

SENAI PROJECT REVIEW JANUARY 2, 1968

THE PROJECT AGREEMENT NO. 512-11-610-042.3 KNOWN AS THE SENAI PROJECT AND A PART OF THE PROJECT AGREEMENT FOR THE IMPROVEMENT OF SECONDARY AND INDUSTRIAL EDUCATION IN BRAZIL WAS SIGNED ON APRIL 17, 1966. THE CONTRACTOR BEING USAID AND THE SENAI NATIONAL DEPARTMENT UNDER THE BRAZILIAN CONFEDERATION OF INDUSTRY.

THE PRINCIPAL PURPOSES OF THE PROJECT ARE:

1. IMPROVING THE EFFECTIVENESS OF SENAI'S INDUSTRIAL MANPOWER TRAINING PROGRAMS--DAY AND NIGHT, IN SCHOOL AND INDUSTRY.
2. INCREASING THE QUANTITY OF PERSONS TRAINED IN THE INDUSTRIAL MANPOWER TRAINING PROGRAMS OF SENAI--TO THE EXTENT THAT AT LEAST 20% MORE EMPLOYEES ARE PREPARED FOR INDUSTRIAL WORK BY THE END OF YEAR 1968.
3. THE ESTABLISHMENT AND OPERATION OF A SYSTEM FOR COLLECTING AND ANALYSING STATISTICS RELATING TO THE PRESENT AND FUTURE INDUSTRIAL MANPOWER TRAINING NEEDS IN ORDER TO PROVIDE AN ACCURATE BASE FOR THE PREPARATION AND TRAINING OF WORKERS AND INSTRUCTORS.
4. THE TRAINING AND UPGRADING OF PROFESSORS, INSTRUCTORS, TECHNICIANS AND ADMINISTRATORS OF SENAI.
5. THE DEVELOPMENT OF INSTRUCTIONAL MATERIALS AND OTHER RESOURCES USED IN THE OPERATIONS OF INDUSTRIAL TRAINING PROGRAMS.

THE SENAI PROJECT CALLED FOR A FIVE MAN TEAM OF TECHNICIANS. THIS WAS REDUCED TO FOUR IN THE RECENT BUDGET CUT. THE TECHNICIANS ARRIVED AT THE FOLLOWING TIMES:

- DR. CHARLES V. YOUNG, MANPOWER DEVELOPMENT ADVISOR, SEPTEMBER 7, 1966
CHIEF OF PROJECT, USAID, RIO DE JANEIRO AND SENAI NATIONAL DEPARTMENT
OFFICE, RIO DE JANEIRO, BRAZIL
- MR. HARRY A. MOSS, APPRENTICESHIP TRAINING SPECIALIST, DECEMBER 1, 1966,
ASSIGNED TO WORK WITH SÃO PAULO REGION OF SENAI, SÃO PAULO, BRAZIL
- MR. ALLAN E. BROEHL, MANPOWER ASSESSMENT ANALYST, JANUARY 8, 1967,
ASSIGNED TO WORK WITH SÃO PAULO REGION OF SENAI, SÃO PAULO, BRAZIL
- MR. RICHARD T. MCGUERTY, INDUSTRIAL TRAINING SPECIALIST, APRIL 14, 1967,
ASSIGNED TO WORK WITH THE SENAI NATIONAL DEPARTMENT - TRAINING
DIVISION (IN INDUSTRY) LATER ASSIGNED TO WORK ON THE EMPRESA PROJECT
WITH A TECHNICIAN FROM THE STATE OF GUANABARA.

ALL OF THE TECHNICIANS WERE PROVIDED WITH COUNTERPARTS AND OFFICE SPACE IN SENAI FACILITIES.

IN THE EARLY STAGES OF THE SENAI PROJECT IT WAS DECIDED THAT AS A TEAM WE WOULD OPERATE IN THE FOLLOWING PHASES:

1. WE WOULD ATTEMPT TO ESTABLISH RELATIONSHIPS WITH SENAI AND OUR COUNTERPARTS IN ORDER TO HAVE GOOD COMMUNICATION AND WORKING ENVIRONMENT.
2. WE WOULD GET INFORMATION, FACTS AND DATA TO FIND THE ACTUAL STATUS AND OPERATION OF SENAI IN BRAZILIAN INDUSTRIAL MANPOWER TRAINING.
3. WE WOULD ESTABLISH AN ORGANIZATIONAL STRUCTURE WITH SENAI TO DISCUSS POSSIBLE CHANGES AND PROJECTS.
4. WE WOULD HELP SENAI TO IMPLEMENT ANY CHANGES TO WHICH THEY AGREED FOR THE IMPROVEMENT OF MANPOWER TRAINING AND THE INCREASE OF NUMBERS OF PERSONS TRAINED -- IN SENAI SCHOOLS OR IN INDUSTRY TRAINING PROGRAMS ASSISTED BY SENAI

