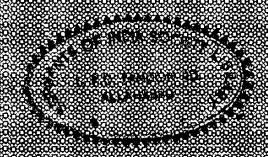
REPORT

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MINISTRY OF EDUCATION AND SCIENTIFIC RESEARCH



## ANNUAL REPORT 1957—58

# MINISTRY OF EDUCATION AND SCIENTIFIC RESEARCH



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				•								PAGB
Introduction .	٠	. •	٠	٠	•	•/	•	•	•	*	•	I
Department of Ed	ucatio	n						••				
Basic, Social a	ınd Aı	.dio-	Visua)	Educ	ation		•					7
Secondary Ed	lucatio	n	•	•		-	-					21
Higher Educ	ation		•	•	•	•		•		•	•	31
Development	of H	indi		•	•			٠.	•1			42
The Democr	atisati	ion of	Educ	ations	al Opr	ortun	ity—:	Schola	uships	3.	٠.	49
Education of	the E	landi	capped	and	Social	Welf	are				• 3	62
Unesco Activ	ities	•	•		•		•				•	68
Information,	and Pr	iblica	tions	•	•							74
Administration	ac	•	•	•	•	•	•		•			82
Department of Cul	tural .	Activ	ities an	d Phy	ysical .	Educa	tion					
Cultural Acti	vities		•	•		•			•	, .	•	87
External Cult	ural F	Relati	ons	•	•	•	٠					93
Physical Educ	cation	and	Youth	Welf	fare				•		•	97
Archaeology,				Vation	ial Ar	chives	, Nat	ional	Libra	ry an	i	
Central Sec	retari	at Li	brary	•	•	•	•	•	•	٠	•	106
Department of Scie	nti fic	Resea	rch an	d Tec	hnical	Educa	ition					
Scientific Res	earch		•			•			•		•	123
. Technical Edi	ıcatio	n	•	•	٠	*	•	•	•	•	•	149

#### INTRODUCTION

After the new Union Cabinet was sworn in in Aprilo11957, a Presidential order recognising some Ministries of the Government of India was issued on 17th April 1957. The former Ministry of Education was renamed Ministry of Education and Scientific Research. The Scientific Research Division of the former Ministry of Natural Resources and Scientific Research and its subordinate offices were transferred to the new Ministry of Education and Scientific Research, that was reconstituted in July, 1957. The reconstituted Ministry now consists of three Departments, namely, (i) Department of Education, (ii) Department of Cultural Activities and Physical Education, and (iii) Department of Scientific Research and Technical Education.

Department of Education: The Second Five-Year Plan in so far as it concerns Education envisages the provision of a minimum standard of education for the maximum number of citizens within the limited resources available. Educational activities have made further headway during 1957-58, the second year of the Plan, though financial stringency has hampered the progress of some of the schemes.

A Conference of Education Ministers held in September, 1957 endorsed the recommendation of the Planning Commission that education for the age-group 6—11 should be made free, universal and compulsory by the end of the Third Plan period at the latest. An All-India Council for Elementary Education to prepare programmes for the early introduction of free and compulsory Elementary education has been set up. The Government of India have advised State Governments and Union Territories to introduce free and compulsory Primary education immediately in a few N.E.S. blocks as pilot projects.

The National Institute of Basic Education was established in February, 1956 and has completed some research schemes on crafts and Basic education. The Standing Committee of the Central Advisory Board of Education on Basic Education at its meeting in August, 1957 recommended the integration of Post-Basic education with Secondary education. A committee has been set up to evolve methods of effective integration. The Government of India have offered financial assistance to State Governments for the establishment of Basic schools at Post-Basic or Secondary level and a Central 345 Edu.—2.

Basic school financed entirely by the Centre is proposed to be established at Delhi.

Central assistance to the extent of Rs. 624 715 lakhs has been given to various State Governments as first and second instalments of the grant for 1957-58 for schemes of Pre-Primary, Basic, Elementary, Women's Social and Audio-Visual Education and Union Territories were provided with Rs. 8 09 lakhs for such schemes. The scheme of improving salaries of teachers at the Primary stage, initiated in 1956-57 with the offer of Central assistance has been extended to teachers at the Middle stage. Under the Scheme to relieve Educated Unemployment' so far during 1957-58 Rs. 44,60,647 have been sanctioned as Central assistance under this scheme.

