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DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20523

CAPITAL ASSISTANCE PAPER

Proposal and Recommendations  
For the Review of the  
Development Loan Committee

INDIA - HIGHER EDUCATION LOAN

AID-ILC/P-464 REVISED

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AGENCY FOR INTERNATIONAL DEVELOPMENT  
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AID-ILC/P-464 REVISED  
October 7, 1966

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: India - Higher Education Loan

Attached for your review are the revised recommendations for authorization of a loan in an amount not to exceed \$12,000,000 to the Government of India to assist in financing the foreign exchange costs of importing equipment, supplies, books and teaching aids required to upgrade India's system of scientific and technological education.

This loan proposal is scheduled for consideration by the Development Loan Staff Committee at a meeting in the near future.

Rachel C. Rogers  
Assistant Secretary  
Development Loan Committee

Attachments:  
Summary and Recommendations  
Project Analysis  
Annexes A-D  
Exhibits 1-3

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INDIA - HIGHER EDUCATION LOAN

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INDIA - HIGHER EDUCATION LOAN

SUMMARY AND RECOMMENDATIONS

1. PURPOSE: To assist the Government of India (GOI) in its efforts to improve the quality of scientific and technical\* education. Specifically, the proposed loan will finance the importation of commodities needed for education programs designed to encourage the uses of new techniques and methods in the teaching of technical education.
2. BORROWER: The GOI, with the Ministry of Education and the University Grants Commission being responsible for utilization of the loan funds.
3. AMOUNT OF LOAN: \$12.0 million; the GOI has agreed to make all Rupee funds available which are necessary to fully implement and support the commodity import program to be financed under the loan.
4. USES OF THE LOAN: The major portion of the proposed loan will provide direct support to the Summer Science Institutes and their Follow-Up Programs, which are designed to instruct teachers of the sciences and technical subjects in "new methods" of classroom and laboratory presentation. A smaller portion of the loan would be used to help meet the deficiencies which have existed for some time in the laboratories, workshops and classrooms of institutions responsible for teaching science and technology. A final segment of the loan would be for commodity support to the four Regional Teachers' Colleges being established with the assistance of an Ohio State University contract team.
5. BACKGROUND: India's system of education has experienced rapid and widespread growth as it has tried to cope with the problems of providing basic education to a significant segment of its population, which is growing at the rate of more than ten million each year. A massive attack on the problems of illiteracy and education at all levels of the system, however, is beyond the capabilities of India, and indeed the sum resources of foreign donors assisting in this field, within the period of the next decade or more. Thus, India has chosen to concentrate on those elements of the system which contribute most to the social and economic development of the country - namely, technical education at the higher and secondary levels.

\*It should be noted that throughout this Paper the term "technical education" is meant to connote the teaching of all the sciences including mathematics, engineering and applied technology.

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The Government, at both the Central and State levels and with assistance from private sources, has mounted a program to improve and expand technical education. However, it lacks the foreign exchange resources, particularly for equipment, supplies and books, required in the early years of the program. The assistance to be provided under this loan is to supply the most essential commodity needs of the institutions responsible for technical education during the first year or two of this expanded program.

6. EXIM BANK CLEARANCE: At its meeting on May 25, 1965, the Exim Bank/AID Liaison Group stated that " . . . the Bank is not prepared to consider this application at the present time."
7. VIEWS OF THE COUNTRY TEAM: The Country Team recommends approval of the loan.
8. STATUTORY CRITERIA: All statutory criteria have been met. See Annex A for details.
9. ISSUES: None.
10. RECOMMENDATIONS: It is recommended that a loan in an amount not to exceed twelve million dollars (\$12,000,000.00) be made to the Government of India for Higher Education, with the following terms and conditions:
  - a) Repayment of principal in U. S. dollars by the Government of India within forty (40) years from the date of the first disbursement under the loan, including a grace period not to exceed ten (10) years.
  - b) Payment of interest in U. S. Dollars of one percent (1%) per annum during the grace period referred to in (a) above on the outstanding principal under the loan. From and after the expiration of this grace period the Borrower shall pay interest in United States Dollars of two and one-half percent (2-1/2%) per annum on the outstanding principal under the loan.
  - c) All commodities financed under the loan shall be procured from the United States.
  - d) The Borrower shall utilize the funds only in accordance with terms and conditions satisfactory to A.I.D.

- (e) Satisfactory assurances shall be provided by the Government of India that such foreign exchange and local currency additional to that made available by this A.I.D. loan as may be necessary to fully support the Higher Education program being assisted under this loan will be made available by the Government of India.
- (f) The loan shall be subject to such terms and conditions as A.I.D. may deem advisable.

11. CAPITAL ACTIVITY COMMITTEE MEMBERS:

	<u>USAID/India</u>	<u>AID/Washington</u>
Loan Officer:	Emerson Gardner Hugh L. Dwelley	William A. Mullen Robert C. Chase
Education Advisor:	Clanton Williams	Anthony R. Lanza
Counsel:	John H. Heires	John R. Liebman
Desk:		Adele Boke

12. DRAFTING OFFICERS:

Emerson Gardner, Clanton Williams, Hugh Dwelley and Robert Chase

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I. BACKGROUND OF EDUCATION IN INDIA

A. The General System

1. Structure - The Indian education system is a massive complex, comprised of large numbers of a wide variety of institutions. Exhibit 1 categorizes the general levels of education in India and lists the types of institutions included in each category. With respect to the overall planning for, and administration of, funds to be provided under the proposed loan, the several agencies concerned, either directly or in an advisory capacity, are described as follows:

a. The Ministry of Education. Within the Ministry of Education (MOE) there is a separate division for technical education to assist in the formulation and execution of policies and programs. The division has four regional offices at Calcutta, Bombay, Kanpur and Madras, whose respective territorial coverage corresponds to that of the Regional Committee of the All-India Council for Technical Education (see c. below).

b. The University Grants Commission (UGC). This body, set up by Central Government in 1956, is concerned with the coordination of standards and development of university education as a whole. Where technical education at universities is concerned (for example post graduate courses, research, and first degree courses), the Commission acts on the advice of the All-India Council for Technical Education. This coordination has ensured a unified approach to technical education in all sectors.

c. The All-India Council for Technical Education. The organization set up by the Central Government to provide leadership in this field is the All-India Council for Technical Education, which consists of representatives of all State Governments, Ministries of the Central Government, industry, commerce, labor, professional and learned societies, universities, technical institutions, the Parliament and various other interests concerned with technical education.

d. State Boards of Technical Education. At the diploma level, institutions are under the academic controls of the State Board of Technical Education, one of which exists in each State. The State Boards include representatives of industry, commerce, universities, technical institutions and other interests concerned with technical education. The Boards prescribe courses of study, arrange for inspection of institutions from time to time, ensure and maintain proper standards, and hold examinations and award diplomas and certificates.

## 2. Growth -

All levels of the system have experienced considerable growth since the start of the Five Year Plans in 1951/52. By the end of the Third Plan, Secondary Schools numbered 22,000 - more than triple the number in 1951 - and enrollment therein had grown from 1.2 million to 5 million. These figures are impressive and represent significant and necessary progress in adjusting the education system to the growing demands of the Indian society. Yet, they also suggest that much more remains to be done in the field of general education, for by 1966 less than 32% of the children in the middle school age group will be enrolled in school; and only about 18% of the high school age and 2% of the college age population will be enrolled. \*

The Government has assigned the highest priority during the Fourth Plan to programs which have a direct relationship to production and economic development. Education, and particularly technical, science and vocational subjects, is one of these programs. One of the most significant recent efforts in the direction of improving technical education is the Summer Science Institutes and their attendant Follow-Up Programs. Briefly, these institutes have been organized to bring together, on a college or university campus, groups of science teachers during the summer vacation for the purpose of introducing them to modern teaching concepts, methods and materials. The Follow-Up Programs, in support of which the bulk of these loan funds will be used, are designed with the objective of providing the necessary supporting services - funds, commodities and professional assistance - on a continuing basis to those institutions and institute alumni who have demonstrated their capacity to reconstruct their regular academic offerings to the end that India's competence in science and technology shall be enhanced.

To achieve its goals, total projected GOI outlay for Education during the Fourth Plan period is estimated at Rs. 1,400 crores (or \$2,940 million equivalent), as compared with Rs. 557 crores (or \$1,170 million equivalent) being expended during the Third Plan period. These expenditures, which represent 9 percent and 6.8 percent respectively of total GOI outlay, demonstrate the significant and growing importance the GOI attaches to its education programs.

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\* It should be noted that actual attendance is considerably less than enrollment due to drop-outs, particularly at the younger ages.

## B. Technical Education

1. Growth - In all industrial advanced countries, technical education has received much attention because of its immediate utility in securing economic prosperity for the people and even more so because of its long range relationship to social order. As the application of science and technology to industry, agriculture, transportation and communications, public health, and other activities becomes wider and more intensive, the need for engineers and technicians of various kinds increases. The provision of technical education is at the core of these activities.

In India, too, the importance of technical education to economic development is being recognized in an increasing measure. Since independence in 1947, the country's efforts and resources have been concentrated on economic reconstruction and social advancement through successive Five Year Plans. For the execution of these Five Year Plans, which envisage an annual rate of growth in those sectors of the economy which are industry - or technology - based of about 11 percent, large numbers of scientists, engineers, and technicians are required. In order to meet these demands, the Government of India in association with the state governments, universities and private agencies has embarked on an extensive program of technical education development at all levels.

In 1950/51 there were in the country only 50 institutions for first degree courses in engineering and technology with an admission capacity of 4,119 students each year. There were also 56 polytechnics with an admission capacity of 5,903 students per year for diploma courses in engineering and technology. By the end of the Second Plan, the number of institutions for degree courses increased to 102 and for polytechnics to 195, with admission capacities of 13,800 students and 25,800 students respectively. By the end of the Third Plan, 33 new degree colleges and 75 new polytechnics had been established, in addition to an expansion of existing institutions to achieve targets in admission of 25,000 to degree courses and 50,000 to diploma courses. The following table indicates the expansion of the system of technical education as well as preliminary targets for 1970-71:

ENGINEERING SCHOOLS AND POLYTECHNICS

<u>Degree Courses</u>				<u>Diploma Courses</u>		
<u>Year</u>	<u>Number of Institutions</u>	<u>Admission Capacity</u>	<u>Output of Graduates</u>	<u>Number of Institutions</u>	<u>Admission Capacity</u>	<u>Output Diploma Holders</u>
1950/51	50	4,119	2,198	56	5,903	2,478
1960/61	102	13,800	5,703	195	25,800	7,969
1965/66	135	25,000	13,200	270	50,000	20,000
(likely achievement)						
1970/71 (target)	400	34,640	20,000	300	71,650	35,500

(Source: Ministry of Education, Technical Education Division)

This more than sevenfold increase in admission of students to technical education institutions within a period of 15 years would be an impressive achievement for any country, but especially so for India which has had to build from almost no base. Despite these gains, however, indications are that current efforts will fall short of requirements by a considerable margin. The following table, based on a recent statement by the Deputy Home Minister, illustrates the estimated shortages of technicians and engineers during the Third and Fourth Plan:

	<u>Third Plan</u>			<u>Fourth Plan</u>		
	<u>Add'l No. Required</u>	<u>Number Available</u>	<u>Shortage</u>	<u>Add'l No. Required</u>	<u>Number Available</u>	<u>Shortage</u>
Engineers	51,000	51,000	-	106,000	86,000	20,000
Technicians	100,000	82,000	18,000	193,000	114,000	79,000

A major contributing factor to the shortage of engineers and technicians is the lack of physical facilities which are properly equipped for students to learn through laboratory experience and applied technology.

