	70	9.9
Fifty to one hundred and ninety-nine	48	6.9
Two hundred to four hundred and ninety-nine	11	1.6
Five hundred to nine hundred and ninety-nin	2	0.3
One thousand or more	3	0.4
Not ascertained	11	1.6
Not applicable (Y)	306	43.6
	701	100.0

Card 05:20,24-26,34-39,33,41,32,40.

TABLE a-44

Degree of Utilization of Training

	No. of Participants	Per Cent
1. Utilization Scores		
75 or higher	456	65.0
Total score is from 50-74	166	23.7
Total score is from 26-49	-	-
Total score is 25 or lower	-	-
No total score (Y)	79	11.3
	701	100.0
2. In your current job have you ever been able to use any of the skills or knowledge that you learned on the program?		
Yes	626	89.4
No	65	9.3
Not applicable (Y)	9	1.3
	701	100.0
3. Have you been able to convey any of what you learned in the program to other people?		
Yes	689	98.3
No	12	1.7
	701	100.0
4. Outstanding Activities		
First dimension - participant states or implies that the planning, organization, operations, changes etc. which characterize the activity were initiated by himself	514	51.9
Participant states, or implies that the planning, organization, operations, changes etc. which characterize the activity were initiated by others or jointly	475	47.9
Not ascertained	2	0.2
	991	100.0
5. Use of Training		
Training used*	983 (activities)	
Training not used	7 (cases)	
Use of training not ascertained	1 (case)	
No activity reported	50 (cases)	
6. What do you find to be the major difficulties in using the skills you learned or in conveying them to other people?		
No difficulties	99	14.1

*311 cases had one activity and 340 cases had two activities.

Table continued on the following page.

	No. of Participants	Per Cent
7. Do you have any plans for using that training which you have not as yet been able to carry out?		
Yes	464	66.2
No	237	33.8
Don't know	-	-
Not ascertained	-	-
	701	100.0

Cards 05:68,43,52; 06:42,47,46,51,36,37; 05:63.

TABLE a-45

Technician Contacts With Trainee Before Training

	Yes	Per Cent	No	Per Cent	Not applicable	Per Cent
Helped select him for training	56	31.2	24	13.4	99	55.4
Helped plan his program	53	29.5	27	15.1	99	55.4
Had work contacts with him	59	32.9	21	11.7	99	55.4
Gave him information or advice about his program	63	35.2	17	9.4	99	55.4
Coordinated his program with the host government	45	25.1	35	19.5	99	55.4
Coordinated his program with his employer	51	28.4	29	16.2	99	55.4

Card 11:73-78.

Chapter VII

TABLE a-46

Participant Contact With U.S. Mission Since Training

	No. of Participants	Per Cent
Since your return have you had any contact with USOM?		
Yes	384	54.8
No	317	45.2
	701	100.0
Since your return have you worked for USOM or in a joint project?		
Yes	267	38.1
No	117	16.7
Not applicable (Y)	317	45.2
	701	100.0
Is there a USOM technician available to you?		
Yes	330	47.1
No	363	51.9
Don't know or don't remember	8	1.0
	701	100.0
Do you have frequent contact with the USOM technician?		
Frequent	184	26.3
Occasional	137	19.5
Never met	10	1.4
Not applicable (Y)	370	52.8
	701	100.0

Card 05:73-76

TABLE a-47

Assistance to Participant by U.S. Mission

	No.of Participants	Per Cent
Have you requested help from USOM?		
Yes	115	16.4
No	585	83.5
Not ascertained	-	-
Not applicable (Y)	1	0.1
	701	100.0

Table continued on the following page...

Was help received? *	1st request	2nd request	3rd request
Yes	70	30	8
Partially	11	8	2
No	34	8	8
Not applicable (Y)	586	586	586

On what kinds of problems did you request help from USOM?

	1st request	2nd request	3rd request	Total
Technical advice, advice of technician on particular project, information on problem, general.	35	11	2	48
Assistance from USOM technically in training staff members.	5	1	4	10
Additional training grant for self.	14	-	-	14
Requested training for others.	2	3	2	7
Requested machinery, equipment, material.	16	7	4	27
Printed material, books, pamphlets.	10	10	3	23
Audio visual aids.	2	2	-	4
Financial assistance, help obtaining money for project.	18	8	1	27
Assistance in securing a job.	13	2	-	15
All other responses.	-	2	2	4
Not applicable (Y)	586	586	586	586

Card 06:14,17,20,23,15-16,21,23.
*Totals do not coincide because some participants made more than one request for aid.