The National Fundamental Education Centre will undertake, from March, 1958, a programme of training District Social Education Organisers responsible for coordinating all Social education activities in their areas, and Principals of Janta Colleges. Against the farget of one Social Education Organiser per district by the close of the Second Plan period, posts for 117 such organisers have been sanctioned. The production of literature for neo-literates and children has received increased impetus in various Prize Competitions held by the Ministry and in such schemes as the Production of Model and Popular Books, Literary Workshops and Purchase of Social Education Literature.

The Advisory Committee on Libraries is expected to complete the work of surveying existing conditions in libraries and making recommendations by March 1958. Inaugurated in August, 1957, the National Book Trust has started functioning and has tentatively drawn up its short and long term publication programmes.

Field work on the Educational Survey of India is expected to be completed by the end of March, 1958 and the final report in most of the States, to be available by the end of June, 1958.

In Secondary education, 575 schools have so far been converted into Multipurpose and 109 into Higher Secondary schools. A sum of Rs. 1-91 crores was given to State Governments by September, 1957 for schemes on Secondary education.

The All-India Council for Secondary Education set up during 1956-57 has opened 29 Extension Services Departments in various Training colleges in the country in addition to 23 set up during the First Plan period.

The Conference of Education Ministers held in September 1957 endorsed the report of the Committee appointed to-work out

estimates of expenditure for the introduction of the three-year degree course at Universities and their affiliated colleges. The Committee recommended that the expenditure should be shared between the Central Government and the University Grants Commission on the one hand, and the State Governments and private enterprise on the other. Thirty Universities have so far either introduced the three-year degree course or accepted the scheme in principle.

Grants amounting to Rs. 4:69 lakhs were given to various non-Hindi speaking State Governments and Union Territories for Tthe development of Hindi. Many new schemes such as, the preparation of terminological indices, investigation of terminological material, organisation of debates between non-Hindi-speaking and Hindispeaking schools and colleges, holding of seminars of Hindi teachers etc. have been included in the Second Five Year Plan, in addition to those already being carried out. Morpho-phonemic analyses of various Indian languages are being done in various Universities before a suitable system of shorthand is evolved. First lists of Technical Terms in Hindi in nine subjects have been finalised, and revised first lists of terms for 16 subjects are awaiting the Government's approval. 50,000 terms have so far been evolved. With a view to publishing a Dictionary of words common to Hindi and other languages, bi-lingual glossaries have been and are being prepared.

Scholarship schemes administered by the Government of India, Scholarships and Fellowships offered by the United Nations and Unesco and under the Colombo Plan, and Point Four Programme have been in operation to promote the studies of Indian nationals abroad. In addition, scholarships and fellowships offered by 12 Foreign Governments and 11 Foreign Organisations and Institutions were utilised. Several schemes of the Government of India are also under operation offering facilities for study in India to scholars of various foreign countries.

During the period under review, 66 educational publications and eight statistical publications were brought out. The inaugural number of 'Youth', a quarterly journal on Youth Welfare, Physical Education and Sports appeared for the first time in September, 1957.

Cultural Activities and Physical Education: The Report of the Sanskrit Commission appointed to make recommendations to improve Sanskrit education is under consideration. The schemes to establish an Institute of Indology and Collection and Preservation of Rare and Ancient Manuscripts were considered in 1957-58, by the Committee appointed for this purpose, and its recommendations are under consideration.

A scheme to develop modern Indian languages other than Hindi has been included in the Second Five-Year Plan at a total cost of Rs. 20 lakhs. Details of this scheme have yet to be finalised. An amount of Rs. 13,60,178 was sanctioned up to December, 1957 to Cultural, Educational and Literary Organisations of all-India status.

The three Akadamis, the Sahitya Akademi, Sangeet Natak Akadami and Lalit Kala Akadami continued their activities during the period under review. A total sum of Rs. 18,16,275 has been provided for their activities during 1958-59.