2. Financing - Prior to independence, the expenditure by the Central Government and by private agencies on technical education was negligible; what meager outlay occurred was provided by the States. As the initiative in the development of technical education grew, the Central Government provided funds in an increasing measure every year, not only for its own institutions, but also for state governments and private institutions. There was corresponding increase in expenditure on the part of the state governments and private agencies. The following table indicates government financing in the past and projections for the Fourth Plan:

OUTLAY FOR TECHNICAL EDUCATION

(\$ Million Equivalent)

	<u>Central Government</u>	<u>State Government</u>	<u>Total</u>
First Plan (1950/51 - 1955/56)	24.2	18.5	42.7
Second Plan (1956/57 - 1960/61)	49.5	53.0	102.5
Third Plan (Likely Achievement) (1961/62 - 1965/66)	148.5	151.0	299.5
Fourth Plan (Target) (1966/67 - 1970/71)	306.0	235.1	541.1
Continuing Schemes	(172.5)	(125.0)	(297.5)
New Schemes	(133.5)	(110.1)	(243.6)

(Source: Ministry of Education, Technical Education Division)

3. Past U.S. Contributions to Education in India - Through June 30, 1965 A.I.D. has grant financed over \$22 million in technical assistance through contracts with American colleges and universities to improve India's scientific, engineering, and teacher training institutions. Included in this total are an A.I.D.-financed consortium

of nine American universities which is helping to establish a modern engineering institute at Kanpur, India, and a project to develop four regional colleges of education with attached multi-purpose demonstration secondary schools. In addition, A.I.D. has granted \$143 million rupee equivalent to the Government of India to support these programs and programs to improve elementary and technical education.

## II. THE BORROWER

The proposed Borrower is the GOI; the loan funds would be made available to the MOE, whose overall responsibility would be to administer the loan.

Although India's external financial condition is not good, repayment of this loan under the recommended terms and conditions is reasonably assured. No defaults on debt payment were noted when India's credit was last analyzed. India's continuing ability to service foreign debt depends in the long run on a variety of interrelated factors, including the rate of economic development of the country, the growth of exports, other foreign exchange earnings, possible adverse international developments, and the availability and terms of foreign assistance. Long term debt servicing ability depends especially on the rate of internal economic development which the Higher Education Loan is designed to promote.

## III. THE PROPOSED LOAN

### A. Need

If the substantial investment - by both India and assisting countries - in industrial development is to be sustained and fostered, the human resource factor must be bolstered, and education is the method.

Although some progress has been made, the quantitative deficiencies of India's educational system remain so vast as to defy description, and any attempt to cope with the problem via the quantitative approach is quite beyond the capacity of this Agency. For example, it has been estimated that solution of the problem area of illiteracy would require the total academic resources of the U.S. for an indeterminate number of years. However, a significant contribution can be made in the area of qualitative deficiencies, to which this proposed loan addresses itself.

These qualitative deficiencies which compound the overwhelming quantitative problems, exist largely because of archaic administrative concepts and philosophies of learning which have long been endemic to education in India. Outdated curricula, as well as instructional and examination procedures which place a high premium on memorization are perhaps the outstanding weaknesses of the system as a whole. Such weaknesses assume particular importance in the field of technical education, where laboratory experimentation and demonstration of practical application of theoretical subject matter, coupled with modern methods of classroom instruction, are of prime importance.

Therefore, in the effort to overcome these weaknesses, the obvious point of concentration is the classroom teacher, and the already existing tool is the Summer Science Institute and its Follow-Up Program.

#### B. Purpose

The proposed loan will supplement the non-project assistance provided to India by the United States. By providing needed foreign exchange confined in use to the Indian education sector, the loan will serve a useful development purpose. In addition, however, it will provide a vehicle which can be - and already has been - used to insure that the funds are spent wisely, efficiently, and in consonance with a reasonable plan for improvement of scientific and technical education.

Assistance to Indian scientific and technical education promises to yield significant returns in terms of the Indian development effort. AID's activities to date in this area already represent a significant investment of human and financial resources. This investment has been well spent, and we and the Indian Government intend to capitalize upon the success of these prior activities by undertaking an expanded program of technical assistance. This program is described briefly in Section III F below. Maximum benefits will be achieved from this program only if the material and equipment needed to demonstrate new teaching methods are available at the Summer Science Institutes. This equipment must also be available later at the schools to which Institute-trained teachers return and to those other schools which show interest in, and give promise of, adopting the new approaches to scientific and technical education.

C. Amount of Loan

The \$12 million to be provided under this loan will satisfy only the most urgent needs of the institutions which will share the benefits. The cost of equipment lists submitted by these institutions total significantly more than \$12 million. These lists are being pared down to include only items of obvious and immediate need which could not be produced locally. The various bodies of the GOI concerned, the USAID staff, and the American contract experts (e.g. Ohio State University, and university personnel working on the SSI program) are satisfied that the amount of material which can be purchased with \$12 million can make a genuine - though limited - contribution toward modernizing technical education in India, and can be administered by the organization and with the methods devised to implement this loan. The allocation of the total amount to the various educational subprograms (e.g. Summer Science Institutes, Engineering Colleges, etc.) was based on the requests of the institutions involved, the cost of equipment required for particular purposes, the status of present inventories at various institutions, and their capacity to put the material to good use.

D. Self-help efforts of the GOI

The willingness of the GOI to officially acknowledge the serious qualitative deficiencies of its educational system, and to institute a major corrective program result, partially from years of effort on the part of American education advisors and is, in itself, a major step forward. The successful execution of this program, however, will require the continued high level interest and support of the GOI. It will require increases in the numbers of teachers, expansion of physical facilities, and improvement of the quality and standards of technical education through measures such as improved teacher training, course reorganization, and major revisions in curricula. We believe the GOI's support of this program to date omens well for its continued willingness to make necessary changes.

One tangible measure of the GOI's commitment to this program is the allocation of rupees that it must, and is prepared, to provide. The \$12 million to be provided under this loan represents only a portion of the total funds needed to adequately equip the institutions to be assisted; the greater share of equipment needs will be met from indigenous sources. For example, it is currently estimated that two-thirds of the equipment needed for a new engineering college can be supplied from indigenous sources; in the case of a new polytechnic, the indigenous share is about 85 percent. Thus, as present institutions are expanded and new ones established, the heaviest financial burden will fall directly on the GOI. The Government has agreed to provide all rupee support necessary to make this project successful.

But equipment purchases comprise only one element in the total financial requirement of a program to expand and improve technical education. During the Third Plan, the total outlay on technical education was approximately \$300 million equivalent; during the Fourth Plan, the corresponding figure is expected to be approximately \$540 million equivalent, an 80% increase. In other words, the equipment which we will be financing will form a part of a broader, fully integrated, program to expand and improve the teaching of technical education.

This loan has already been useful in precipitating desirable self-help actions on the part of the GOI. Until recently, one of AID's principal reservations regarding the program had been the absence of arrangements to insure that teaching materials would be made available on a timely basis to support the work of U.S. technicians and trained Indian teachers. In the process of discussing this loan with GOI officials over the past two years, AID has insisted upon an explicit assignment of responsibilities among GOI institutions concerned with the project, and the development of adequate implementation procedures. We now feel that the GOI has taken the steps necessary to insure that loan financed materials are intelligently selected, efficiently brought to their proper user institutions, and effectively utilized. In addition, controls have been built into the implementation stage of this loan to insure that these arrangements work successfully.

#### E. Use of Loan Funds

Of the total \$12 million loan, \$4.7 million will be allocated to the University Grants Commission to be expanded through the newly-established Division of Institutes and Follow-Up, to provide equipment for the Summer Science Institutes and the Follow-Up Programs in the universities and colleges. (Approximately \$730,000 of this amount will be used to reimburse the GOI for approved expenditures made for the 1965 SSI program.)

The remaining \$7.3 million will be expended through the regular machinery of the MOE to support the Summer Science Institute Follow-Up Programs in the engineering schools, polytechnics and Regional Teachers' Colleges, and, to a lesser degree, to assist in meeting existing deficiencies in the laboratories and classrooms of these institutions. In aggregate, although an exact breakdown cannot be given, all but a small portion of this loan will be used to support the Institutes and their Follow-Up Programs.

The following summary shows the allocations being made to each phase of the program:

1. University Grants Commission	
(a) 1965 SSI's (previously approved)	\$ 730,000
(b) 1967 and 1968 SSI's	1,670,000
(c) SSI Follow-Up Programs for Universities and Colleges	<u>2,300,000</u>
Sub-Total	\$ <u>4,700,000</u>
2. Ministry of Education (inclusive of Follow-Up Support)	
(a) Secondary Schools	\$ 900,000
(b) Engineering Colleges	4,000,000
(c) Polytechnics	1,400,000
(d) Regional Teachers' Colleges	<u>1,000,000</u>
Sub-Total	\$ <u>7,300,000</u>
TOTAL	<u>\$12,000,000</u>

Further breakdown of the above allocations among the various curricula has been the subject of careful analysis by the Education Division of USAID/India and the concerned governmental bodies. They have benefitted from the expert advice of professional American consultants as well.

The commodities to be procured will be tailored to the needs of the Summer Science Institutes, the follow-up program for Institute-trained teachers to instruct according to the "new methods" in their classrooms, and the basic, standard items of equipment and supplies needed in laboratories and workshops in order to reach minimum standards.

F. Description of Activities to be Financed

1. Support to the Summer Science Institutes - \$2.4 Million

The major portion of assistance to be given under this loan will be related to the overall efforts of the U.S. and the GOI to improve standards of education through a far reaching Summer Science Institutes program. This program began during the summer of 1963

as an experiment in conducting four National Science Foundation-type summer science institutes to give in-service training to high school science teachers. It proved so successful that the GOI asked the U.S. to provide professors for 40 summer institutes and several seminars during 1964. The 1964 program, attended by a total of 2,031 teachers, included 16 institutes for high school teachers of mathematics and sciences; 16 institutes and a series of seminars for college teachers of the sciences; four institutes for engineering college faculty members; and four institutes for polytechnic faculty members.

In 1965, 94 institutes were held - 12 each in chemistry and physics, 16 in mathematics and 7 biology for secondary school teachers; and 3 in high school science education for college professors and teachers; and 8 each in engineering and polytechnics. Some 3,600 professors and teachers attended. \* In support of this program, approval was given the GOI to procure commodities valued at up to \$900,000 under AID Loan No. 386-H-103, a non-project loan. AID agreed in writing that amounts expended would be charged to this Higher Education Loan (if authorized), thereby permitting the GOI to purchase an additional \$900,000 of general (non-educational) commodities under Loan No. 386-H-103 (or a subsequent non-project loan). AID/W was notified on June 28, 1966 by the India Supply Mission that only \$730,000 of this amount was actually expended for the 1965 SSI program. For this reason, that amount of this Higher Education Loan has been charged to the SSI's.

Present Mission thinking is to conserve the considerable accomplishments of the Summer Science Institutes program by holding the maximum number of American-staffed institutions to not more than 100 for any summer, by limiting subject matter to the present list, and by depending for expansion of the program upon the rapid addition of summer institutes with all Indian instructional staffs aided for a few years to come by a small corps of American advisors.

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\* Please see Exhibit 2 for a map of the 1965 Institute program.

It was originally planned to allocate \$1.5 million of this loan to the 1966 Summer Science Institutes, but because loan funds could not be made available on a timely basis, the 1966 SSI's had to depend for equipment principally on what was left over from the 1965 program. In addition, \$45,000 in grant funds was made available for essential materials. Despite the shortage of funds, the University Grants Commission and the four university contractors to AID which set up the SSI's (Ohio State University, Teachers College of Columbia University, Houston University and the University of Wisconsin) held the same number of institutes (94) in 1966 as in 1965.

One hundred and forty institutes are planned for 1967, of which 40 institutes will be staffed solely by Indian educators. The \$1.5 million which had been previously budgeted for the 1966 SSI program (plus the \$170,000 authorized but not expended for the 1965 SSI) will be made available for the 1967 and subsequent year SSI programs. The list of equipment for the 1967 program should be ready in mid-October. Orders should be placed shortly thereafter if this equipment is to be made available at the start of the program in May of next year. For this reason, when and if this loan is authorized, we will send a letter to the GOI indicating our willingness to reimburse the Government from this loan for purchases of eligible items for the 67 program incurred after the date the loan is authorized.