TABLE a-48

Participant Membership in U.S. Society
And Receipt And Use Of U.S. Publications

Are you now a member of a U.S. professional society?	No. of Participants	per cent
Yes	114	16.2
No	587	83.8
	701	100.0

Did you receive any U.S. professional publications?

Yes	220	31.4
No	481	68.6
	701	100.0

Table continued on the following page...

How much use are the publications to you?

	No. of participants
Very useful	23
Somewhat useful	175
Only a little useful	22
Not applicable	481
	701

Card 06:25-27.

APPENDIX B

METHODOLOGY

The Training Evaluation Survey of USAID/Bolivia followed the instructions established by ICA-AID/Washington for the world-wide training study. Data were gathered by personal interview on standard questionnaires, which were then edited and coded using the methods prescribed by Washington. All the information of the coded interviews was then transferred to IBM cards from which were derived the tabulations used for the analyses of the Final Report.

Sampling

The Bolivian study was required to approximate as closely as possible a fifty per cent sample of the participant universe and to interview no less than 500 returned participants.

The basis for the sample was the alphabetical card file of the USAID/Bolivia Training Office. Since the Training Office had very few records and considered the card file the most accurate and complete source of information, Factual Data Sheets were prepared for every other individual whose name appeared in the file with the following exceptions: individuals 1) known to be living abroad; 2) in training; 3) not back six months at the time of interviewing. The general cut-off date was June, 1963. However, a few cases were included, of participants who had returned later than this date provided they had been back six months at the time of the interview.

When it was discovered that, due to factors beyond the control of

the Survey, the sample in certain sectors of the participant universe would fall short of a fifty per cent sample, second and third stratified samples were taken for Army, Education, Health and Labor participants.

The difficulties of locating the cases of the random sample arose from the fact that the study covered a span of 20 years (1943-1963). During this time Bolivia had undergone drastic social, political and economic changes. Many participants could not be found. Some had emigrated, several had died, others had changed jobs numerous times.

Loss of records after the Health and Education services were disbanded affected the locating of participants from these two fields. Transfer of training functions from USAID/Bolivia to the U.S. Army Mission and the practice of rotation in the Bolivian army made it difficult to find some of these trainees.

A very high percentage of the labor participants of recent years have been miners and farmers who because of their work or area of residence were completely inaccessible to the Survey. Interviewers were sent to the mining areas such as Oruro and Potosí but were able to contact only a few of the Survey sample.

The relationship of field of sponsor and the totals and percentages of the Survey sample are shown in the accompanying table.

It is to be noted that the totals given in the table differ from those given in Figure "Summary of Participants Trained Through 1963" because the card file at the time of selection of the sample totalled 1422 instead of 1628 due to the fact that not all of the participants trained in 1963 figured in the Survey universe.