IN RELATION TO PHASE I, SENAI ASSIGNED COUNTERPARTS TO THE USAID TECHNICIANS VERY PROMPTLY. HOWEVER, SOME CHANGES HAVE BEEN MADE IN THESE ASSIGNMENTS TO IMPROVE PROJECT WORK AND TO INVOLVE BRAZILIANS WORKING CLOSER TO THE ACTIVITIES TO BE IMPLEMENTED. SENAI HAS ACTED QUICKLY AND WITH EXPEDIENCE IN ASSIGNING COUNTERPARTS AND OFFICE SPACE.

THE MANPOWER SURVEY FOR ANALYZING TRAINING NEEDS WAS PLANNED AND IMPLEMENTED IN JUNDIAI, SÃO PAULO BEGINNING IN APRIL, 1967. ABOUT THIRTY SENAI INTERVIEWERS WERE ASSIGNED TO WORK WITH THE USAID TECHNICIAN TO MAKE THE SURVEY. THE SURVEY WAS ACTUALLY STARTED IN EARLY JUNE, 1967 AND THE FIELD WORK WAS COMPLETED IN EARLY JULY.

THE TABULATION OF THE DATA TOOK SOME TIME AS IT WAS DECIDED THAT THE DATA SHOULD BE MACHINE PROCESSED (DATA PROCESSING) AFTER THE COLLECTION. IT WAS AGREED THAT SENAI SHOULD ADAPT THE DATA TO MACHINE PROCESSING SO THAT IT WOULD HAVE THE ADVANTAGE OF KNOWING HOW TO USE THIS PROCESS IN THE FUTURE. DATA HAD BEEN COMPLETELY TABULATED BY THE END OF OCTOBER, 1967. PRELIMINARY REPORTS WERE ALSO WRITTEN -- FINAL REPORT DUE AT YEAR'S END.

PHASE II, OCCUPATIONAL ANALYSES FOR TRAINING NEEDS PURPOSES HAS BEEN PLANNED AND A TRAINING PROGRAM FOR SELECTED ANALYSTS HAS BEEN DESIGNED. THIS PHASE OF THE SENAI PROJECT HAS MOVED SOMEWHAT SLOWER DUE TO THE ABSENCE OF CERTAIN KEY SENAI TECHNICIANS WHO SHOULD BE INVOLVED IN THE TRAINING OF THE ANALYSTS AND IN THE PROCESS OF OCCUPATIONAL ANALYSIS. THIS PHASE OF THE SENAI PROJECT IS NOW READY TO PROCEED.

MANPOWER SURVEYS AND OCCUPATIONAL ANALYSES HAVE NOW BEEN REQUESTED IN THREE OTHER SENAI REGIONS:

1. SURVEY OF MANPOWER IN THE CONSTRUCTION INDUSTRY-GUANABARA AND GREATER RIO DE JANEIRO
2. SURVEY OF INDUSTRIAL MANPOWER IN BELO HORIZONTE, MINAS GERAIS
3. SURVEY OF INDUSTRIAL MANPOWER IN VITORIA, ESPIRITO SANTO

THE SURVEYS AND ANALYSES IN JUNDIAÍ AND THE ABOVE THREE INDUSTRIAL AREAS SHOULD SERVE TO ESTABLISH A SURVEY AND ANALYSIS PROCEDURE THAT CAN BE USED FOR MANPOWER SURVEYS FOR TRAINING NEEDS ANYWHERE IN BRAZIL.

ON AUGUST 22, 1967 THE SENAI PROJECT TEAM (USAID TECHNICIANS AND THEIR COUNTERPARTS) MET WITH THE SENAI REPRESENTATIVE COMMITTEE WHICH WAS APPOINTED AT THE SUGGESTION OF DR. CHARLES V. YOUMANS AND WITH THE APPROVAL OF DR. ITALO BOLOGNA BY SELECTED SENAI REGIONAL DIRECTORS. THIS COMMITTEE REPRESENTS ALL OF THE SENAI REGIONS AND HAS THE FUNCTION OF DISCUSSING AND CONSIDERING SUGGESTED PROJECTS AND CHANGES PRESENTED TO IT BY THE SENAI PROJECT TEAM. (THE ATTACHED ORGANIZATION CHARTS SHOW THE STRUCTURAL RELATIONSHIPS AND FUNCTIONS OF THIS COMMITTEE.)