During 1966-1971 Indian education will see a large measure of expansion. Whereas there are now some 87,000 teachers of the sciences and technology in secondary schools and higher education, that number in 1971 will approximate 128,000. It would be ideal if all of these teachers could be institute-trained, but this does not now appear possible. By the end of the 1965 program, approximately 6,790 or 7.8 per cent of India's 87,000 teachers of science and technology had attended a Summer Science Institute and had been trained to establish in their own classrooms and laboratories the "new approach" to the training of their disciplines. The following tables summarize this training by level and discipline:

Statistics As Of End Of 1965 SSI Program

<u>Secondary School Teachers</u>	<u>No. Institute- trained</u>	<u>Total Number</u>	<u>Percentage Institute- trained</u>
Mathematics	1,000	25,600	4
Chemistry	800	10,200	8
Biology	550	16,400	3
Physics	800	10,200	8
	<u>3,150</u>	<u>62,400</u>	<u>5</u>
 <u>College Faculty Members</u>			
Mathematics	550	5,200	11
Chemistry	550	4,100	13
Botany/Zoology	550	4,400	12
Physics	550	4,100	13
	<u>2,200</u>	<u>17,800</u>	<u>12</u>
 <u>Engineering College Faculty Members</u>			
All Divisions	720	3,700	19
 (It should be noted that in 1965 India's Engineering Colleges were only half staffed.)			
 <u>Polytechnic Faculty Members</u>			
All Divisions	720	3,400	21
 (It should be noted that in 1965 India's polytechnics were only 45 per cent staffed.)			
 GRAND TOTALS			
	<u>6,790</u>	<u>87,300</u>	<u>8</u>

By the end of U.S. assistance to the Summer Science Institute Program as presently planned (1971), these figures should increase to the following levels:

Projected Statistics as of End of 1971 Program

	<u>No. Institute- trained</u>	<u>Total Number</u>	<u>Percentage Institute- trained</u>
<u>Secondary School Teachers</u>			
Mathematics	17,700	35,000	50
Chemistry	7,800	15,000	52
Biology	11,300	22,500	50
Physics	7,800	15,000	52
	<u>44,600</u>	<u>87,500</u>	<u>51</u>
<u>College Faculty Members</u>			
Mathematics	7,800	8,300	94
Chemistry	6,200	6,900	90
Botany/Zoology	6,700	7,000	96
Physics	6,200	6,900	90
	<u>26,900</u>	<u>29,100</u>	<u>93</u>
<u>Engineering College Faculty Members</u>			
All Divisions	5,500	5,800	95
<u>Polytechnic Faculty Members</u>			
All Divisions	5,500	5,500	100
GRAND TOTAL	82,500	127,900	65

2. Summer Science Institutes Follow-Up to Colleges, Universities, and Secondary Schools \$3.2 Million

If the "new methods", which are inculcated in these teachers during the Summer Science Institutes, are to be carried back to the classrooms and laboratories, a vigorous follow-up program must be established to ensure new methods are applied and adequate teaching tools, equipment and supplies are available in institutions which have hitherto been lacking the barest essentials. Such items as books, films, projectors, laboratory equipment and the like will have to be provided to the colleges and classrooms where the graduates of the Institutes will teach if they are to effectively apply their newly acquired skills. The policies, procedures and organization necessary for such a program have evolved over the past year, and are now posed for final acceptance by A.I.D. and the GOI.

This program includes a commodity import element to be funded under this loan, in addition to the other elements of supervisors, consultants, technicians, participant training and rupee support costs to be funded from other sources. Much work has gone into development of the commodity needs for the follow-up program and the GOI and the USAID have agreed on the following allocation of the \$3,200,000 to be made available for these purposes (Note: this amount excludes follow-up for the engineering colleges and polytechnics which is discussed later):

- \$900,000 will be spent for commodity needs of the secondary schools
- \$2,300,000 will be spent for commodity needs of the science departments of universities and colleges, including the direct follow-up of the college level SSI program.

The 300-odd Indian and U.S. consultants who participated in the 1965 Summer Science Institutes, with the help of several thousand teacher participants, drew up lists of the commodities necessary for the follow-up program. These voluminous lists are now being refined and restricted to non-indigenous items needed in the various facets of the follow-up program. Compilation of the lists of equipment to be procured for each individual institution will be a continuing process throughout the year-- being dependent upon the information submitted by the consultants and participants attending the 1965 and 1966 SSI's, the knowledge already available to the UGC concerning equipment status, and further knowledge gathered during visits by American and Indian personnel working on the follow-up commodity needs for the secondary schools.

3. Support to Engineering Colleges - \$4.0 Million

There are now 135 engineering colleges in India which have long, unfilled requirements for laboratory and workshop equipment. In addition, the 1966-1967 follow-up to the Engineering Summer Science Institutes requires such items as library books, magazines and journals and teaching aids in addition to essential basic laboratory equipment. The MOE plans to spend \$4,000,000 under this loan to meet these needs.

With regard to the needs for follow-up to the Summer Science Institutes, the implementation plan is essentially the same as described for follow-up for the other SSI's. Lists of commodities needed have been prepared by the consultants who participated in the 1965 SSI program. Additional lists are currently under preparation by the MOE Technical Education Division for new colleges to be included in the 1966-1967 follow-up program.

With respect to the more general laboratory and workshop requirements of the 135 engineering colleges, commodity lists have been submitted and are periodically up-dated throughout the year based on changes in curriculum offerings, numbers of students enrolled, additions to faculty and similar matters. Eight Boards of Technical Studies, composed of eminent educators from colleges and universities, are established in the following fields: Engineering and Metallurgy, Architecture and Regional Planning, Chemical Engineering and Chemical Technology, Textile Technology, Management Studies and Research. These Boards prepare model syllabi, and lists of physical facilities required, establish teaching standards, and are concerned with the conduct of the technical education program in their respective fields. The commodity requests submitted by the engineering colleges are based on the commodities authorized by the Boards for equipping laboratories and workshops, and modifications or additions to the standard approved items must be reviewed by the Boards.

Thus far, commodity lists have been submitted to the MOE, but have not been finally screened and reduced to the \$4-million procurement level.

4. Support to Polytechnics - \$1.4 Million

Commodity procurement for the some 270 polytechnics and follow-up to the polytechnic SSI's will be handled much the same way as procurement for the engineering colleges.

Commodity requirements lists have been prepared by the polytechnics, and lists for the SSI follow-up program have been prepared by the consultants attending the 1965 SSI's. The MOE has the final task of paring down these lists to the \$1,400,000 allocated under the loan for polytechnics, and clearance is still required to separate out any indigenous items which may remain on the lists.

5. Support to Regional Teachers' Colleges - \$1.0 Million

The final segment of the loan will be used to provide commodity support to the four Regional Teachers' Colleges, which are receiving assistance from an Ohio State University (OSU) contract team. The purpose of this assistance, which has been provided by OSU since 1956, is to bring into being four Regional Teachers' Colleges of Education with attached multi-purpose schools. In three technical fields of secondary teachers' training - commerce, agriculture, and technology - the Regional Teachers' Colleges' program is unquestioned. Further, as indicated above, through the Summer Science program, the Mission already has a substantial stake in the teaching of sciences in India at the secondary level.

The U. S. assisted programs in the Regional Teachers' Colleges will shift emphasis as rapidly as possible from training teachers to training teachers of teachers. Teachers' training colleges, whose present faculties number less than 2,500 are the major sources of secondary school teachers. If the four Regional Teachers' Colleges together graduate about 2,400 teachers per year (as per present plan, subject to increase as plant, faculty and equipment develop) it is clear that this program will have a significant impact on secondary school teaching. Moreover, the impact in agriculture, commerce and technology will be even more pronounced, because other sources of supply for teachers in these new fields are almost non-existent.

\$1,000,000 (\$250,000 for each Regional Teachers' College) is to be allocated under this loan to partially satisfy existing commodity needs. Each college has prepared an initial list of laboratory, library and teaching aid needs.

#### G. Implementation of Loan Funds

All procurement and distribution will be based upon lists of equipment prepared within the University Grants Commission and the Division of Technical Education in the Ministry of Education. These lists will be the final result of the examination and pruning process described in Section F preceding.

Equipment lists for the \$3.97 million to be made available through the University Grants Commission will be prepared by the Division of Institutes and Follow-Up which was specifically established to administer the Summer Institutes and follow-up program. Equipment lists for the \$7.3 million to be made available through the Ministry of Education are being prepared by the Division of Technical Education in the MOE with, in the case of the \$1 million for regional teacher colleges, the active assistance of the team from Ohio State University.

As a condition precedent to the establishment of letters of commitment for each project activity, AID will approve the final list of goods for that activity. These lists will be in two forms: by commodity, to facilitate procurement; and by recipient institution, for purposes of distribution. These lists will be reviewed by personnel from the National Science Foundation as well as by USAID staff before procurement is authorized.

After the lists have been compiled and approved by AID, the actual mechanics of procurement and distribution will be overseen by special Procurement and Distribution Branches (see Exhibit 3) within the MOE and UGC respectively. These units have been specifically established to perform these tasks. The branches will order the equipment through the usual channels of the Ministry of Industry and Supply. The India Supply Mission in Washington (part of the Ministry of Industry and Supply) will receive copies of the equipment lists and will place the orders in the United States in the same manner as they do annually for many millions of dollars of goods purchased every year in the United States by the Government of India. The Supply Mission will specifically assign a staff member as responsible party for administering procurement under this loan. In addition, the National Science Foundation will designate a representative from its Washington office to serve as liaison to the Supply Mission, expediter, and technical consultant for special procurement problems.

Most of the equipment will be shipped to the port of Bombay where it will be consigned to the Assistant Director of Shipping (also part of the Ministry of Industry and Supply) who will sort, repackage, and transport these materials in accordance with the equipment distribution lists prepared by the MOE and UGC special procurement branches. Copies of these distribution lists will have also been made available to the USAID and to an NSF staff member specifically designated to work with the MOE and UGC procurement branches in monitoring the distribution of equipment.

Finally, the more than 200 American educators to be engaged for the 1967 SSI and Follow-Up program provide a further measure of assurance that the distribution program will be effectively implemented, and more particularly, that proper use is made of the equipment. These men will be working in regional training centers and schools throughout the country. Since the effectiveness of the new teaching approaches they are introducing will depend in part upon the availability of this equipment, these men will be closely assessing the availability and use of the equipment. The National Science Foundation will designate a member of its staff in New Delhi as contact point for problems and questions related to this equipment. In addition, the Foundation will devote a section of its regular status reports to A.I.D. to a discussion of the system established for selecting, providing, and using this equipment.

The above description indicates the general contours of the plan for administering this loan. The loan agreement will require as a condition precedent that the MOE submit a more detailed implementation plan for the procurement, shipping, warehousing, and distribution of all materials purchased. USAID officials, assisted by American educational consultants, will make periodic checks on the progress of this implementation to insure that the approved plan is being successfully executed. The Monthly Progress Reports (See Implementation Letter, Annex D) and such other reports as may be required from time to time will form the basis for monitoring this plan.

#### IV. BENEFITS TO UNITED STATES ASSISTANCE STRATEGY FOR INDIA

The U.S. Long Range Assistance Strategy for India states that U.S. objectives are (1) to support India's democratic system both for its value to the Indians and for its consistence with American values and interests, and (2) to help India become a conspicuous development success. The proposed loan to help India improve its teaching in the fields of Science and Technology serves these objectives by improving India's educational system and by helping to provide an adequate supply of technically educated and qualified personnel, which is an essential component of industrial and economic development. The shortage in India of personnel so qualified has shown up again and again as a delaying and limiting

factor to the successful completion of development projects in which the U.S. has had an interest. GOI planners estimate that there will be a short fall of more than 18,000 newly trained technicians from the Third Plan goals and of 20,000 engineers and 19,000 technicians from those required under the Fourth Plan. Beyond this, there is the matter of the quality of education to be received by those who will be trained. Without the Summer Institutes and Follow-Up Program and the equipment to be financed from the proposed loan, very few of them will have benefitted from training in the modern technological methods which are essential to modern industrial developments.