COMPARISON OF SURVEY UNIVERSE WITH CASES OF SURVEY SAMPLE

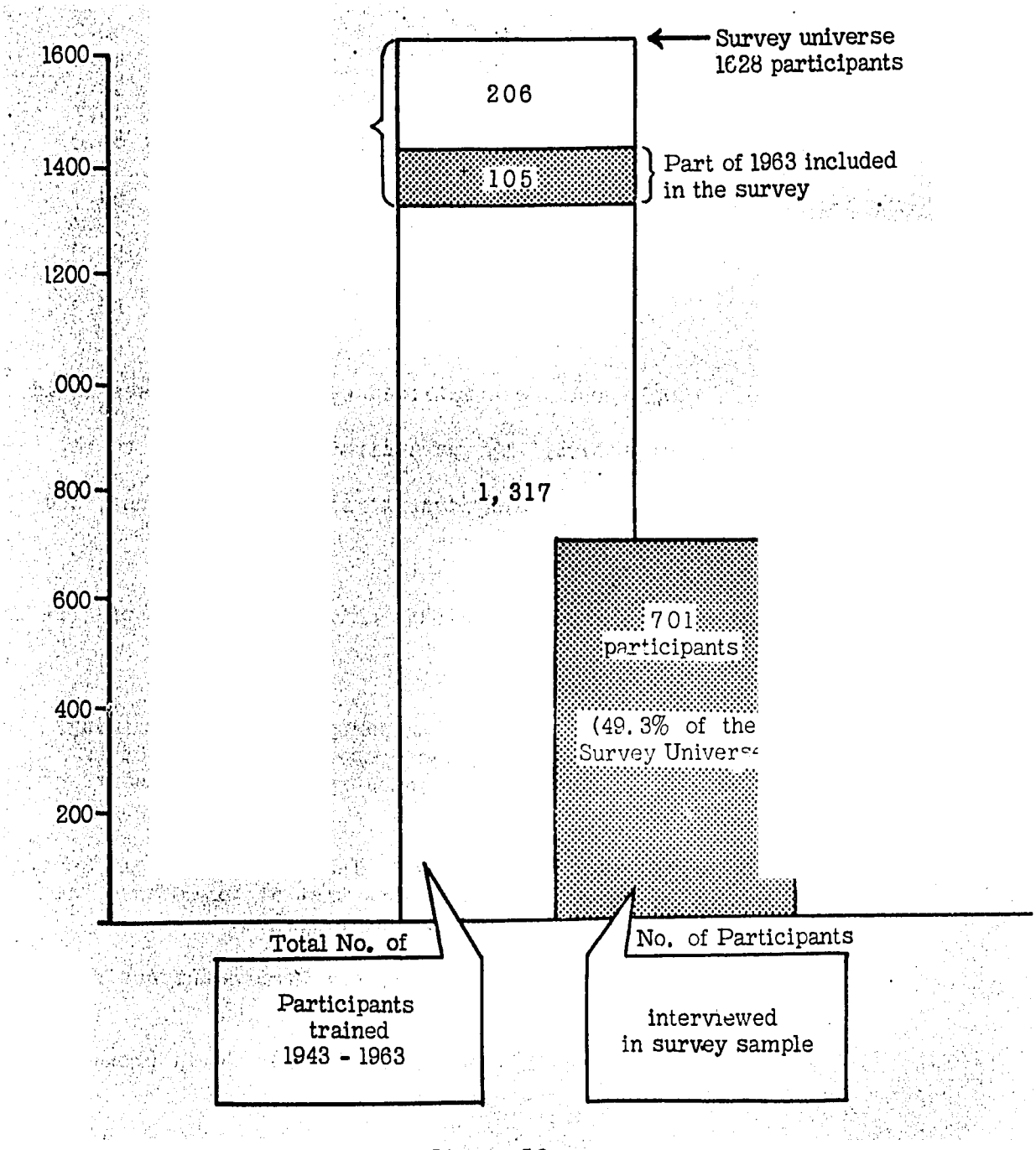


Figure 13

TABLE b-1

Comparison Number of Cases Card File
And Number and Percentages of Survey Sample Interviewed

Sponsor	Total Participants of Card File	Total Interviewed	Percentage Interviewed
Agriculture	210	105	50.0
Army	152	66	43.5
Education	147	62	42.1
Health	186	87	46.7
Industry and Mining *1	58	40	69.0
Labor	193	82	42.5
Miscellaneous *2	137	75	54.7
Public Administration *3	228	127	55.7
Transportation *4	111	57	51.3
Total	1422	701	49.3

Of the total random sample and the stratified samples, 211 cases could not be located after extended effort; 136 participants were found to be living abroad; 12 had died; 15 were army desertors; one was a nun; and one was in jail.

The Survey sample reflected the participant universe in terms of distribution by sex and area of residence.

*1. This classification includes participants in geology, mining, industry, and labor. Distributing these special cases to other fields would lower the percentage in Industry and Mining and raise it in Labor.

*2. The "Miscellaneous" category includes IAGS, Audio-Visual, Social Welfare and Community Development trainees that at times have been classified separately or in one of the other fields.

*3. Public Administration includes Government Management Assistance and Public Safety.

*4. Transportation includes Engineering and Public Works (roads) and Civil Aviation.

Questionnaires

The questionnaires used in interviewing were furnished by AID/Washington International Training Division. The Form A Participant questionnaire in Spanish was used in all interviews with returned trainees. The Supervisor Questionnaire, Part I and Part II in Spanish was used with Bolivian supervisors and the Technician Questionnaire, Part I and Part II in English was used with U.S. technicians. Permission was granted by the Study Director of the International Training Division, AID/Washington to dispense with Form B and Supplement A of the Participant questionnaire.

The last page of the questionnaire (a white sheet as distinguished from the yellow sheets of the interview) was filled out by the participants who so desired and was submitted and classified separately.

Interviewing

Interviewing was begun in late November, 1963, and continued until May, 1964. It was preceded by a one week "Interview School" held in La Paz at which information was presented about the activities of United States aid to Bolivia, the AID participant program, USAID/Bolivia Training Office procedures, and the world-wide training evaluation survey. Several days of the school were dedicated to analyzing and discussing the questionnaires and interviewing techniques. Practice interviews were conducted in which the interviewers criticized and helped one another in order to understand thoroughly the problems and challenges presented in gathering accurate unbiased information.