A GRID OF SIXTEEN CONCERNS OF SENAI HAD BEEN PRESENTED TO DR. ITALO BOLOGNA FOR POSSIBLE PROJECT WORK OF THE SENAI PROJECT TEAM. DR. BOLOGNA REDUCED THIS NUMBER TO TEN CONCERNS THAT HE BELIEVED THAT THE PROJECT TEAM SHOULD CONCERN ITSELF WITH IN ITS WORK. THE SENAI REPRESENTATIVE COMMITTEE, AFTER CONSIDERING ALL OF THESE ITEMS SUGGESTED THE FOLLOWING WORK PRIORITIES FOR THE SENAI PROJECT TEAM:

PRIORITY I - DEVELOP A PROCEDURE FOR MAKING PERIODIC MANPOWER SURVEYS TO DETERMINE ACTUAL TRAINING NEEDS IN THE SEVERAL TYPICAL INDUSTRIAL AREAS OF BRAZIL.

PRIORITY II - HELP SENAI TO IMPLEMENT THE EMPRESA PROJECT AND ACCELERATE THE IMPLEMENTATION OF SAME.

PRIORITY III - IMPROVE THE QUALITY AND QUANTITY OF SENAI'S IN-SCHOOL TRAINING PROGRAMS.

PRIORITY IV - HELP SENAI TO ESTABLISH STANDARDS IN THE OPERATING OF SENAI SCHOOLS AND TRAINING COURSES.

PRIORITY V - HELP SENAI TO DEVELOP INSTRUCTIONAL MATERIAL AND TEACHING AIDS, INCLUDING AUDIO-VISUAL METHODS AND TECHNIQUES.

DR. BOLOGNA, DIRECTOR OF THE SENAI NATIONAL DEPARTMENT APPROVED THE FIRST THREE PRIORITIES FOR IMPLEMENTATION BY THE SENAI PROJECT TEAM. THE SENAI PROJECT TEAM IS TO ALSO MAKE ANY POSITIVE SUGGESTIONS THAT WOULD HELP SENAI TO IMPLEMENT PRIORITIES IV AND V ON A SELF-HELP BASIS.

WORK ON THE PRIORITY I PROJECT IS WELL UNDER WAY. THE JUNDIAI MANPOWER SURVEY IN SÃO PAULO SHOULD BE COMPLETE BY FEBRUARY 1, 1968. MANPOWER SURVEYS HAVE BEEN IN THE PLANNING STAGE FOR GUANABARA AND MINAS GERAIS. ONE TECHNICIAN HAS BEEN ASSIGNED FULL TIME TOWARD THE IMPLEMENTATION OF THE MANPOWER SURVEYS FOR TRAINING NEEDS. A HANDBOOK DESCRIBING THE PROCEDURES AND STEPS IN MAKING THE MANPOWER SURVEYS SHOULD BE READY BY THE END OF THE CALENDAR YEAR 1968.

TWO USAID TECHNICIANS HAVE BEEN ASSIGNED TO WORK WITH COUNTERPARTS ON THE PRIORITY II PROJECT. A PILOT PROJECT HAS BEEN PLANNED FOR SÃO PAULO TO TRY OUT A TEAM APPROACH TO IMPLEMENTING THE EMPRESA PROJECT THERE. ONE USAID TECHNICIAN IS WORKING WITH THE COORDINATOR OF THE EMPRESA PROJECT IN THE SENAI NATIONAL DEPARTMENT. HIS COUNTERPART, HOWEVER, IS THE GUANABARA TECHNICIAN RESPONSIBLE FOR EMPRESA PROJECT WORK IN THE GUANABARA REGION. A PILOT PROJECT MAY ALSO BE IMPLEMENTED IN RIO.