In summary, if the U.S. is to succeed in supporting Indian democracy by means of economic development, improved scientific and technological education is of high importance. Failure to so improve the availability of properly trained manpower will increase the difficulty of effectively implementing the numerous industrial projects in which the U.S. tax-payer's money is being invested. The proposed improvements to scientific and technical education are most important to the expanded rate of development for which the U.S. is working in India.

#### V. IMPACT ON U.S. ECONOMY

This loan to the GOI would benefit the U.S. economy since all funds would be expended for direct purchase of commodities from private firms in the U.S. and for transportation of at least one-half of such equipment by U.S. shipping companies.

Inasmuch as all loan funds will finance procurement only in the U.S., the short-run effect on U.S. balance-of-payments will be approximately neutral. Over the long-run, GOI repayment of the loan in dollars will favorably affect the U.S. balance-of-payments.

Competition with U.S. private enterprise will not be fostered as a result of this loan.

October 7, 1966

AID-DLC/P-464

ANNEX A

INDIA - HIGHER EDUCATION LOAN

STATUTORY CHECKLIST

1. FA Sec. 102. Precautions that have been or are being taken to assure loan proceeds are not diverted to short-term emergency purposes (such as budgetary, balance of payments, or military purposes) or any other purpose not essential to the country's long-range economic development. -- The Loan Agreement will provide that the loan funds be used only for financing the foreign exchange costs of imported commodities required to upgrade India's system of scientific and technological education.
2. FA Sec. 201(b). Manner in which loan will promote country's economic development, emphasizing help for long-range plans and programs designed to develop economic resources and increase productive capacities. -- Considered in Sections III.B & IV of this Paper.
3. FA Sec. 201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States. -- This loan is part of the U.S. share of a free world Consortium pledge to the Government of India for the Indian fiscal year 1965/66. Clearance will be obtained from the Eximbank for AID consideration.
4. FA Sec. 201(b)(2). Information and conclusion on activity's economic and technical soundness, including the capacity of the recipient country to repay the loan at a reasonable rate of interest. -- The economic and technical soundness of this proposal are considered in Sections IV, V, and VII. The capacity of the GOI to repay is considered in Section VII. It is concluded that this commodity import program is economically and technically sound and that the GOI has the capacity to repay this loan under the recommended terms and conditions.
5. FA Sec. 201(b)(3). Information and conclusion on existence of reasonable promise activity will contribute to development of economic resources or increase of productive capacities. -- Considered in Sections III.B and IV of this Paper. It is concluded that this commodity import program will contribute

The following abbreviations are used:

- FA Foreign Assistance Act of 1961, as amended by the Foreign Assistance Act of 1964 and other laws.
- App. Foreign Assistance and Related Agencies Appropriation Act, 1965.
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directly to the development of economic resources and increase of productive capacities by improving the facilities for training persons in the sciences and technology who will be available to industry.

6. FA Sec. 201(b)(4). Information and conclusion on activity's relationship to other development activities, and its contribution to realize long-range objectives. -- Considered in Section III.B. of this Paper. It is concluded that these commodity imports for educational institutions will support a broad spectrum of development activities directly and indirectly benefitting from the skills of engineers, technicians and other scientifically-trained personnel.
  7. FA Sec. 201(b)(5). Country's self-help measures, including institution of foreign Assistance Act investment guaranty programs. -- Considered in Section VII. of this Paper. An Investment Guarantee Program is in effect in India.
  8. FA Sec. 201(b)(6). Information and conclusion on possible effects on U.S. economy, with special reference to areas of substantial labor surplus. -- Considered in Section VIII of this Paper. All commodities financed under this loan will have their source and origin in the U.S., which may benefit areas of labor surplus.
  9. FA Sec. 201(b). Information and conclusion on reasonable prospects of repayment. -- Considered in Section VII of this Paper. It is concluded that repayment is reasonably assured.
  10. FA Sec. 201(d). Information and conclusion on legality (under laws of the country and the U.S.) and reasonableness of lending and relending terms. -- The funds will be lent in compliance with the laws of the U.S. and India. The lending terms are considered reasonable.
  11. FA Sec. 201(e). Information and conclusion on availability of an application together with sufficient information and assurances to indicate reasonably that funds will be used in an economically and technically sound manner. -- A joint USAID/GOI task force was established in December 1964 to consider the loan proposal. Subsequently a formal application was received from the GOI, and A.I.D. is satisfied that the funds will be used in an economically and technically sound manner. The use of the funds is described in Section V and AID approval of commodities to be procured will be one of the conditions of the Loan Agreement.
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12. FA Sec. 201(f). If a project, information and conclusion whether it will promote the economic development of the requesting country, taking into account the country's human and material resource requirements and the relationship between the ultimate objective of the project and the country's overall economic development. -- Considered in Sections III. B and IV. It is concluded that the loan will promote economic development in India.
13. FA Sec. 201(f). If a project, information and conclusion whether it specifically provides for appropriate participation by private enterprise. -- Private enterprise both in the U.S. and India would benefit from the loan.
14. FA Sec. 202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources. -- Considered in Section VIII. All funds from this loan will be used to finance imports from private sources in the U.S.
15. FA Sec. 601. Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; (f) strengthen free labor unions. -- (a) Trade will take place between the U.S. and India since all purchases financed from this loan will have their source and origin in the U.S. (b) Private initiative and competition will be fostered through the additional supply of trained engineers, technicians and vocationally-educated personnel who will be available to the private sector. (c) It is unlikely that this loan will have any direct effect on cooperatives, credit unions, and savings and loan associations. (d) It is unlikely that the loan will have any direct effect on monopolistic practices. (e) This loan will serve to improve technical efficiency of industry, agriculture and commerce by increasing the cadre of personnel trained in the sciences and technology. (f) This loan will probably have no direct effect on free labor unions.
16. FA Sec. 601(d). Conclusion and supporting information on compliance with the Congressional policy that engineering and

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professional services of U.S. firms and their affiliates are to be used in connection with capital projects to the maximum extent consistent with the national interest. -- Not applicable.

17. FA Sec. 601, 602. Information and conclusions whether loan will (a) encourage U.S. private trade and investment abroad; (b) encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise), and (c) permit American small business to participate equitably in the furnishing of goods and services financed by it. -- (a) and (b) All commodities financed under the loan will have their source and origin in the U.S. Purchases will be from private U.S. firms and transactions will take place through private trade channels. As a result of a better trained and more highly skilled work force in India, U.S. firms may be encouraged to increase their participation in Indian industrial ventures. (c) The Loan Agreement will provide arrangements to permit participation by U.S. small business.
18. FA Sec. 604(a). Compliance with restriction of commodity procurement to U.S. except as otherwise determined by the President and subject to statutory reporting requirements. -- The Loan Agreement will contain a provision covering this requirement.
19. FA Sec. 604(b). Compliance with bulk commodity procurement restriction to prices no higher than the market price prevailing in the U.S. at time of purchase. -- The Loan Agreement will contain a provision covering this requirement.
20. FA Sec. 604(d). Compliance with requirement that marine insurance be purchased on commodities if the participating country discriminates, and that such insurance be placed in the U.S. -- The Loan Agreement will contain a provision covering this requirement.
21. FA Sec. 611(a)(1). Information and conclusion on availability of engineering, financial, and other plans necessary to carry out the assistance and of a reasonably firm estimate of the cost of the assistance to the United States. -- Considered in in Sections V & VI of this Paper. Appropriate plans have been completed.

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22. FA Sec. 611(a)(2). Necessary legislative action required within recipient country and basis for reasonable anticipation such action will be completed in time to permit orderly accomplishment of purposes of loan. -- No legislative action is required within India to permit orderly accomplishment of the purposes of the loan.
  23. FA Sec. 611(b); App. Sec. 101. If water or water related land resource construction project or program, information and conclusion on benefit-cost computation. - This Section is not applicable.
  24. FA Sec. 611(c). Compliance with requirement that contracts for construction be made on competitive basis to maximum extent practicable. -- No construction contracts will be financed from this loan.
  25. FA Sec. 619. Compliance with requirement that assistance to newly independent countries be furnished through multilateral organizations or plans to maximum extent appropriate. -- This assistance is being provided as part of the U.S. share of a Consortium pledge to India which includes the International Bank for Reconstruction and Development and the International Development Association as contributors.
  26. FS Sec. 620(a); App. Sec. 107. Compliance with prohibitions against assistance to Cuba and any country (a) which furnishes assistance to Cuba or fails to take appropriate steps by February 14, 1964 to prevent ships or aircraft under its registry from carrying equipment, materials, or supplies from or to Cuba; or (b) which sells, furnishes or permits any ships under its registry from carrying items of primary strategic significance, or items of economic assistance. -- India is not in violation of this Section.
  27. FA Sec. 620(b). If assistance to the government of a country, existence of determination it is not controlled by the international Communist movement. -- India is not controlled by the international Communist movement.
  28. FA Sec. 620(c). If assistance to the government of a country, existence of indebtedness to a U.S. citizen for goods or services furnished or ordered where such citizen has exhausted available legal remedies or where the debt is not denied or contested by such government or the indebtedness arises under an unconditional guaranty of payment given by such government. -- India is not ineligible under this Section.
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29. FA Sec. 620(d). If assistance for any productive enterprise which will compete with U.S. enterprise, existence of agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan. -- Not applicable.
  30. FA Sec. 620(e). If assistance to the government of a country, extent to which it (including government agencies or sub-divisions) has, after January 1, 1962, taken steps to repudiate or nullify contracts or taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking appropriate steps to discharge its obligations. -- India is not ineligible under this Section.
  31. FA Sec. 620(f); App. Sec. 109. Compliance with prohibitions against assistance to any Communist country. -- India is not a Communist country.
  32. FA Sec. 620(g). Compliance with prohibition against use of assistance to compensate owners for expropriated or nationalized property. -- Assistance made available under the loan will not be used for such purpose.
  33. FA Sec. 620(h). Compliance with regulations and procedures adopted to insure against use of assistance in a manner which, contrary to the best interests of the U.S., promotes or assists the foreign aid projects or activities of the Communist-bloc countries. -- The Loan Agreement will contain a provision covering this requirement.
  34. FA Sec. 620(i). Existence of determination that the country is engaging in or preparing for aggressive military efforts. -- No such determination has been made.
  35. FA Sec. 620(k). If construction of productive enterprise where aggregate value of assistance to be furnished by U.S. will exceed \$100 million, identification of statutory authority. -- Not applicable.
  36. FA Sec. 620(l). Compliance with prohibition against assistance after 31 December 1965 for the government of a country which fails to institute investment guaranty program. -- India has instituted the Investment Guaranty Program.
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37. FA Sec. 636(h); 612(c). Appropriate steps that have been taken to assure that, to maximum extent possible, country is contributing local currencies to meet the cost of contractual and other services and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services. -- A provision will be included in the Loan Agreement that the GOI assures all necessary local currency funds will be made available to support this commodity import program. Such commodities will only be imported as part of a broader, fully integrated program to expand and improve the teaching of technical education at selected institutions. Although no request has been made for a U.S. contribution to local currency costs in support of this program, such costs may be financed at a subsequent date through loans under U.S.-owned PL 480 funds.
38. App. Sec. (unnumbered). Use of funds to carry out FA Sec. 205, which pertains to IDA. -- No contribution to IDA is involved in this loan.
39. App. Sec. 102. Compliance with requirement that payments in excess of \$25,000 for architectural and engineering services on any one project be reported to Congress. -- Not applicable.
40. App. Sec. 104. Compliance with bar against funds to pay pensions, etc., for military personnel. -- Loan funds will not be provided for such purposes.
41. App. Sec. 111. Compliance with requirement for security clearance of personnel under contracts for services. -- Not applicable.
42. App. Sec. 112. Compliance with requirement for approval of contractors and contract terms for capital projects. -- Not applicable.
43. App. Sec. 114. Compliance with bar against use of funds to pay assessments, etc., of U.N. member. -- Loan funds will not be provided for such purposes.
44. App. Sec. 117. Compliance with regulations on employment of U.S. and local personnel for funds obligated after 30 April 1964. -- Not applicable.
45. App. Sec. 401. Compliance with bar against use of funds for publicity or propaganda purposes within U.S. not heretofore authorized by Congress. -- Loan funds will not be provided for such purposes.