A wide range of activities in External Cultural Relations designed to promote mutual good-will and understanding between India and other countries was carried out during the year. Cultural Agreements were concluded with Poland and Rumania. The activities included the sending of delegates to participate in the 2500th Anniversary Celebrations of the Lord Buddha in Cambodia and Thailand, the 250th Anniversary Celebrations of the Founding of the Technical University at Prague and International Congress of Orientalists in Germany, sending Indian Hockey team to participate in the Afghan Jashan celebrations and Indian poets and musicians for Republic Day Celebrations in Nepal and inviting cultural delegations from Nepal, the U.S.S.R., Rumania, Bhutan and Mongolia to India.

In the field of Physical education, the chief event was the establishment of the Lakshmibai College of Physical Education at Jhansi. It started functioning from 17th August, 1957. The Advisory Board of Physical Education and Recreation set up originally in 1950 was reconstituted on a broader basis. A Committee to work out a programme and syllabus of Health Education and Nutrition for Primary and Secondary schools and for Training Colleges was set up. It has been proposed to extend the scope of the National Discipline Scheme, originally intended only for schools of displaced persons, to other schools in three selected regions of the country.

The Fourth Inter-University Youth Festival was organised at New Delhi from 1st to 10th November, 1957 on a scale larger than before. In addition to continuing activities like granting financial assistance for students' tours, holding Dramatics and Youth Leadership Camps etc., the work relating to the 'Survey of Living Conditions of Students' was taken in hand. This is a pilot survey and will be conducted in a few selected Universities.

Up to December 1957, a sum of Rs. 27.5 lakhs was sanctioned for holding 886 Labour and Social Service Camps with the participation of 96,113 campers. These camps are held in rural areas, the campers doing manual labour that is of service to the community. An amount of Rs. 3.02 lakhs was sanctioned up to December, 1957 to five Universities and five State Governments for Campus Work Projects, such as construction of recreation halls-cum-auditoria, swimming pools, open air theatres etc. In such projects the staff and students of the institution concerned compulsorily render skilled and unskilled labour.

Scientific Research and Technical Education: Progress in regard to Technical education was fully maintained during the year. So far 19 selected existing engineering colleges and 40 polytechnics have been expanded into larger units resulting in 2,538 additional seats for degree courses and 4,485 additional seats for diploma courses.

Grants amounting to Rs. 54 lakhs are expected to be disbursed to non-Government scientific and technical institutes by the end of the year. These grants are paid for the dévelopment and expansion of post-graduate courses, of affiliated colleges, the development of instructional facilities, establishment and development of specialised courses such as Printing Technology, Industrial Administration, Ore dressing etc., the expansion of training facilities in Mining Engineering.

Of the three central institutes proposed to be set up during the Plan period, the Administrative Staff College established at Hyderabad during 1956-57 has started functioning. The college conducts three courses a year and admission to the first batch took place in December 1957.

The Survey of India continued to carry out topographical and geodetic surveys and preparation of related maps.

The Sibpur Herbarium was taken over from the Government of West Bengal by the Botanical Survey of India. The Herbarium will form the nucleus of the proposed Central National Herbarium

The Zoological Survey of India continued to carry out faunistic surveys in Rajasthan, South India, Assam, Uttar Pradesh, Madhys Pradesh and West Bengal. Research in various problems o systematics, ecology and zoogeography was also conducted.

The Hindi edition of the National Atlas of India was published during the year. Insets included, the Atlas contains 96 maps depicting the socio-economic picture of the country. Work relating

to the preparation of the English edition of the Atlas was taken in hand.

The development of various scientific research institutes, laboratories and scientific societies was continued by the provision of technical assistance and grants-in-aid.

During the year four additional Vigyan Mandirs were set up bringing the total to 18 Vigyan Mandirs.

A separate Annual Report is being published for the Council of Scientific and Industrial Research (that is an autonomous body) of its activities and the activities of National Laboratories during 1957-58.

#### DEPARTMENT OF EDUCATION

#### BASIC, SOCIAL AND AUDIO-VISUAL EDUCATION

ELEMENTARY AND BASIC EDUCATION

State Schemes of Pre-Primary, Elementary, Basic and Women's Education: Central grants amounting to Rs. 567 40936 lakhs were sanctioned to various State. Governments as Central assistance for 1957 58 for Schemes of Pre-Primary, Basic, Elementary and Women's Education fincluded in the Educational Development Programmes of States under the Second Five-Year Plan.