PARTICIPANT TRAINING WAS ALSO PLANNED AS A PART OF THE SENAI PROJECT TO UPGRADE AND INFORM SENAI PERSONNEL IN METHODS AND TECHNIQUES OF INDUSTRIAL MANPOWER TRAINING IN THE U.S.A. IN DECEMBER 1966 SENAI WAS ASKED TO NOMINATE SIX PARTICIPANTS AND THREE ALTERNATES FOR A TOUR OF VOCATIONAL SCHOOLS AND INDUSTRIAL TRAINING PROGRAMS IN THE U.S.A. ON JUNE 6, 1967 SENAI NOMINATED SEVEN TECHNICIANS FOR THE TOUR. ON OCTOBER 12, 1967 FIVE PARTICIPANTS WERE SENT ON A NINE WEEK TOUR. THE TOUR WAS INCREASED ONE WEEK TO ALLOW PARTICIPANTS TO RETURN VIA MEXICO CITY TO OBSERVE INNOVATIONS IN MANPOWER TRAINING THERE. ONE PARTICIPANT WAS UNABLE TO GO DUE TO A SURGICAL OPERATION FOR STOMACH ULCER. PARTICIPANTS RETURNED WITH AN ENTHUSIASTIC REPORT ON DECEMBER 17, 1967. A SECOND GROUP OF EIGHT PARTICIPANTS HAVE BEEN NOMINATED FOR A SIMILAR TOUR IN 1968.

ACCORDING TO SENAI STATISTICS IN THE ANNUAL REPORT OF THE SENAI NATIONAL DEPARTMENT THE GOAL OF INCREASING SENAI MANPOWER TRAINING SERVICE BY 10% PER YEAR HAS BEEN ACHIEVED FOR THE YEAR 1966

	<u>1965</u>	<u>1966</u>	<u>INCREASE</u>
NUMBER OF TRAINEES - IN SCHOOLS	55,293	65,309	18.2%
NUMBER OF TRAINEES - IN INDUSTRY	85,000	92,300	8.6%
TOTAL NUMBER OF TRAINEES (SERVED)	140,293	157,609	12.3%

IT SHOULD BE SAID HOWEVER, THAT THE NUMBER OF TRAINEES TRAINED IN INDUSTRY (WITH SOME HELP FROM SENAI) IS ESTIMATED. ALSO, ALL STATISTICS ARE IN

TERMS OF NUMBERS OF ENROLLEES (MATICULAS) FROM WHICH THERE IS A LOSS DUE TO DROP OUTS. THE DROP OUTS FROM SENAI SCHOOLS SEEMS TO BE IN THE ORDER OF 11.9%. THIS WOULD NOT CHANGE THE PERCENTAGE OF INCREASE SINCE THE LOSS DUE TO DROP OUTS WOULD APPLY TO BOTH THE YEARS 1965 AND 1966. STATISTICS FOR THE YEAR 1967 ARE NOT AVAILABLE AT THIS TIME. THE 1967 ANNUAL REPORT WILL BE PUBLISHED ABOUT MARCH 1, 1968. ONE OF THE RECOMMENDATIONS OF THE SENAI PROJECT TEAM WILL BE THAT SENAI ATTEMPT TO ESTABLISH REGULAR STATISTICAL REPORTING ON THE NUMBERS OF TRAINEES COMPLETING TRAINING IN ALL PROGRAMS THAT ARE ASSISTED BY SENAI.

USAID TECHNICIANS AND THEIR COUNTERPARTS HAVE VISITED TWENTY SENAI SCHOOLS AND TRAINING CENTERS AND ABOUT THE SAME NUMBER OF BRAZILIAN INDUSTRIAL FIRMS -- SOME OF WHICH HAVE TRAINING PROGRAMS UNDER AN AGREEMENT WITH THE SENAI NATIONAL DEPARTMENT. IT WAS DECIDED EARLY IN THE SENAI PROJECT THAT TECHNICIANS COULD NOT VISIT ALL OF THE SENAI SCHOOLS AND TRAINING CENTERS. IN ORDER TO GET DATA ON ALL SENAI OPERATIONS AND TO ALLOW ALL SCHOOLS AND TRAINING CENTERS TO PARTICIPATE A QUESTIONNAIRE SURVEY WAS SENT TO 148 TRAINING LOCATIONS -- INCLUDING BOTH SENAI SCHOOLS AND INDUSTRIAL TRAINING PROGRAMS IN SENAI ACORD PROGRAMS WITH INDUSTRY. EIGHTY SEVEN USABLE RESPONSES WERE RECEIVED AND TABULATED. FINDINGS WILL BE PUBLISHED IN THE FORM OF A REPORT TO SENAI. THIS REPORT SHOULD BE COMPLETE IN ENGLISH BY FEBRUARY 1, 1968. THE REPORT WILL INCLUDE RECOMMENDATIONS FOR CHANGES IN THE SENAI OPERATIONS AS A RESULT OF SURVEY FINDINGS AND VISITS OF THE SENAI PROJECT TEAM.