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LOAN AUTHORIZATION

Provided from Development Loan Funds

INDIA - HIGHER EDUCATION

Pursuant to the authority vested in the Administrator of the Agency for International Development (hereinafter called the "A.I.D.") by the Foreign Assistance Act of 1961, as amended, and the Delegations of Authority issued thereunder, I hereby authorize the establishment of a loan pursuant to Part I, Chapter 2, Title I, the Development Loan Fund, to the Government of India (hereinafter called the "Borrower") of not to exceed Twelve Million Dollars (\$12,000,000) to assist in financing the foreign exchange costs of importing equipment, supplies, books and teaching aids required to upgrade India's system of scientific and technological education, such loan to be subject to the following terms and conditions:

- a) Repayment of principal in U.S. dollars by the Government of India within forty (40) years from the date of the first disbursement under the loan, including a grace period not to exceed ten (10) years.
- b) Payment of interest in U.S. Dollars of one percent (1%) per annum during the grace period referred to in (a) above on all amounts of outstanding principal under the loan. From and after the expiration of this grace period the Borrower shall pay interest in United States Dollars of two and one half percent (2½%) per annum on all amounts of outstanding principal under the loan.
- c) All commodities financed under the loan shall be procured from the United States. Final plans for commodity procurement, as prepared by the Borrower in consultation with AID and AID contract personnel, will be satisfactory and acceptable to AID as a precondition of procurement.
- d) The Borrower shall relend the funds or make other financial arrangements only in accordance with terms and conditions satisfactory to A.I.D.
- e) Satisfactory assurances shall be provided by the Government of India that such foreign exchange and local currency additional to that made available by this loan and necessary to effectively administer the project will be made available by the Government of India.

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: 2 :

f) The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

\_\_\_\_\_  
Administrator

\_\_\_\_\_  
Date

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A.I.D. Loan Number

Project Number

LOAN AGREEMENT

Between the

PRESIDENT OF INDIA

and the

UNITED STATES OF AMERICA

for

INDIAN HIGHER EDUCATION

Dated:

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L O A N A G R E E M E N T Dated  
between the President of India ("Borrower") and the UNITED STATES  
OF AMERICA, acting through the AGENCY FOR INTERNATIONAL DEVELOPMENT  
("A.I.D.").

ARTICLE I

The Loan

SECTION 1.01. The Loan. A.I.D. agrees to lend to the Borrower pursuant to the Foreign Assistance Act of 1961, as amended, an amount not to exceed Twelve Million United States Dollars (\$12,000,000) ("Loan") to assist the Borrower in carrying out the Project referred to in Section 1.02 ("Project"). The Loan shall be used exclusively to finance United States dollar costs of goods and services required for the Project ("Dollar Costs"). The aggregate amount of disbursements under the Loan is hereinafter referred to as "Principal."

SECTION 1.02. The Project. The Project shall consist of the improvement of India's system of scientific and technological education by the acquisition and utilization of modern equipment, supplies, books and teaching aids for the following activities:

(a.) Centers at which secondary school, polytechnic and college teachers of science, mathematics and engineering receive summer training in new techniques and developments in their fields ("Summer Science Institutes").

( b.) A program providing commodity, participant training, supervisory, and other support to insure effective application in secondary schools, polytechnics, engineering and other colleges and universities of new techniques and developments taught at Summer Science Institutes ("Summer Science Institutes Follow-Up Program").

( c.) The four educational institutions designed to train teachers for multipurpose secondary schools and presently receiving technical assistance from Ohio State University ("Regional Teachers' Colleges").

( d.) Certain of the approximately 135 educational institutions in India providing training in engineering and related fields ("Engineering Colleges").

( e.) Certain of the approximately 283 educational institutions in India providing training in technical arts and applied sciences ("Polytechnics").

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ARTICLE II

Loan Terms

SECTION 2.01. Interest. The Borrower shall pay to A.I.D. interest which shall accrue at the rate of one percent (1%) per annum for ten years following the date of the first disbursement hereunder and at the rate of two and one-half percent ( $2\frac{1}{2}\%$ ) per annum thereafter on the outstanding balance of Principal and on any due and unpaid interest. Interest on the outstanding balance shall accrue from the date of each respective disbursement (as such date is defined in Section 7.04), and shall be computed on the basis of a 365-day year. Interest shall be payable semi-annually. The first payment of interest shall be due and payable no later than six (6) months after the first disbursement hereunder, on a date to be specified by A.I.D.

SECTION 2.02. Repayment. The Borrower shall repay the Principal to A.I.D. within forty (40) years from the date of the first disbursement hereunder in sixty-one (61) approximately equal semi-annual installments of principal and interest. The first installment of Principal shall be payable nine and one-half ( $9\frac{1}{2}$ ) years after the date on which the first interest payment is due in accordance with Section 2.01. A.I.D. shall provide the Borrower with an amortization schedule in accordance with this Section after the final disbursement under the Loan.

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SECTION 2.03. Application, Currency and Place of Payment.

All payments of interest and Principal hereunder shall be made in United States dollars and shall be applied first to the payment of interest due and then to the repayment of Principal. Except as A.I.D. may otherwise specify in writing, all such payments shall be made to the Controller, Agency for International Development, Washington, D. C., U.S.A., and shall be deemed made when received by the Office of the Controller.

SECTION 2.04. Prepayment. Upon payment of all interest and refunds then due, the Borrower may prepay, without penalty, all or any part of the Principal. Any such prepayment shall be applied to the installments of Principal in the inverse order of their maturity.

SECTION 2.05. Renegotiation of the Terms of the Loan. The Borrower agrees to negotiate with A.I.D., at such time or times as A.I.D. may request, an acceleration of the repayment of the Loan in the event that there is any significant improvement in the internal and external economic and financial position and prospects of the country of the Borrower.

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ARTICLE III

Conditions Precedent to Disbursement

SECTION 3.01. Conditions Precedent to Initial Disbursement.

Prior to any disbursement or to the issuance of any Letter of Commitment under the Loan, the Borrower shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

( a.) An opinion of the Attorney-General of India or of other counsel acceptable to A.I.D. that this Agreement has been duly authorized or ratified by, and executed on behalf of, the Borrower, and that it constitutes a valid and legally binding obligation of the Borrower in accordance with all of its terms;

(b.) A statement of the names of the persons holding or acting in the office of the Borrower specified in Section 9.02, and a specimen signature of each person specified in such statement;

( c.) Evidence of the financing plans and arrangements made by Borrower concerning the availability of funds required to finance the project.

( d.) An implementation plan describing the means and techniques to be employed in procurement, shipping, warehousing and distributing the Eligible Items.

( e.) For each project activity, as defined in Section 1.02, a list of the equipment to be provided each recipient institution and the same equipment list segregated by commodity for purposes

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of procurement. These lists will be subject to approval by A.I.D. It is understood, however, that delay or failure in satisfying this condition for any one project activity will not prevent the issuance of letters of commitment or actions to effect reimbursement for any other activity.

(f) Such other conditions as A.I.D., from time to time, prior to the final disbursement of the Loan, may reasonable require.

SECTION 3.02. Terminal Dates for Meeting Conditions Precedent to Disbursement.

(a) Except as A.I.D. may otherwise agree in writing, if all of the conditions specified in Section 3.01(a) through (d) shall not have been met within ninety (90) days from the date of this Agreement, or if Section 3.01(e) has not been met for all project activities within six (6) months of the date of this Agreement, A.I.D. at its option may cancel the then undisbursed balance of the amount of the loan and may terminate this Agreement by giving written notice to the Borrower. Upon the giving of such notice, this Agreement and all obligations of the parties thereunder shall terminate. In the event of a termination, upon the giving of notice, the Borrower shall immediately repay the Principal then outstanding and shall pay any accrued interest and, upon receipt of such payments in full, this Agreement and all obligations of the parties hereunder shall terminate.

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SECTION 3.03. Notification of Meeting of Conditions Precedent to Disbursement. A.I.D. shall notify the Borrower upon determination by A.I.D. that the conditions precedent to disbursement have been met.

ARTICLE IV

General Covenants and Warranties

SECTION 4.01. Execution of the Project.

(a.) The Borrower shall carry out the Project with due diligence and efficiency, and in conformity with sound financial, administrative, technical and planning practices and in conformity with procurement arrangements, plans and contracts with procurement agents approved by A.I.D. Borrower shall obtain A.I.D. concurrence prior to any material modification or cancellation of any such practices, arrangements or contracts.

(b.) The Borrower shall adequately maintain, repair and operate in accordance with sound practices, all goods procured with Loan funds and any construction or facility resulting from or associated with the use of such goods, including a construction or facility on which such goods are used ("Project Facility").

SECTION 4.02. Funds and Resources to be Provided by Borrower.

The Borrower shall provide promptly as needed all funds, in addition to the Loan, and all other resources required for the punctual and effective carrying out of the project.

SECTION 4.03. Continuing Consultation. The Borrower and

A.I.D. shall cooperate fully to assure that the purpose of the Loan will be accomplished. To this end, the Borrower and A.I.D. shall from time to time, at the request of either party, exchange views through their representatives with regard to the progress of the

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of the Project, the performance by the Borrower of its obligations under this Agreement, the performance of the consultants, contractors and suppliers engaged on the Project, and other matters relating to the Project.

SECTION 4.04. Management. The Borrower shall provide qualified and experienced management for the Project and it shall train such staff as may be appropriate for the maintenance and operation of the Project.

SECTION 4.05. Taxation. This Agreement, the amount agreed to be lent hereunder, and any evidences of indebtedness issued in connection herewith shall be free from, and the Principal and interest shall be paid without deduction for and free from, any taxation or fees imposed under the laws in effect within the country of the Borrower.

SECTION 4.06. Utilization of Goods and Services.

( a ) Goods and services financed under the Loan shall be used exclusively for the Project, except as A.I.D. may otherwise agree in writing. Upon completion of the Project, or at such other time as goods financed under the Loan can no longer usefully be employed for the Project, the Borrower may use or dispose of such goods in such manner as A.I.D. may agree to in writing prior to such use or disposition.

( b ) Except as A.I.D. may otherwise agree in writing, no goods or services financed under the Loan shall be used to promote or assist any foreign aid project or activity associated with or

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financed by any country not included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time of such use.

SECTION 4.07. Disclosure of Material Facts and Circumstances.

Borrower represents and warrants that all facts and circumstances that it has disclosed to A.I.D. in the course of obtaining the Loan are accurate and complete, and that it has disclosed to A.I.D., accurately and completely, all facts and circumstances that might materially affect the Project and the discharge of its obligations under this Agreement. The Borrower shall promptly inform A.I.D. of any facts and circumstances that may hereafter arise that might materially affect, or that it is reasonable to believe might materially affect, the Project or the discharge of the Borrower's obligations under this Agreement.

SECTION 4.08. Commissions, Fees and Other Payments.

( a ) Borrower warrants and covenants that in connection with obtaining the Loan, or taking any action under or with respect to this Agreement, it has not paid, and will not pay or agree to pay, nor to the best of its knowledge has there been paid nor will there be paid or agreed to be paid by any other person or entity, commissions, fees or other payments of any kind, except as regular compensation to the Borrower's full time officers and employees or as compensation for bona fide professional, technical or comparable services. The Borrower shall promptly report to A.I.D. any payment or agreement to pay for such bona fide professional, technical or comparable

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services to which it is a party or of which it has knowledge (indicating whether such payment has been made or is to be made on a contingent basis), and if the amount of any such payment is deemed unreasonable by A.I.D., the same shall be adjusted in a manner satisfactory to A.I.D.

( b ) The Borrower covenants that no payments have been or will be received by the Borrower, or any official of the Borrower, in connection with the procurement of goods and services financed hereunder, except fees, taxes or similar payments legally established in the country of the Borrower.