Most of the interviews took place in La Paz, where 70 per cent of the returned participants were working. A branch office was established in Cochabamba with two interviewers and an interviewer was stationed in Santa Cruz and another in Trinidad. The interviewers from La Paz travelled to

Oruro, Potosí, Sucre and Tarija, all provincial cities where cases of the random sample were said to reside.

Most of the interviews with supervisors took place in La Paz, with a few being taken in conjunction with the interviewing in the provincial cities. All the technician interviews were done in La Paz.

A total of 711 participant interviews were completed of which 10 were discounted because the interviews were taken in error (participant had not been back six months, interviewee answered questionnaire in regards to a non-U.S. sponsored training grant rather than his USAID sponsored training).

Only 170 supervisors could be interviewed regarding 258 participants. This was because many individuals, named as supervisors, worked indirectly with the participants and refused to be interviewed on the grounds that they had no knowledge of training programs. Several of these were high government and army officials. Most of the participants interviewed in the provincial cities who worked for the Government of Bolivia gave the names of supervisors in La Paz. These supervisors sometimes disclaimed knowledge of the participants' training.

Nineteen U.S. technicians were interviewed in relation to 179 trainees.

Editing and Coding

Editing and coding was begun in December and carried on simultaneously with the interviewing. This was to expedite the work of machine tabulation, which was also to be carried on simultaneously to avoid over-burdening the Census office with all the data at one time.

The coding was done by five trained bi-lingual coders. Their work was checked for errors three different times.

Machine Processing and Analysis

Transfer of the data of the interviews onto IBM cards was done in the National Sampling and IBM Departments of the Office of Census and Statistics of the Ministry of Finance. Most of the cross tabulations were prepared in the IBM department. Two complete decks of IBM cards were prepared and verified and one deck was forwarded to IDT, AID/Washington.

The analysis and Final Report was prepared by the Survey Director with the assistance of a small staff.

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PROCEDURE FOR DEVELOPING UTILIZATION SCORES

Utilization of Training in Relation to Participant's Work

In order to obtain an indication of the degree to which participants have used their training, numerical scores were assigned to six specific questions of the interview schedule. For example, if the participant had never been unemployed since his return from training (Q.101) he was given a "score" of six points. The next "score" question (Q.119) asked the participant if he had been able to use any of his training acquired skills since his return. If he replied "yes" he received a score of 20. The following question (Q.120) inquired as to the extent of use of these skills: "Practically none" (score 0) "only a little" (score 6) "some" (score 12) "quite a bit" (score 18) "almost everything, everything" (score 24).

The above three questions related to use of training in terms of the participant's work.

Two subsequent questions asked the trainee if he had been able to convey any of what he had learned to others, (Questions 124, 125). If he had been able to transmit any of his training acquired knowledge he was given

a score of 15 points, and the degree in which he conveyed the information as indicated above (from "practically none" to "almost everything, everything") was scored zero, 5, 10, 15, 20.

The sixth question (Q.127) asked the trainee if he had plans for the use of training which he had not yet been able to carry out. If he had such plans his score for that question was 15.

The maximum total score for positive answers to all the above is 100. If the participant answered "no" to a question, or had less than the highest possible score his total score decreased accordingly.

If, for any reason any one of the questions was coded "Y", meaning "don't know, don't remember" or if the participant was at any time unemployed since training the total score is invalidated.

The breakdown of scores for participants is "25 or lower", "26 to 49", "50 to 74", "75 or higher", and "no score".

A similar system for rating the participants is used in the coding of the Supervisor and Technician questionnaires. The breakdown for the Supervisor rating is 19 or lower, 20 to 80, and 81 or higher. For the Technician evaluation the rating is 17 or lower, 18 to 74, and 75 or higher. The differences in the rating systems are due to the number of questions and the score for each question between the various schedules: participant, supervisor, technician.

Participant Questions Related to Utilization Score

Job Utilization		Score
Question 101:	Since you've been back from that (training) program, have there been any periods when you were not employed?	
	Yes, never had a job since return..	0
	Yes, gives periods.....	0
	No.....	6

Score

Question 119: In your current job, have you ever been able to use any of the skills or knowledge that you learned on the program we have been discussing?

Yes	20
No	0

Question 120: How much of your skills or knowledge have you used?