IT IS RECOMMENDED THAT THE SENAI PROJECT TEAM BE CONTINUED AT THE FOUR MAN LEVEL. THE MANPOWER SURVEY FOR TRAINING NEEDS PROCEDURE SHOULD BE COMPLETED BY THE END OF THE CALENDAR YEAR 1968. THE FOURTH MAN SHOULD BE AN INDUSTRIAL TRAINING SPECIALIST WITH SOME VOCATIONAL EDUCATION INSTITUTIONAL EXPERIENCE. THIS TYPE OF PERSON SHOULD BE ABLE TO HELP IMPLEMENT ANY OF THE PRIORITIES: II, III, IV OR V THAT HAVE BEEN ASSIGNED TO THE SENAI TEAM. THE SENAI PROJECT SHOULD BE EXTENDED TO THE END OF THE CALENDAR YEAR 1970. IF THE EXPECTED RESPONSE TO THE SENAI PROJECT IS ACHIEVED THE PROJECT SHOULD BE CONTINUED EVEN FURTHER INTO THE FUTURE. THE IMPROVEMENT OF INDUSTRIAL MANPOWER TRAINING IS ONE OF BRAZIL'S MOST CRITICAL NEEDS.


 CHARLES V. YOUMANS
 MANPOWER DEVELOPMENT ADVISOR
 SENAI PROJECT

PRINCIPAL ACCOMPLISHMENTS OF THE SENAI PROJECT TEAM

1. THE VISITING AND OBSERVING OF OVER TWENTY SENAI SCHOOLS AND TRAINING CENTERS IN OPERATION IN TWELVE SENAI REGIONS-- INCLUDING THE REGIONS OF SÃO PAULO, RIO GRANDE DO SUL, MINAS GERAIS, GUANABARA AND RIO DE JANEIRO--THE MORE HEAVILY INDUSTRIALIZED AREAS OF BRAZIL.
2. THE VISITING AND OBSERVING OF TRAINING IN TWENTY LARGE INDUSTRIAL FIRMS AND TALKING WITH THEIR GENERAL MANAGERS AND/OR TRAINING DIRECTORS ABOUT TRAINING PROBLEMS.
3. THE DISTRIBUTION OF A QUESTIONNAIRE SURVEY TO ALMOST 150 SENAI SCHOOLS AND TRAINING CENTERS AND THE TABULATION AND ANALYSIS OF THE 87 RESPONSES FROM SENAI DIRECTORS.
4. THE ESTABLISHMENT OF AN ORGANIZATIONAL COMMITTEE STRUCTURE IN SENAI TO WORK WITH THE SENAI-USAID TEAM OF TECHNICIANS.
5. THE COMPLETION OF THE FIELD WORK AND TABULATION OF THE RESULTS OF THE MANPOWER SURVEY OF TRAINING NEEDS IN JUNDIAÍ, SÃO PAULO.
6. THE PRELIMINARY PLANNING OF ADDITIONAL MANPOWER SURVEYS FOR GUANABARA, MINAS GERAIS AND ESPÍRITO SANTO.
7. THE SENDING OF FIVE BRAZILIANS AS PARTICIPANTS TO THE U. S. A. (AND RETURNING VIA MEXICO CITY) TO SEE VOCATIONAL INDUSTRIAL (BOTH SCHOOL AND INDUSTRIAL PLANT) TRAINING PROGRAMS IN OPERATION. THE PLANNING FOR ANOTHER EIGHT PARTICIPANTS TO TAKE THE TOUR IN 1968.
8. THE GATHERING OF INFORMATION AND DATA ON SIXTEEN CONCERNS OF SENAI, WHICH LED TO THE SELECTION OF THE FIVE PRIORITY PROJECTS BY SENAI FOR THE SENAI-USAID TEAM'S WORK.
9. THE ANALYSIS OF THE NECESSARY STEPS FOR SENAI TO IMPLEMENT THE "EMPRESA PROJECT," ON A PILOT PROJECT BASIS IN SÃO PAULO AND RIO DE JANEIRO (CITY).