SECTION 4.09. Maintenance and Audit of Records. The Borrower shall maintain, or cause to be maintained, in accordance with sound accounting principles and practices consistently applied, books and records relating both to the Project and to this Agreement. Such books and records shall, without limitation, be adequate to show:

( a.) The receipt and use made of goods and services acquired with funds disbursed pursuant to this Agreement.

( b.) The nature and extent of solicitations of prospective suppliers of goods and services acquired.

( c.) The basis of the award of contracts and orders to successful bidders.

( d.) The progress of the Project.

Such books and records shall be regularly audited, in accordance with sound auditing standards, for such period and at such intervals

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as A.I.D. may require, and shall be maintained for five years after the date of the last disbursement by A.I.D. or until all sums due A.I.D. under this Agreement have been paid, whichever date shall first occur.

SECTION 4.10. Reports. The Borrower shall furnish to A.I.D. such information and reports relating to the Loan and to the Project as A.I.D. may request.

SECTION 4.11. Inspections. The authorized representatives of A.I.D. shall have the right at all reasonable times to inspect the Project, the utilization of all goods and services financed under the Loan, and the Borrower's books, records and other documents relating to the Project and the Loan. The Borrower shall cooperate with A.I.D. to facilitate such inspections and shall permit representatives of A.I.D. to visit any part of the country of the Borrower for any purpose relating to the Loan.

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ARTICLE V

Special Covenants and Warranties

SECTION 5.01. Utilization of Loan Proceeds. Except as A.I.D. may otherwise agree in writing, the Loan or the loan proceeds shall be utilized only in accordance with the following approximate allocations:

- ( a. ) Seven Hundred and Thirty Thousand Dollars (\$730,000) to finance Eligible Items for the 1965 Summer Science Institutes.
- ( b. ) One Million Six Hundred and Seventy Thousand Dollars (\$1,670,000) to finance Eligible Items for the 1967 and subsequent Summer Science Institutes.
- ( c. ) One Million Dollars (\$1,000,000) to finance Eligible Items for Regional Teachers' Colleges.
- ( d. ) Two Million Three Hundred Thousand Dollars (\$2,300,000) to finance Eligible Items for the Summer Science Institutes Follow-Up Program for colleges and universities.
- ( e. ) Nine Hundred Thousand Dollars (\$900,000) to finance Eligible Items for the Summer Science Institutes Follow-Up Program for secondary schools.
- ( f. ) Five Million Four Hundred Thousand Dollars (\$5,400,000) to finance Eligible Items for Engineering Colleges and Polytechnics.

SECTION 5.02. Flexibility in Allocation of Loan Proceeds. Actual disbursements may exceed these allocations by up to twenty percent of the above estimated figures so long as the total amount of the loan is not thereby exceeded.

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ARTICLE VI

Procurement

SECTION 6.01. Procurement from the United States. Except as A.I.D. may otherwise agree in writing, disbursements made pursuant to Section 7.01 shall be used exclusively to finance the procurement for the Project of goods and services, including ocean shipping and marine insurance, having both their source and origin in the United States of America.

SECTION 6.02. Eligibility Date. Except for the items procured for the 1965 Summer Science Institute, and items procured for the 1967 Summer Science Institute pursuant to Mr.

letter to

of

and otherwise as AID may agree in writing, no goods may be financed under the Loan which are procured pursuant to orders or contracts firmly placed or entered into prior to the date of this Agreement.

SECTION 6.03. Goods and Services Not Financed Under Loan. Goods and services procured for the Project, but not financed under the Loan, shall have their source and origin in countries included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time orders are placed for such goods and services.

SECTION 6.04. Implementation of Procurement Requirements. The definitions applicable to the eligibility requirements of Sections 6.01,

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6.02, and 6.03 will be set forth in detail in Implementation Letters submitted pursuant to Section 9.03 of this Agreement.

SECTION 6.05. Plans, Specifications and Contracts.

(a) Whenever A.I.D. so directs in writing, the Borrower shall furnish to A.I.D., promptly upon preparation, bid documents and contracts relating to the Project, and any modifications therein, whether or not the goods to which they relate are financed under the Loan.

(b) Except as A.I.D. may otherwise agree in writing, all of the Bid documents and Contracts financed pursuant to subsection (a) above, which A.I.D. has specifically requested be furnished, shall be approved by A.I.D. in writing.

(c) A.I.D. shall approve in writing before their issuance all bid documents relating to goods financed under the loan which A.I.D. may specifically request in writing. All documents relating to goods financed under the Loan shall be in terms of United States standards and measurements, except as A.I.D. may otherwise agree in writing.

(d) A.I.D. shall approve in writing all contracts for equipment and material as A.I.D. may specify, prior to their execution. Material modifications in any of such contracts and changes in any of such personnel shall also be approved by A.I.D. in writing prior to their becoming effective.

SECTION 6.06. Reasonable Price. No more than reasonable prices shall be paid for any goods financed, in whole or in part, under the Loan. Such items shall be procured on a fair and on a competitive basis in accordance with procedures therefor prescribed in Implementation Letters.

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SECTION 6.07. Shipping and Insurance.

(a) Goods procured from the United States and financed under the Loan shall be transported to the country of the Borrower on flag carriers of any country included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time of shipment.

(b) At least fifty percent (50%) of the gross tonnage of all goods procured from the United States and financed under the Loan (computed separately for dry bulk carriers, dry cargo liners and tankers) which shall be transported on ocean vessels shall be transported on privately-owned United States-flag commercial vessels unless A.I.D. shall determine that such vessels are not available at fair and reasonable rates for United States flag commercial vessels. No such goods may be transported on any ocean vessel (or aircraft) (i) which A.I.D., in a notice to the Borrower, has designated as ineligible to carry A.I.D.-financed goods or (ii) which has been chartered for the carriage of A.I.D.-financed goods unless such charter has been approved by A.I.D.

(c) If in connection with the placement of marine insurance on shipments financed under United States legislation authorizing assistance to other nations, the country of the Borrower, by statute, decree, rule or regulation, favors any marine insurance company of any country over any marine insurance company authorized to do business in any state of the United States of America, goods procured from the United States and financed under the Loan shall during the continuance of such discrimination be insured against marine risk in the United States of America with a company or companies authorized to do a marine insurance business in any state of the United States of America.

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(d) The Borrower shall insure, or cause to be insured, all goods procured in the United States and financed under the Loan against risks incident to their transit to the point of their use in the Project. Such insurance shall be issued upon terms and conditions consistent with sound commercial practice, shall insure the full value of the goods, and shall be payable in the currency in which such goods were financed. Any indemnification received by the Borrower under such insurance shall be used to replace or repair any material damage or any loss of goods insured or shall be used to reimburse the Borrower for the replacement or repair of such goods. Any such replacements shall be of United States source and origin and otherwise subject to the provisions of this Agreement.

SECTION 6.08. Notification to Potential Suppliers. In order that all United States firms shall have the opportunity to participate in furnishing goods and services to be financed under the Loan, the Borrower shall furnish to A.I.D. such information with regard thereto, and at such times, as A.I.D. may request in Implementation Letters.

SECTION 6.09. United States Government-Owned Excess Property. The Borrower shall utilize, with respect to goods financed under the Loan to which the Borrower takes title at the time of procurement, such reconditioned United States Government-Owned Excess Property as may be consistent with the requirements of the Project and as may be available with a reasonable period of time. The Borrower shall seek assistance from A.I.D. and A.I.D. will assist the Borrower in ascertaining the availability of and in obtaining such Excess Property. A.I.D. will

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make arrangements for any necessary inspection of such property by the Borrower or its representative. The costs of inspection and of acquisition, and all charges incident to the transfer to the Borrower of such Excess Property, may be financed under the Loan. Prior to the procurement of any goods, other than Excess Property, financed under the Loan and after having sought such A.I.D. assistance, the Borrower shall indicate to A.I.D. in writing, on the basis of information then available to it, either that such goods cannot be made available from reconditioned United States Government-Owned Excess Property on a timely basis or that the goods that can be made available are not technically suitable for use in the Project.

SECTION 6.10. Information and Marking. Borrower shall give publicity to the Loan and the Project as a program of United States aid and shall mark goods financed under the loan as prescribed in Implementation Letters.

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ARTICLE VII

Disbursements

SECTION 7.01. Disbursements for United States Dollar Costs - Letters of Commitment to United States Banks. Upon satisfaction of conditions precedent, the Borrower may, from time to time, request A.I.D. to issue Letters of Commitment for specified amounts to one or more United States banks, satisfactory of A I D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, through the use of letters of credit or otherwise, for Dollar Costs of goods and services procured for the Project in accordance with the terms and conditions of this Agreement. Payment by a bank to a contractor or supplier will be made by the bank upon presentation of such supporting documentation as A.I D may prescribe in Implementation Letters Banking charges incurred in connection with Letters of Commitment and Letters of Credit shall be for the account of the Borrower and may be financed under the Loan.

SECTION 7 02. Other Forms of Disbursement. Disbursements of the Loan may also be made through such other means as the Borrower and A.I.D., from time to time, may agree to in writing.

SECTION 7.03. Date of Disbursement. Disbursements by A.I.D. shall be deemed to occur on the date on which A.I.D. makes a disbursement to the Borrower, to its designee, or to a banking institution pursuant to a Letter of Commitment.

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SECTION 7.04. Terminal Date for Disbursement. Except as A.I.D. may otherwise agree in writing, no Letter of Commitment or amendment thereto shall be issued in response to requests received by A.I.D. after \_\_\_\_\_, and no disbursement shall be made against documentation received by A.I.D. or any bank described in Section 7.01 after \_\_\_\_\_. A.I.D., at its option, may at any time or times after \_\_\_\_\_, reduce the Loan by all or any part thereof for which documentation was not received by such date.

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ARTICLE VIII

Cancellation and Suspension

SECTION 8.01. Cancellation by the Borrower. The Borrower may, with the prior written consent of A.I.D., by written notice to A.I.D., cancel any part of the Loan (i) which, prior to the giving of such notice, A.I.D. has not disbursed or committed itself to disburse or (ii) which has not then been utilized through the issuance of irrevocable Letters of Credit or through bank payments made other than under irrevocable Letters of Credit.

SECTION 8.02. Events of Default; Acceleration. If any one or more of the following events ("Events of Default") shall occur:

- (a) The Borrower shall have failed to pay when due any interest or installment of Principal required under this Agreement;
- (b) The Borrower shall have failed to comply with any other provision of this Agreement, including, but without limitation, the obligation to carry out the Project with due diligence and efficiency;
- (c) The Borrower shall have failed to pay when due any interest or any installment of principal or any other payment required under any other loan agreement, any guaranty agreement, or any other agreement between the Borrower or any of its agencies and A.I.D. or any of its predecessor agencies,

then A.I.D. may, at its option, give to the Borrower notice that all or any part of the unrepaid Principal shall be due and payable sixty (60) days thereafter, and, unless the Event of Default is cured within such sixty (60) days:

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- (i) such unrepaid Principal and any accrued interest hereunder shall be due and payable immediately, and
- (ii) the amount of any further disbursements made under then outstanding irrevocable Letters of Credit or otherwise shall become due and payable as soon as made.

SECTION 8.03. Suspension of Disbursements. In the event that at any time:

- (a) An Event of Default has occurred;
- (b) An event occurs that A.I.D. determines to be an extraordinary situation that makes it improbable either that the purpose of the Loan will be attained or that the Borrower will be able to perform its obligations under this Agreement;
- (c) Any disbursement would be in violation of the legislation governing A.I.D., or;
- (d) The Borrower shall have failed to pay when due any interest or any installment of principal or any other payment required under any other loan agreement, any guaranty agreement or any other agreement between the Borrower or any of its agencies and the Government of the United States or any of its agencies.

then A.I.D. may, at its option:

- (i) Suspend or cancel outstanding commitment documents to the extent that they have not been utilized through the

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issuance of irrevocable Letters of Credit or through bank payments made other than under irrevocable Letters of Credit, in which event A.I.D. shall give notice to the Borrower promptly thereafter,

- (ii) Decline to make disbursements other than under outstanding commitment documents,
- (iii) Decline to issue additional commitment documents, and
- (iv) At A.I.D.'s expense, direct that title to goods financed under the Loan shall be transferred to A.I.D. if the goods are from a source outside the country of the Borrower, are in a deliverable state and have not been offloaded in ports of entry of the country of the Borrower. Any disbursement made or to be made under the Loan with respect to such transferred goods shall be deducted from Principal.