Schemes of Union Territories in the fields of Pre-Primary, Elementary, Basic and Women's Education: Administrative approval and expenditure sanction amounting to Rs. 8.09 lakhs have been issued to various Union Territories for the implementation of the Educational Development Schemes in Pre-Primary, Elementary, Basic and Women's Education for 1957-58 under the Second Five-Year Plan of Educational Development Programmes of Union Territories.

Improvement of Teachers' salary: In 1956-57 the Government of India offered financial assistance to State Governments to the extent of 50% of the additional expenditure involved for improving salaries of teachers at the Primary stage. In 1957-58 this assistance was extended to cover teachers at the Middle stage.

Scheme to Relieve Educated Unemployment.—The Scheme initiated in 1953-54 envisaged the appointment of 80,000 Rural Teachers and 8,000 Social Education Workers by the end of the First Five-Year Plan. Practically all the teachers and about 2,000 Social Education Workers were appointed by various State Governments. During 1957-58, which is the last year for receiving assistance from the Government of India. a sum of Rs. 44,60,647 was sanctioned to various State Governments under this Scheme.

Pilot Projects for Provision of Universal Free and Compulsory Education in a few N.E.S. Blocks in each State/Territory: In order that State Governments and Administrations of Union Territories may be suitably equipped with adequate knowledge for tackling all the problems and difficulties that are likely to arise when launching a comprehensive programme of universal, free and compulsory education in the country, the Ministry of Education and Scientific

Research in consultation with the Ministry of Community Development have advised all State Governments and Administrations of Union Territoires immediately to introduce universal free and compulsory Primary education as pilot projects in a few development blocks in every State/Territory.

Financial Assistance to Voluntary Educational Organisations in Pre-Primary, Primary and Basic Education: Initiated during the First Five-Year Plan the scheme is being continued in the Second Five-Year Plan. Financial assistance to the extent of 66% of the approved non-recurring and 50% of the approved recurring expenditure for developmental purposes was given to the Voluntary Educational Organisations in the First Plan period and in 1956-57. From 1957-58, Central assistance is proposed to be given at the flat rate of 60% of the approved developmental expenditure.

A sum of Rs. 75 lakhs has been allotted for Basic and Social education for the entire Plan period and the provision for 1957-58 is Rs. 12 lakhs. During 1957-58 (up to 31st December, 1957) a sum of Rs. 2,53,243 has been given as grant-in-aid to "Voluntary Educational Organisations", working in the field of Basic and Pre-Primary education only. Progress of the Scheme has, however, been hampered by restrictions placed on the construction of buildings, that is one of the main items for which assistance is sought under the scheme.

A sum of Rs. 8 lakhs has been proposed for inclusion in the budget for 1958-59 for Basic and Pre-Primary institutions.

Scheme for giving loans for construction of Hostels: Under this Scheme a provision of Rs. 200.00 lakhs has been made for the Second Plan period for loans to various categories of educational institution. This provision includes a sum of Rs. 20.00 lakhs for granting loans to Basic and Social Educational Institutions, out of which roughly half the amount is available for Basic Educational Institutions. A sum of Rs. 4 lakhs only is available for Basic Educational Institutions during 1957-58. Till December 1957, two loans of Rs. 45,000 and Rs. 15,000 that are committed expenditure from 1956-57 have been sanctioned. A few applications are still under consideration. Restrictions imposed on the construction of buildings and the need for conservation of steel and cement for priority schemes have affected the operation of the Scheme.

The question of continuing the loan scheme during 1958-59 is under consideration.

Establishment of Post-Basic Institutions: This scheme provides for the establishment of Basic Schools at the Secondary or Post-Basic level. It will be operated both by the Government of India

and State Governments. The Central Government propose to establish a Central Basic School at New Delhi, as recommended by the Standing Committee on Basic Education, the entire expenditure of which will be borne by the Central Government. The State Governments have been requested to establish similar Post-Basic Institutions in their States with Central assistance to the extent of 60% of the expenditure involved.