Practically none	0
Only a little	6
Some	12
Quite a bit	18
Almost everything, everything.	24

Transmission of Training to Others

Question 124: Have you been able to convey any of what you learned in the program to other people?

Practically none	0
Only a little	5
Some	10
Quite a bit	15
Almost everything, everything..	20

Question 125: About how much of that training have you been able to transmit to other people?

Practically none	0
Only a little	5
Some	10
Quite a bit	15
Almost everything, everything..	20

Future Plans

Question 127: Do you have any plans for using that training which you have not as yet been able to carry out?

Yes	15
No	0

Supervisor Questions Related to Participants' Use of Training

Question 12: Has any of the information (participant) acquired on his program been conveyed to others?

Yes	26
No	0
Don't know or don't remember (Y)	
Not ascertained (Y)	

	Score
Question 14: Do you think this program was worth the cost and difficulty?	
Worth cost and difficulty.....	4
Not worth cost and difficulty.....	0
Don't know or don't remember (Y)	
Not ascertained (Y)	
Question 15: How suitable was (participant's) training for his usefulness to your organization?	
In regards to question:	
All comments are positive.....	30
All comments are negative.....	0
Some comments are positive, some neutral and some negative.....	15
Don't know (Y)	
Not ascertained (Y)	
Question 17: How important was (participant's) training...?	
Essential	40
Very Important.....	30
Helpful but not very important.....	10
Not useful.....	5
Better off without it.....	0
Don't know or don't remember (Y)	
Not ascertained (Y)	

Technician Questions Related to Participants' Use of Training

Question 5: Contribution of training to participant's job performance.	
Major.....	51
Minor.....	25
No importance.....	5
Reduced usefulness.....	0
Don't know or don't remember (Y)	
Not ascertained (Y)	
Question 8.A: Utilization of training by: Supervisor	
Satisfied.....	5
Dissatisfied.....	0
Can't rate (Y)	
Not ascertained (Y)	

	Score
Question 8.B: Utilization of training by: Department/Ministry	
Satisfied.....	7
Dissatisfied.....	0
Can't rate (Y)	
Not ascertained (Y)	
Question 8.C: Utilization of training by: Participant	
Satisfied.....	37
Dissatisfied.....	0
Can't rate (Y)	
Not ascertained (Y)	