SECTION 8.04. Cancellation by A.I.D. Following any suspension of disbursements pursuant to Section 8.03, if the cause or causes for such suspension of disbursements shall not have been eliminated or corrected within sixty (60) days from the date of such suspension, A.I.D. may, at its option, at any time or times thereafter, cancel all or any part of the Loan that is not then either disbursed or subject to irrevocable Letters of Credit.

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SECTION 8.05. Continued Effectiveness of Agreement. Notwithstanding any cancellation, suspension of disbursement or acceleration of repayment, the provision of this Agreement shall continue in full force and effect until all Principal and accrued interest due and owing to A.I.D. pursuant to this Loan Agreement have been paid in full.

SECTION 8.06. Refunds.

(a) In the case of any disbursement not supported by valid documentation in accordance with the terms of this Agreement, or of any disbursement not made or used in accordance with the terms of this Agreement, A.I.D., notwithstanding the availability or exercise of any of the other remedies provided for under this Agreement, may require the Borrower to refund such amount in United States dollars to A.I.D. within thirty days after receipt of a request therefor. Such amounts shall be made available first for the cost of goods and services procured for the Project hereunder, to the extent justified; the remainder, if any, shall be applied to the installments of Principal in the inverse order of their maturity. Notwithstanding any other provision in this Agreement A.I.D.'s right to require a refund with respect to any disbursement under the Loan shall continue for five years following the date of such disbursement.

(b) In the event that A.I.D. receives a refund from any contractor, supplier, or banking institution, or from any other third party connected with the Loan, with respect to goods or services financed under the Loan,

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and such refund relates to an unreasonable price for goods or services, or to goods that did not conform with specifications, or to services that were inadequate, A.I.D. shall first make such refund available for the cost of goods and services procured for the Project hereunder, to the extent justified, the remainder to be applied to the installments of Principal in the inverse order of their maturity.

SECTION 8.07. Expenses of Collection. All reasonable costs incurred by A.I.D., other than salaries of its staff, in connection with the collection of any refund or in connection with amounts due A.I.D. by reason of the occurrence of any of the events specified in Section 8.02 may be charged to the Borrower and reimbursed to A.I.D. in such manner as A.I.D. may specify.

SECTION 8.08. Non-Waiver of Remedies. No delay in exercising or omission to exercise any right, power, or remedy accruing to A.I.D. under this Agreement shall be construed as a waiver of any of such rights, powers or remedies.

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ARTICLE IX

Miscellaneous

SECTION 9.01. Communications. Any notice, request, document or other communication given, made or sent by the Borrower or A.I.D. pursuant to this Agreement shall be in writing or by telegram, cable or radiogram and shall be deemed to have been duly given, made or sent to the party to which it is addressed when it shall be delivered to such party by hand or by mail, telegram, cable or radiogram at the following addresses:

TO BORROWER:

Mail Address: Secretary to the Government of India  
Ministry of Finance  
Department of Economic Affairs  
New Delhi, India

Cable Address: ECOFAIRS  
New Delhi, India

TO AID:

Mail Address: Development Loan Division  
USAID/New Delhi  
c/o American Embassy  
New Delhi, India

Cable Address: USAID/New Delhi  
c/o American Embassy  
New Delhi, India

Borrower, in addition, shall provide the USAID Mission in the country of the Borrower with a copy of each communication sent to A.I.D. Other addresses may be substituted for the above upon the giving of notice. All notices, requests, communications and documents submitted to A.I.D. hereunder shall be in English, except as A.I.D. may otherwise agree in writing.

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SECTION 9.02. Representatives. For all purposes relative to this Agreement, the Borrower will be represented by the individual holding or acting in the office of Joint Secretary to the Government of India, Ministry of Finance, Department of Economic Affairs and A.I.D. will be represented by the individual holding or acting in the office of Assistant Administrator or Deputy Assistant Administrator, Bureau for Near East and South Asia. Such individuals shall have the authority to designate by written notice additional representatives. In the event of any replacement or other designation of a representative hereunder, Borrower shall submit a statement of the representative's name and specimen signature in form and substance satisfactory to A.I.D. Until receipt by A.I.D. of written notice of revocation of the authority of any of the duly authorized representatives of the Borrower designated pursuant to this Section, it may accept the signature of any such representative or representatives as conclusive evidence that any action effected by such instrument is duly authorized.

SECTION 9.03. Implementation Letters. A.I.D. shall from time to time issue Implementation Letters that will prescribe the procedures applicable hereunder in connection with the implementation of this Agreement.

SECTION 9.04. Promissory Notes. At such time or times as A.I.D. may request, the Borrower shall issue promissory notes or such other evidences of indebtedness with respect to the Loan, in such form, containing such terms and supported by such legal opinions as A.I.D. may reasonably request.

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SECTION 9.05. Termination Upon Full Payment. Upon payment in full of the Principal and of any accrued interest, this Agreement and all obligations of the Borrower and A.I.D. under this Loan Agreement shall terminate.

IN WITNESS WHEREOF, Borrower and the United States of America, each acting through its respective duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the date and year first above written.

PRESIDENT OF INDIA

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

UNITED STATES OF AMERICA

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

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ANNEX D

Draft Revised:

Secretary to the Government of India  
Department of Economic Affairs  
Ministry of Finance  
Government of India  
New Delhi

Dear Sir:

Subject: A.I.D. Loan No. 386-H-  
Higher Education Loan  
Implementation Letter No. 1

This letter sets forth the procedures for using the proceeds of the loan for Higher Education and provides information to assist you in implementing the project in accordance with the Loan Agreement. Nothing in this letter or its attachments alters the scope of the Loan Agreement or the terms of the specific sections that are referred to or explained.

Instructions and explanations in this Implementation Letter and the attachments may be supplemented or modified by subsequent Implementation Letters as necessary from time to time.

I. General Conditions Precedent.

A.I.D., at the Borrower's request, will issue letters of commitment and will authorize reimbursement under the loan to finance expenditures for Eligible Items subject to satisfaction of the following conditions precedent:

A. Legal Opinion. This opinion is required by Section 3.01(a) of the Loan Agreement. Attachment A will serve as a guide in preparing this opinion which should be submitted to the Regional Legal Advisor, USAID Mission, New Delhi, for his review and approval.

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B. Representatives. Pursuant to Section 3.01(b) and Section 9.02 of the Loan Agreement, you should submit evidence of the authority of the representatives of the Government of India.

C. Availability of Funds. Pursuant to Section 3.01(c) of the Loan Agreement, you should provide a statement or statements evidencing arrangements satisfactory to A.I.D. of the availability of funds necessary to finance all components of the project. This evidence should include:

- (a) A Schedule setting forth the estimated Indian rupee funds to be made available in support of this project, broken down by the general categories of the loan.
- (b) A statement of the budgetary arrangements made at the institutional, State and Central levels to provide both dollar amounts made available under this loan and supporting rupee costs. This statement should indicate the amount sanctioned for the project for the current fiscal year.

D. Project Implementation Plan. Pursuant to Section 3.01(d) of the Loan Agreement, you should provide evidence of the plans and techniques for procuring, shipping, warehousing and distributing Eligible Items, including information as to administration, methods and techniques to be employed in procurement and the opening of letters of credit. You should also submit a timetable for the procurement, shipping, and in-country distribution of all equipment,

E. Equipment Lists. Pursuant to Section 3.01(e) of the Loan Agreement, you should provide for A.I.D.'s approval lists of the equipment which will be purchased under this loan. Two separate lists of material should be submitted for each project activity, one which groups commodities by units of purchase, and another which designates the institutions receiving these goods. As provided in Section 3.01(e), however, it is understood that satisfaction of this condition is not prerequisite to A.I.D.'s authorization of reimbursement of issuance of letters of commitment relating to other activities under the loan.

## II. Terminal Date for Fulfillment of Conditions Precedent.

Pursuant to Section 3.02 of the Loan Agreement, the conditions set forth in Section 3.01(a) through (d) of the Agreement should be satisfied within ninety (90) days after the date of the Agreement

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and the condition set forth in Section 3.01(e) should be satisfied for all project activities within six (6) months after the date of the Agreement. Except as A.I.D. may otherwise agree in writing, if any of the conditions precedent in Section 3.01 remain unfulfilled after the pertinent Terminal Date has elapsed, A.I.D. may at its option terminate the Agreement by written notice to the Borrower.

### III. Financing Procedures and Documentation.

The procedures for requesting disbursement and the documentation required by A.I.D. as a basis for disbursement of loan funds, pursuant to Article VII of the Loan Agreement, are described in Attachment B for disbursement under Letters of Commitment. All requests for disbursement under the Loan should be submitted to the Agency for International Development, Washington, D. C., U.S.A., 20523, Attention: C/FRD.

Upon satisfaction of conditions precedent 3.01(a) through (d) A.I.D. will effect the transfer from this loan to such A.I.D. non-project loan(s) as your Government may specify amounts expended on behalf of the 1965 Summer Science Institute pursuant to A.I.D.'s letter to the Government of India dated December 7, 1964 regarding this matter.

Upon satisfaction of conditions precedent 3.01(a) through (d) and 3.01(e) as it applies to this project activity, A.I.D. will reimburse the Government of India for expenditures incurred subsequent to \_\_\_\_\_ for goods to be used for the 1967 and subsequent Summer Science Institutes.

### IV. Procurement.

A. Small Business Notification. Information on procurement must be made available to the A.I.D. so that it may be disseminated to interested U.S. suppliers, as required by Section 100.4 of the Standard Provisions Annex to the Loan Agreement. Procedures to be followed in complying with this requirement, unless a specified waiver in writing is granted by A.I.D., are described in Attachment C.

B. Eligible Sources of Procurement. With respect to Section 100.1 of the Loan Agreement, goods are considered to be of United States source and origin when:

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1. Such goods are shipped from a United States port, or from a free port or bonded warehouse if shipped from said port or bonded warehouse in the form in which received when shipped there from a United States port;
2. Such goods are mined, grown, or produced through manufacturing, processing, or assembly in the United States;
3. Not more than 10 percent of the lowest price (excluding ocean transportation and marine insurance) at which the supplier makes the goods available for export sale represents the cost (delivered to point of production) of imported components;
4. All imported components of such goods were imported from certain free-world countries (AID Geographic Code 899); and
5. Neither the commodity nor the transaction is one which is prohibited by the Foreign Assets Control Regulations (Communist China).

Code 899 as in effect at the date of this Letter includes any country in the world except the following:

The Union of Soviet Socialist Republics, Albania, Bulgaria, Czechoslovakia, East Germany, Estonia, Hungary, Latvia, Lithuania, Rumania, Poland, Vietnam (North), North Korea, China (Mainland), and Communist controlled areas (which include Manchuria, Inner Mongolia, the provinces of Tsinghai and Sikang, Sinkiang, Tibet, the former Kwantung leased territory, the present Port Arthur Naval Base Area, and Liaoning Province), Outer Mongolia, and Cuba.

C. Limitation on Shipping Facilities. No goods may be financed by the loan which are shipped to the Borrower by any transportation medium owned, operated, or under the control of a country (other than India) not included in Code 899 of the A.I.D. Geographic Code Book as in effect at the time of shipment.

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D. Special Shipping Limitation. As provided for in Section 6.1. of the Loan Agreement, items otherwise eligible for financing under the A.I.D. loan will not be so financed if shipped on vessels named in Attachment D, which will be periodically updated by A.I.D. as required.

V. Marking

In accordance with the provisions of Section 101.3. of the Loan Agreement, the Borrower shall assure publicity for the loan by the display of appropriate signs and the marking of goods financed under the loan. Instructions to assist you in complying with these requirements are contained in Attachment E.