A total provision of Rs. 40 lakhs has been made for the entire Plan period. Of this, Rs. 8 läkhs are available during 1957-58. However, as it is a new Scheme, made known to the State Governments only in May, 1957, it has not been possible to make much progress. A few proposals are under consideration.

A sum of Rs. 11 lakhs has been proposed for inclusion in the budget for 1958-59.

Establishment of All-India Council for Elementary Education: The Government of India have set up an All-India Council for Elementary Education. The Council is an advisory body and consists of 23 members including 14 representatives from State Governments; one representative each of the Planning Commission, Central Advisory Board of Education, All-India Council for Secondary Education and the Ministry of Community Development; one Principal of a Training College and two educationists connected with Basic Education, Girls' education and education of the Backward Classes,

The Council will advise the Central and State Governments on all matters relating to Elementary education and prepare programmes for the early implementation of compulsory and free Elementary education. It will also organise research in the administrative, financial and pedagogic problems of Elementary education and assist in the production of suitable literature for teachers and educational administrators to improve the quality of Elementary education and to enforce compulsory attendance.

A budget provision of Rs. 10,000 exists in the current year for meeting expenses connected with the Council. The Council will hold its first meeting before the end of the financial year.

A sum of Rs. 10,000 has been proposed for inclusion in the budget for 1958-59 for the Council.

Seminars, Conferences and Exhibitions in Basic Education: These schemes have been introduced to undertake programmes for the in-service education of teachers and to offer them opportunities to reflect on their experiences and re-evaluate them with the help of other members of the profession.

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A seminar was held in September, 1957 at the Sri Ramakrishna Mission Vidyalaya, Coimbatore, that was attended by Principals of Post-Graduate Basic Training Colleges. Another Seminar is being held at Haunsbhavi (Mysore State) attended by the Directors of Education/Directors of Public Instruction of various State Governments.

It is proposed to hold four regional seminars in 1958-59 at a cost not exceeding Rs. 4,000 for each seminar.

Production of Literature on Basic Education: It is a well known fact that there is a great dearth of suitable literature on Basic Education and that this is one of the biggest hurdles in the effective development of Basic education.

The Government of India are accordingly taking up a programme for production of literature and other material on Basic education. This includes the production of guide books, supplementary reading material for children, source books for teachers and monographs on various subjects connected with Basic education. A provision of Rs. 8 lakhs has been made for the Second Plan period; and a provision of Rs. 1 lakh exists in the budget for the current year. The scheme was finalised only late in the year and steps to implement it have now been taken.

A sum of Rs. 3 lakhs has been proposed for inclusion in the budget for 1958-59.

Central Scheme for Expansion of Girls' Education and Training of Women Teachers: In order to accelerate the pace of girls' education which has lagged behind that of boys, the Government of India has introduced a special scheme for the expansion of girls' education and the training of women teachers under the Second Five-Year Plan. The Plan provision for this is Rs. 250 lakhs. The budget provision for the scheme for the current financial year is Rs. 25 lakhs. The Government of India's contribution may be up to the extent of 75% of the expenditure. The current year's budget provision of Rs. 25 lakhs has been allocated to State Governments on the basis of the number of girls not attending schools in the age group 6—14.

As the finalised scheme a a Centre's contribution for the current finar nicated to State Governments only in November, 1957, very few proposals have been received so far from State Governments.

Standing Committee of the Central Advisory Board of Education on basic Education: The Committee met on 27-8-1957 and made

recommendations of which the most important, was on "the integration of Post-Basic education" with Secondary education" It was suggested that a committee should be appointed to go, into the whole question of how this integration should be effected. The Goy-enment accepted the suggestion and appointed a committee.

National Institute of Basic Education: The Institute was established on 1st February, 1956. Its functions are (i) to conduct researches in Basic education and crafts, and (ii) to train senior administrators and teachers in Basic education.

