



Item 2, Ref. B:

AIT is not being developed into a lycee or junior college. The curriculum which has been developed at AIT provides for a four-year program on the secondary level. Each school year is scheduled for 40 instruction periods each week. The instructional program consists of language, mathematics, science, social science, sports, and at least 11 hours per week in technical subjects. In fact, in the fourth year, the program provides for 28 hours in the technical sequence. The lycee school curriculum does not provide courses in the technical areas, such as auto mechanics, electricity-electronics, machine shop, sheet metal, welding, building construction and woodworking.

The 13th year at AIT is not to be considered as the first year of a junior college program. This is the fourth year of a four-year secondary education program, which is absolutely necessary in order to provide the students with sufficient in-depth skill and knowledge to meet job requirements. At present, the 14th year at AIT is not in effect.

In 1962, 60% of the AIT graduates entered the Faculty of Engineering. In 1965, 20% of the graduates were enrolled, and in 1969 the enrollment figure was reduced to 15%. In 1970, the number was further reduced to 14%. The figure of 30% cited on page 8 of the PRDP was an estimate utilizing the best figures available at the time.

In the years to come, it is anticipated that approximately 10% of the AIT graduates will enroll in the Faculty of Engineering. The main reason for this reduction is that increasing numbers of AIT graduates are finding employment. This is certainly an indication that AIT is fulfilling the purpose for which it was designed.

The comment on an engineering graduate school reflecting an increase in aspirations seems to indicate a misunderstanding. The original work program proposed and the work program of the present contract both include the paragraph:

"8. Advise and assist in the development of research and graduate teaching programs."

The Afghan staff has been thinking of a graduate program since the beginning of the present Faculty of Engineering. The University has also considered a proposal by the Polytechnic for a six-year program leading to the Master's Degree. At present the Faculty is not strong enough to initiate a graduate program, nor is it clear that the need exists. The present situation, therefore, is not an increase in aspirations but rather an acceptance of the fact that the Faculty has not developed as rapidly as originally hoped. Whether a graduate program will be appropriate 3, 5, 10 years from now is a question that will have to be periodically re-examined. It is the opinion of USET and USAID/E that a program

for re-education and continuing education of graduates may well be desirable but that this should not be at a Master's Degree level. The Mission, therefore, is requesting the AID/W Contract Office to . . . item 8 . . . the work program.

At present the Faculty of Engineering is producing approximately 60 graduates per year. If the enrollment is increased to 500 students, the number of graduates would increase to approximately 100 per year. It will be two more years (1972) before the Polytechnic produces any graduates.

According to the report, 'Manpower and Education in Afghanistan' prepared by the Ministry of Education, March 1969, there were roughly 140,000 workers employed in factories-industry, geological work, construction, transportation and communication. In these same categories, there were 100 to 140 Afghan engineers and 220 to 230 foreign engineers employed. By 1972, an increase of employment is estimated at 50,000, with an increase in the ratio of engineers to the total labor force. The number of additional engineers needed annually is approximately 200.

The real problem refers to the requirements of the various government agencies and on this point it is practically impossible to make any predictions. The only thing which can be said is that the output of the two training institutions (Faculty of Engineering and Polytechnic) is going to increase in the future, to reach by 1972 a level of about 250 per year, which seems to be high compared to the present size of the engineering force in the country. However, much of the future needs will depend on:

- a. the policy adopted with regard to the replacement of foreign engineers;
- b. the possibility of employing numbers of engineers for non-technical fields;
- c. the possibility of expanding considerably field services in public works, sanitation, etc.;
- d. the modernization of the occupational pattern in the productive sectors which would need a larger ratio of engineers to labor force;
- e. the chance to increase exploration and production of natural gas, oil, and possibly other mineral wealth.

While there have been ad hoc studies on manpower, education and statistics,\* USAID/A

- \*1. Manpower and Education in Afghanistan - Report of the Manpower Committee Education Commission - Ministry of Education, Kabul, March 1969.
2. Educational Statistics Afghanistan 1969 - Department of Planning-Directorate.

encouraged an IBRD study in these areas in 1969. The offer to make this study was not accepted by the RGA. Subsequently, at the request of the Ministry of Planning a Bureau of Census Consultant conducted a general study on means to improve the overall RGA statistical system. Subsequent work emanating from this initial effort provide projects concerning the needs for engineers, technicians and skilled workers.

Item 5, Ref. B

The increased enrollment from 400 to 500 students, as referred to in the PRDP, could probably be accomplished by the Afghans without enlarging the present facilities or increasing the number of faculty members. The overall quality of instruction would not necessarily be impaired. If the enrollment should exceed 500 students, then additional costs would be increased, and additional faculty needed.

Item 4, Ref. B

One direct-hire technician should remain after the phaseout of these projects to:

1. assist in carrying out the required participant training program for AIT and the Faculty of Engineering;
2. assist the Ministry of Education plan for the future development of these institutions;
3. assist the Ministry of Education to develop a vocational-teacher training program in conjunction with the Faculty of Education.

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