VI. Reporting

It is requested, in accordance with Section 101.6. of the Loan Agreement, that the Borrower furnish A.I.D. with the following reports:

A. Monthly Progress Reports. A report of the procurement and deliveries made under the loan will be required each month of the calendar year. The first report covering the period from inception of the project through December 31, 1965, should be delivered within thirty (30) days of the end of the reporting period to the USAID Mission, India. Reports covering subsequent monthly periods are to be delivered within thirty (30) days of the end of the reporting period and until the project is completed. The reports should be delivered in four (4) copies. The format to be used in these reports is given in Attachment F.

B. Quarterly Shipping Reports. These reports should be submitted in two (2) copies and should show, for each calendar quarter, the actual extent to which the requirement under Section 5.2. of the Loan Agreement is being met. This report should follow the form indicated in Attachment G. Each report should include a covering summary statement, giving the cumulative actual figures beginning with the initial report through the month of latest report, for U.S. and non-U.S. flag vessels, by category of vessel, as applicable. If the summary statement indicates a lag in complying with the provisions of Section 5.2., a statement should be included indicating how the deficit in shipping on U.S. flag vessels is to be made up. The Quarterly Shipping Report should be submitted within thirty (30) calendar days of the end of the reporting quarter. The initial Shipping Report should be prepared for all shipments made through December 31, 1965. Quarterly Shipping Reports should be submitted directly to the Resources Transportation Division, Agency for International Development, Washington, D.C., U.S.A., 20523.

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C. Completion Report. The A.I.D. will provide you with further information at the appropriate time concerning the form and content of the required final Completion Report.

VII. Commissions and Fees

Your attention is called to the requirements of Sections 102.2 and 102.3 of the Loan Agreement. The Government of India should promptly notify A.I.D. of any payment that it has made or has agreed to make to any person, firm, corporation, or other entity (except as regular compensation to full time officers and employees) as compensation for bona fide professional, technical, or other comparable services rendered in connection with obtaining the loan. Such notification should indicate to whom such commissions or fees have been or will be paid, the amount thereof, and for what services, and the regular place of business of the person or entity receiving the payment. This notification should be sent to the Agency for International Development, Washington, D. C., U.S.A., 20523, Attention: NESA/CDF.

A commissions paid or to be paid to a bona fide agent of a supplier is eligible for financing under this loan if the agent has made a direct and substantial contribution toward securing the sale of goods and services required for the Project, so long as the regular place of business of the agent and the services performed by the agent are in the United States of America. With respect to each and every payment of such commission, fee, retainer or other such payment, the following information shall be given:

- a) Name of payee
- b) Address of payee
- c) Ownership of payee
- d) Service performed by payee
- e) Amount

VIII. Records

Records required to be kept under Section 101.5 of the Loan Agreement which relate to the acquisition and disposition of Eligible Items will be maintained for at least five (5) years after the final disbursement of funds under the loan.

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A.I.D. will be glad to discuss with your representatives any problems or questions that you may have concerning the implementation of the loan, or this Implementation Letter including its attachments.

Sincerely yours,

William C. Ide  
Deputy-Director

**Attachments:**

Available in  
NESA/CDF

- A. Guide for the Assistance of Counsel
- B. Disbursement of Loan Funds - Letter of Commitment Procedure
- C. Borrower's Notice to U.S. Business Regarding Proposed Procurement of Goods
- D. Restriction Against the Use of Vessels That Have Traded With Cuba
- E. Marking Requirements
- F. Monthly Progress Report
- G. Quarterly Shipping Statement

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HIGHER EDUCATION LOAN

Date Report Prepared \_\_\_\_\_

AID Loan No. 386-H-

Certified as Correct \_\_\_\_\_

PROGRESS REPORT

For Period \_\_\_\_\_ to \_\_\_\_\_

(all figures in U.S. Dollars)

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Categories of Eligible Items	Orders Placed		Shipments		In Warehouse		Delivered to User Institutions	
	In Month	Cumulative	In Month	Cumulative	Start Month	End Month	In Month	Cumulative
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>Eligible items should be grouped under the following six program types:</p> <ol style="list-style-type: none"> <li>1. Summer Science Institutes (SSI)</li> <li>2. SSI follow-Up: Secondary Schools</li> <li>3. SSI Follow-Up: Universities &amp; Colleges</li> <li>4. Engineering colleges</li> <li>5. Polytechnics</li> <li>6. Regional Teachers' Colleges</li> </ol> </div>								

LEVELS OF INDIAN EDUCATION  
(Figures for 1965/66)

1. LITERACY

Coordinated program between Ministries of Education and Community Development to increase adult literacy. Only about one-eight of population among women and 1/3 among men are literate.

2. ELEMENTARY (465,000 schools)

a. Primary Schools (409,000) - Classes I - V (ages 6-11)

- 1) Literacy - Rudimentary knowledge
- 2) Preparation for middle schools

b. Middle Schools (56,000) - Classes VI - VII (ages 11-14)

- 1) Preparation for trade schools
- 2) Preparation for secondary schools

3. SECONDARY (22,200 schools)

a. High Schools (14,000) - Classes IX - X (ages 14-16)

Preparation for external examinations or technician or trade school.

(note: A program is underway to convert high into higher secondary schools with a broader curriculum and an additional school year)

b. Higher Secondary Schools (5,315) - Classes IX - XI (ages 14-17)  
Previously non-vocational academic education.

c. Multipurpose Schools (2,900) - Classes IX - XI (ages 14-17)

Practical courses (e.g. technology, agriculture, commerce, and home science) in addition to humanities and science.

d. Pre-university Courses - Classes XI - XII

Similar to higher secondary school programs but under direct supervision of universities

e. Junior Technical Schools (51) - Classes IX - XI (ages 14-17)

Integrated course in general education, technical education, and technical training in various engineering trades.

4. DIPLOMA (TECHNICAL)

- a. Elementary Teacher Schools (1400 one and two year Schools)
- b. Nurses Schools (238 one year schools)
- c. Polytechnics (270 three year Schools)

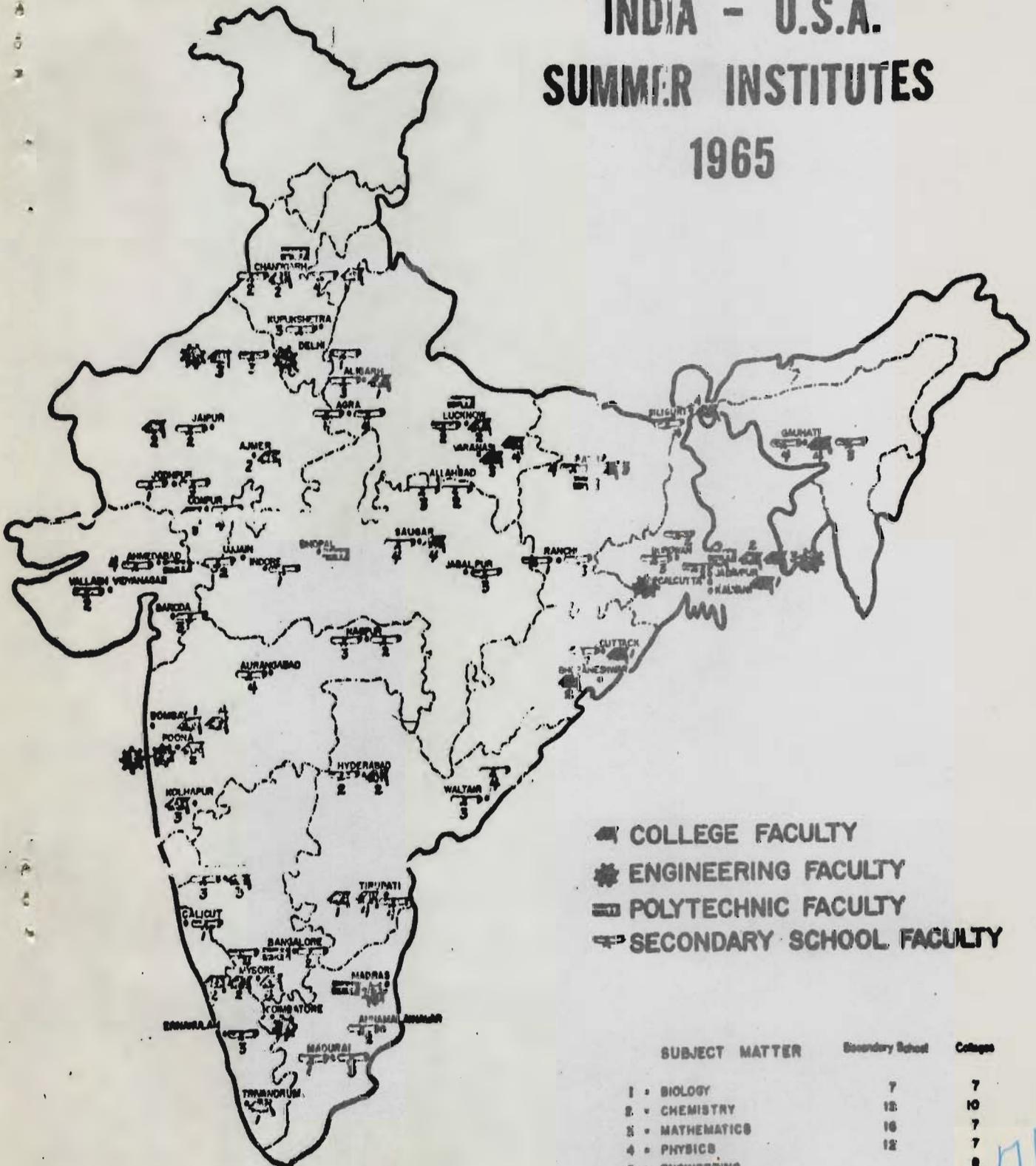
5. BACCALAUREATE

- a. Universities (62)  
Student body is in the colleges they govern.
- b. Colleges of arts and sciences, and of commerce (1,400)  
Associated with universities
- c. Engineering Colleges (135)  
Associated with universities
- d. Nursing Colleges (5)
- e. Agricultural Universities (7)
- f. Regional Colleges of Education (4)

6. GRADUATE

- a. Institutes of Technology including Indian Institute of Science at Bangalore (6)
- b. University Graduate Schools (at 40 colleges & universities)
- c. Teachers Training Colleges (262 schools)
- d. Medical Colleges (82)

# INDIA - U.S.A. SUMMER INSTITUTES 1965



- ▣ COLLEGE FACULTY
- ★ ENGINEERING FACULTY
- ▨ POLYTECHNIC FACULTY
- ▤ SECONDARY SCHOOL FACULTY

SUBJECT MATTER	Secondary School	Colleges
1 - BIOLOGY	7	7
2 - CHEMISTRY	12	10
3 - MATHEMATICS	16	7
4 - PHYSICS	12	7
5 - ENGINEERING		8
6 - POLYTECHNIC		8

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# HIGHER EDUCATION--SUMMER INSTITUTES & FOLLOW-UP

I. Has overall responsibility for administration of loans  
 1) expends \$ 5,400,000 for Engineering Colleges and Poly-  
 technics and for the 1966 summer institutes for engineering  
 and polytechnic faculty; 2) allocates to HECET \$ 1,000,000  
 for four Regional Colleges of Education; 3) allocates  
 \$ 4,700,000 to UGC for the 1966 summer science institutes  
 and the follow-up program in the sciences; and 4) repays  
 to FY 65 non-project loan \$ 900,000 borrowed for 1965  
 institutes.

II. Has responsibility for inter-ministerial and other  
 governmental activity.

POLICY AND PROGRAMS	
GOVERNMENTAL ADDITIONAL SECRETARY MINISTRY OF EDUCATION	ACADEMIC NATIONAL SCIENCE ADVISORY COUNCIL

I. Council is comprised of representatives of MHE, U.S.C.,  
 HECET, and leading educationalists and scientists.  
 II. Has overall responsibility for students matters:  
 1) through UEC plans and supervises the institute and follow-  
 up program in the sciences; 2) through HECET supervises  
 development of science education in colleges of education;  
 and 3) through the MHE Technical Education Division has  
 general purview of the institute and follow-up programs in  
 engineering and technology.