The second function will be taken up after the Institute has been able to establish itself. In regard to (i), the Institute has so far engaged in the following activities in 1957-58, some of which have been completed;—(i). Researches in Basic Education (Pamphlet); (ii) Current trends in the syllabuses of post-graduate Basic Training Colleges; (iii) some trends in Basic school curriculum; (iv) difficulties in the day-to-day working of Basic school teachers; (v) Bibliography, (vi) Basic education abstracts; (vii) Guide book and textbook for social studies, (viii) Organising a Basic School (Pamphlet), (ix) Analyssis and evaluation of correlated lesson plans, (x) Action programme for the improvement of a rural Basic School, (xi) Measuring educational potentiality of crafts, (xii) determination of targets for various crafts, and (xiii) Progress of Basic Education (Brochure).

During the year a proposal to publish a Basic Education Quarterly, was approved by the Government. It will be published by the Institute....

Alresearch wing in cratts has recently been created in the Institute and placed in the charge of a special officer. Two research fellowships have been recented in the Institute of the value of Rs. 300 each per mensen.

met once to review the research work of the Institute. Its chairman is the Minister of State for Education.

#### Social Education

Research Training and Production Centre: This Ministry has sponsored through the Research, Training and Production! Centre, Jamia Millia Islamia, Delhi, in March 1956 research in the field of Reading Material and other teaching aid for neo-literates. On the basis of this study the Centre has prepared 12 speciment books for neo-literates. The project was completed in June, 1957. The total expenditure incurred on the project is about Rs. 40,000. The Centre's report on the project has been received in the Ministry.

Scheme for Setting up Adult Schools: Another project, taken up in cooperation with Jamia Millia Islamia, Delhi, is the setting up of Adult Schools in the country. The basic idea is to find ways and means to make Adult Education work throughout the country more effective, sustaining and fruitful. The estimated expenditure on the project is about Rs. 2,74,000. The project started in July and will last for about three years.

Appointment of District Social Education Organisers: Social Education activities carried on by the State Education Departments and those carried on by the Social Education Organisers in the Community Project areas have not so far been coordinated by any agency. This is sought to be done by State Education Departments appointing District Social Education Organisers who will be in charge of organising and coordinating all Social education activities in their area, whether it is included in the Development Blocks or not. It is expected that by the close of the Second Five-Year Plan each district will have its District Social Education organiser.

The Scheme was started in 1955-56 and is continued in the Second Five-Year Plan. Posts of 117 District Social Education Organisers were sanctioned to ten States and two Union Territories. Forty-seven posts have been filled so far.

National Fundamental Education Centre: The National Fundamental Education Centre was established by Government of India under the Ministry of Education on 15th May 1956. The objectives of the Centre are to serve as National Centre for training, research and evaluation and to provide leadership in the field of Social education. Its functions are (a) to train the key-personnel of Social education, e.g., District Social Education Organisers, etc., (b) to carry out research and evaluation in the field of Social education, (c) to conduct experiments in the production of better type of material and equipment for Social education and (d) to act as Clearing House of ideas and information pertaining to Social education.

Activities of Centre: The training programme of District Social Education Organisers and Principals of the Janata Colleges is under consideration. It is expected that the training programme will start early in April, 1958.

After Professor Charles Madge, a Unesco Expert in Research and Evaluation, joined, schemes for research were taken up. The Centre will carry out research work in the coming year on (1) expenditure on Social education in N.E.S. Blocks and its effect on Social education programme, (2) training of local leaders, (3) activities of Community Centres, and (4) activities of Women's Clubs.

Experts: Out of the two experts to be provided by the Unesco Professor Charles Madge joined on 16th December, 1957. The Expert in Audio-visual Aids has yet to join; so also the expert to be provided by T.C.M.

Advisory Committee for Libraries: The Advisory Committee for Libraries appointed to advise the Government of India on matters pertaining to the expansion of library service in the country has completed the first part of its work, namely, to survey existing conditions of libraries in India.

The report of the Committee is being written and it is hoped that it will be submitted to the Ministry at the end of March, or early in April, 1958.

Financial Assistance to Voluntary Educational Organisations: In the Second Plan under the scheme of giving financial assistance to Voluntary Educational Organisations working in certain significant fields of education, there exists a provision of Rs. 7.2 lakhs for institutions of Social education during the present financial year. Out of this, Rs. 2,69,516 have been sanctioned so far. A provision of Rs. 9 lakhs has been proposed for 1958-59.