SUMMARY OF TOTAL PARTICIPANTS USAID/BOLIVIA

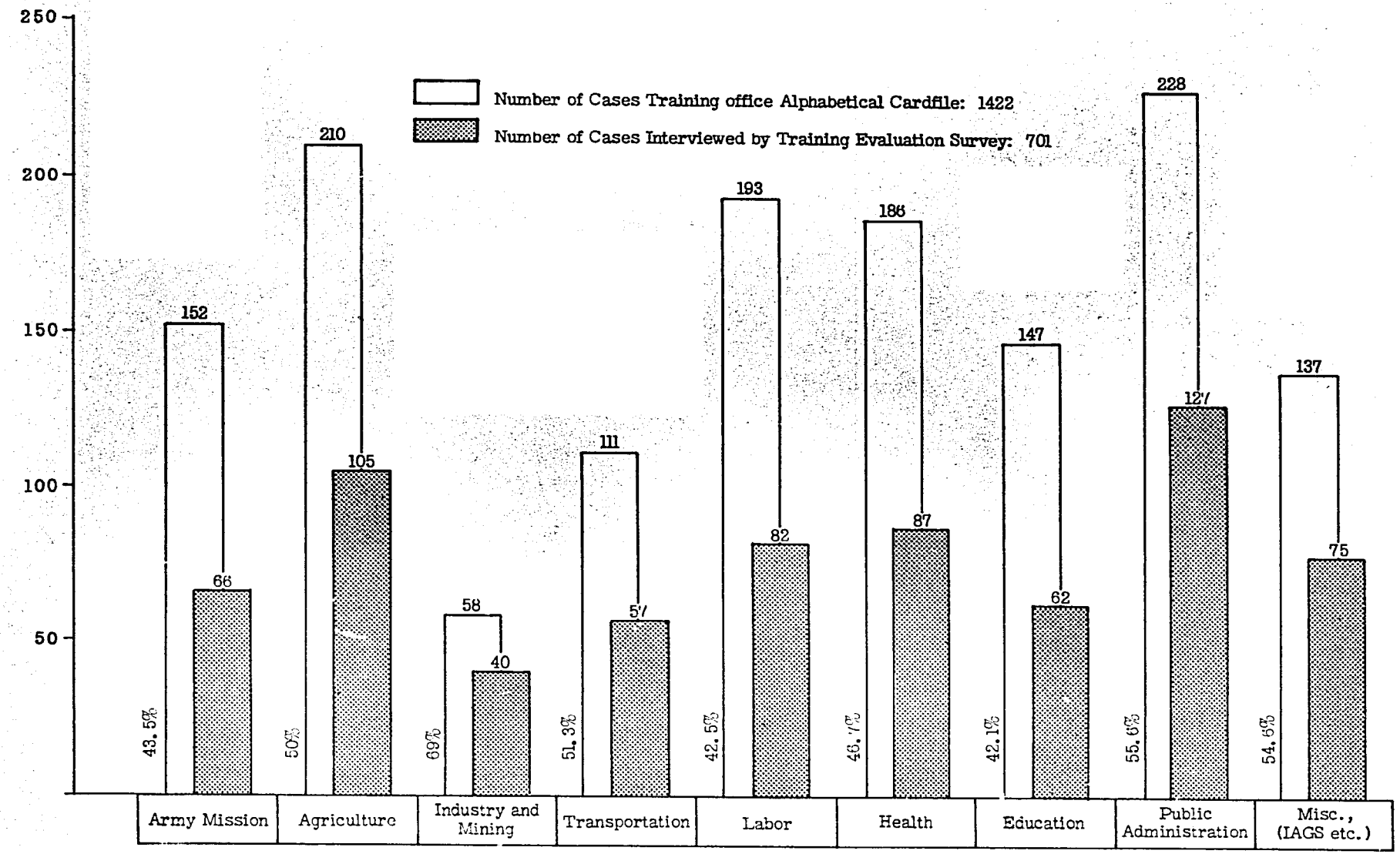

Figure 14

APPENDIX C

COSTS OF TRAINING

U.S. Dollar Costs of Training (OBLIGATIONS)

(In Thousands)

1. Total cost of training from inception (FY 1942) through 6/30/'64. $ 3,81

2. Total U.S. dollar assistance provided Bolivia by A.I.D. and predecessor agencies through June 30, 1964 is $284,368,000, including Development Loan This does not include assistance provided through the U.S. Food for Peace Program, which totalled $58,178,000 through June 30, 1964.

3. Costs of Training in Relation to Total Mission Technical Assistance Progra Costs.
Total Technical Assistance Program Costs $33,992; Training Costs $3,818.

4. Costs of Training by Field of Activity

	Through 6/30/61	During FY'61		FY'62	FY'63	FY'64
Agriculture	458	40		88	24	20
Industry	166	12	Manufac- turing*	5	17	24
Transportation	286	(8)		66	14	26
Labor	174	2		145	145	102
Health	420	44		48	16	2
Education	441	(24)		4	49	1
Public Administration	326	44	Govern. Manage.*	34	23	20
Community Development	52	-		-	-	-
Technical Support	42	-		-	7	32
General and Miscellaneous	301	-		39	14	(1)
	2,666	111				
	538		Mining	74	21	21
	355					
	259		Public Safety	35	25	12
	3,818			538	355	259

* Change in title.

Figures in brackets show net deobligations during Fiscal Year, i.e. deobligations exceeded obligations by amount in parentheses.

Data from the Controllers Office USAID/Bolivia. October 8, 1964

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COSTS OF TRAINING

Total Local Currency Costs of Training (Trust Fund) Starting FY 1962

1. Total local currency costs of training from inception (FY 1942) through 6/30/1964. $B.3,128 equivalent to U.S. $ 263.

2. Total local currency costs of training in relation to Total Mission Technical Assistance Program Costs.
   Total Technical Assistance Program Costs. $B.18,593 equivalent to U.S.$ 1,566.

   Training Costs. $B. 3,128 equivalent to U.S.$ 263 i.e. 17%.

3. Costs of Training in Local Currency by Fields of Activity

	FY 1962		FY 1963		FY 1964	
	$B	U.S.$	$B	U.S.$	$B	U.S.$
Agriculture	207	17	96	8	169	14
Mining-Petroleum	81	7	2	-	(1)	-
Transportation	140	12	(7)	(1)	30	3
Manufacturing	42	4	131	11	(22)	(2)
Education	63	5	15	1	9	1
Health	82	7	59	5	(10)	(1)
Government Management	69	6	60	5	(27)	(2)
Public Safety	30	2	226	19	(37)	(3)
Labor	514	43	951	80	(20)	(2)
General	200	17	89	8	(25)	(2)
Technical Support	-	-	12	1	-	-
	1428	120	1634	137	66	6

Total $B. 3,128 equivalent to U.S. $ 263

Figures in brackets show net deobligations during Fiscal Year, i.e. deobligations exceeded obligations by amount in parentheses.

Data from the Controllers Office USAID/Bolivia. October 8, 1964

APPENDIX D

GLOSSARY

A.I.D./ICA: The Agency for International Development, Department of State. Previously known as the International Cooperation Administration (ICA). AID/W: Agency for International Development/Washington.

Altiplano: The mountain plateau area, about 13,000 feet high, which is an important geographic and economic factor of Bolivia. The city of La Paz is located within a bowl-like valley of the altiplano.

AVC: Audio-Visual Center, which was formerly a separate office within the framework of USAID/Bolivia. It is now known as the Communications Media Branch and performs many of the same functions as AVC in preparing and publishing booklets and communications materials.

Banco Agricola: The State Agriculture Bank, which deals exclusively with agriculture and livestock, primarily in the field of supervised credit.

Banco Central: The Central Bank. A GOB state bank which prints and controls the Bolivian currency.

Banco Minero: The State Mining Bank which supervises and purchases the production of the mines in the private sector in Bolivia.

Campesino: Bolivian country person or farmer

Caudillismo: Spanish term used in Latin America related to political leadership tendencies in which an individual develops and maintains a strong personal following. Historically this has often resulted in bitter factional struggles within countries for the achievement and maintenance of power, by a single individual and his associates, to the detrement of the country, and its people as a whole.

CBA: Centro Boliviano-Americano. The joint Bolivian American cultural center, where, among other activities, English language courses are taught.

CBF: Corporación Boliviana de Fomento. Bolivian Development Corporation, the state organization for development of Bolivian resources.

Census Office: Oficina de Censos and Estadística. A division of the Ministry of Finance, within which are located the National Sampling Department and the IBM Division where machine processing of this Survey's data was done.

Certificate of Achievement: This is a type of diploma or statement of activity awarded to the participant, to indicate his satisfactory completion of an A.I.D. sponsored training program.

CNSS: Caja Nacional de Seguro Social - The national social security agen (fund) from which is paid costs of health insurance, clinics, retirement benefits, etc.

CO: Controllor's Office of USAID/Bolivia which handles all the funds and expenditures of the Mission.

Counterpart funds: Counterpart funds are local currency funds required to be deposited by a country cooperating in the U.S. Foreign Assistance Program into a "Special Account" in the name of the cooperating country. These counterpart funds are deposited as a result of U.S. assistance and can only be used for jointly agreed-upon activities.

The above definition does not include other types of local currency funds which are required to be deposited to U.S.-owned accounts with the U.S. Treasury and which, in most cases, provide for specific uses in accordance with individual agreements.

COB: Central Obrera Boliviana - Central Workers Union - A federation of the various other unions in Bolivia.

Coding: Classifications of answers on questionnaires into numerically identified categories for machine card punching.

COMIBOL: Corporación Minera Boliviana - The State mining enterprise which operates the largest mines in Bolivia which were nationalized in 1952 at the time of the Revolution.

Communications Seminar: A training seminar designed to provide the participant with sharpened understanding of the role which communication must play if he is to successfully transmit to others his newly acquired knowledge and skills when he returns home. The aims of the seminars are: to stimulate and motivate the participant through creating an awareness of (1) the need for improvement in communication practices, (2) the nature of the processes of change, and (3) the role of communication as a tool of planned change.

CNC: Consejo Nacional de Caminos - The national road service which replaced the Servicio Nacional de Caminos. Its functions are to construct, improve, and maintain the roads of Bolivia.

DGAC: Dirección General de Aereonautico Civil. A division within the Ministry of Public Works which regulates civilian air transportation.

Economic Activity: Classifications of area of positions as defined in List II of A.I.D. Manual Order 1363.7.

Fiscal Year (FY): Government accounting interval; U.S. fiscal years end on June 30.

Follow-Up: This term embraces all those activities undertaken by the US AIDs in each country to assist returned participants in achieving both the technical and non-technical objectives of their training programs.

GOB: Government of Bolivia

Host Country: A term used generally to refer to the country (in the case of this study, Bolivia), receiving United States assistance and participating in cooperative programs of technical assistance and economic development.

ITD: The International Training Division of A.I.D., formerly called Office of Participant Training of ICA (O/PT).

IAGS: Inter-American Geodetic Survey. The section of the U.S. Army Map Service whose work is to plan and conduct the mapping of the country in which the operations are being carried on.

I & M: Industry and Mining. A divisional classification of the activiti of the United States Missions used until 1960. Training in both industry and mining was sponsored under this single category.

IGM: Instituto Geográfico Militar: The Bolivian geographic institute which is a dependency of the Bolivian army, with which the IAGS carries on its activities.

ITB: Instituto Tecnológico Boliviano: The Bolivian Technological Institute, an institute at the university level, giving educatior in all branches of engineering.

LAB: Lloyd Aereo Boliviano - the principal Bolivian airline.

Ministerio de Asuntos Campesinos: Ministry of Rural Affairs of GOB.

MNR: Movimiento Nacionalista Revolucionario: National Revolutionary Movement, the name of the principal political party of Bolivia until it was overthrown in the Revolution of November 4, 1964.

Multiplier Effect: When a participant transmits his knowledge or skills by disseminating them to fellow workers, the effect of his training is enhanced or "multiplied".

Occupational Level: Classifications of level of positions according to standard A.I.D. definitions as given in List I of Manual Order 1363.1

Orientation Session: A general training period, at the beginning of a trainir program or upon the participant's arrival in a foreign country, designed to give him overall understanding of the new cultural atmosphere in which he is placed and to give him more specific information on administrative procedures, program concepts, and other problems he is likely to meet.

Participant: A foreign national who is sent to the United States or a third country for training in some field of specialization, and who is sponsored by US AID and some governmental or non-governmental organization in his home country; this name is used interchangeably with "trainee".

PIO/P: Project Implementation Order/Participant - the basic document authorizing and describing the training desired for each participant.

Project Manager; Program Specialist: U.S. or third-country training official in charge of participant's actual training program; now called Training Officer, but not to be confused with the Mission Training Officer, who handles training operations at the country level.

Servicio: See definition page 8.

SAI: Servicio Agricola Inter-Americano. The title in Spanish of the Inter-American Cooperative Agriculture Service.

SCBAC: Servicio Cooperativo Boliviano Americano de Caminos. The Inter-American Cooperative Road Service.

SCIDE: Servicio Cooperativo Inter-Americano de Desarollo Educational. Spanish title of the Inter-American Cooperative Education Service.

SCISP: Servicio Cooperativo Inter-Americano de Salud Publica. Spanish title of the Inter-American Cooperative Health Service.

Supervisor: Immediate supervisor of participant-respondents on the job in their home country (usually in this Survey a Bolivian national).

Tabulating: Processing of data on punch cards to produce relevant tables.

Technician: U.S. technical advisor in Bolivia concerned with training projects in different technical fields and acquainted with participant-respondents. Most Bolivian participants are also technicians in the general sense, but in the Survey report, the term refers only to U.S. technical specialists. It does not include training administration.

Third-Country Training: Training in a country other than the U.S. or the count of the participant.

T.O.: The Training Office of USAID/Bolivia.

Training Fields: These are the fields of training activity described and assigned standard identification codes in A.I.D. Manual Order 1053.4 of October 21, 1959.

Training program: The schedule of activities set up for a participant to accomplish so that he may acquire the instruction and experience which are necessary for project objectives.

Types of Training:

Observation: Training in which a participant sees how other persons perform work in his field of specialization. It is applied to those programs where observation, either singly or by teams, is the primary method of training. This type of training is usually of brief duration -- a few weeks.

On-the-Job: This is training where the participant observes and actual performs, in varying degree, the duties of a specific job or series of specific jobs. He learns job skills by direct contact with those skills in factory, office, laboratory or field.

Special Groups: This is training in which an educational institution, private business, government agency or other organization, plans a special training program more or less "custom-made" to fill th needs of special, pre-selected groups.

University (Academic): Academic training is that conducted in regular educational institutions of higher learning but may also include professional and technical schools. It may or may not be orient toward the requirements of academic degrees.

UMSA: Universidad Mayor de San Andrés, the principal University of Bolivia, located in La Paz.

USOM or
USAID/Bolivia: The U.S. Operations Mission/Bolivia, or the present title - U.S. AID Mission/Bolivia.

U.T. University of Tennessee.

Utilization: Utilization of training has two main facets like the two sides of a coin. One is the direct use on the job of the knowledge and skills acquired during training. The second is the transmittal of this training to others.

W.I.C.: The Washington International Center, which under contract with A.I.D., provides cultural orientation to participants after arrival in Washington, D.C.

Sanitary engineers apply their training in drilling for drinking water in Santa Cruz.

After study in Puerto Rico under a training grant, a social worker passes her new techniques to a group of Aymara girls.