Evening Institute for Workers' Education: It is proposed to set up a pilot Workers Institute under the Second Five-Year Plan in a city where there is a large labour population. The institute is expected to come into existence in the next financial year.

The total provision for this project for the entire Plan period is Rs. 5 lakhs (originally it was Rs. 10 lakhs). During 1958-59 a provision of Rs. 90,000 has been proposed.

Social Education in Urban Areas: Under the Scheme, it is proposed to set up Co-ordinating Councils to organise Social Education during the course of the Second Five-Year Plan. The provision for the scheme for the entire plan period has been revised from the original allotment of Rs. 25 lakhs to Rs. 15 lakhs. As a result of this the number of co-ordinating Councils to be established has been reduced from 20 to 12. The scheme has been referred to various State Governments for their comments. There is not much hope of the scheme being finalised for implementation soon and no expenditure is likely to be incurred during 1957-58. The Scheme is, however, expected to start functioning during 1958-59. Accordingly, a provision of Rs. 10,02,000 has been proposed for the year 1958-59.

State Schemes of Social Education including Production of Literature and Library Development: The schemes of Social Education and Library development included in the States Educational Development Programmes for 1957-58 were approved by the Government of India and the first instalment has been sanctioned to all State Governments. The release of the second instalment is under consideration and orders are expected to issue shortly. The percentage of Central assistance admissible on schemes of Social Education including Production of Literature and Library development during the year under review is 50 per cent.

'Prize Scheme' for Best Books for Neo-literates: Since 1954 the Government of India have awarded prizes on the best books for neo-literates in all regional languages.

In 1957, as a result of the fourth prize competition, 35 prizes of Rs. 500 each and five prizes of Rs. 1000 each were awarded to authors of books in various regional languages in consultation with the Popular Literature Committee Fifteen hundred copies each of these prize books will be purchased by the Ministry for distribution in Community Projects and National Extension Service Blocks!

The fifth competition on similar lines has been announced and entries will be received upoto 30th April 01958

Books for Children Prize Competition: With a view to developing childrens, literature in the various Indian/languages, this Ministry has awarded on the basis of trecommendations received from various State; Governments prizes to authors of outstanding books for children for the last two years.

As a result of the third competition 22 prizes of Rs. 500 each has been awarded in March, 1958 on the best books for children in various regional languages in consultation with the Children Literature Committee. Two thousand copies of each of the 23 prize-winning books of second prize competition for children have been purchased during the period 1957-58 for distribution in Education Centres, Children's Libraries etc. Copies of the prize-winning books under the third prize competition will be purchased in 1958-59.

of The fourth Prize Competition for Childrens Literature has been announced on the lines of the third prize competition. The last date for receiving entries for this competition is 31st August, 1958.

Literary Workshops: The Ministry is continuing the scheme of organising Literary Workshops for training authors in the technique of writing for neo-literates and children.

to write for neo-literates and four for training authors to write for

children—were sanctioned at an estimated cost of Rs. 11,000 each. They will be organised in the various States as under:

For Children

For Neo-Literates

Rajasthan
Punjab
Jammu & Kashmir
Orissa

Bombay \*
Kerala
West Bengal

Uttar Pradesh

An equal number of workshops both for neo-literates and children will be held every year during the Second Five-Year Plan period.

Popular Encyclopaedia in Hindi (Gyan Sarovar): During 1957-58 the first volume of Gayan Sarovar, the popular encyclopaedia in Hindi which is proposed to be published in five volumes, was published through Maktaba Jamia, Ltd. The second edition of 10,000 copies of Gyan Sarovar—Volume I has now been brought out and is on sale. Volume II is expected to be out by the middle of 1958 and two more volumes will be completed in 1958-59.

Production of Model Books: In order to raise the level of book production in children's literature, this Ministry is producing a few model books. Some of the books produced or under production are:

- (i) Baune ki Kheti.—This has already been published and is available in the market.
- (ii) Bharat Ke Jahaz.—This is a book on the history of Indian shipping in Hindi under production by Toy Cart, Bombay. It is expected that the book will be available shortly.
- (iii) Anokhe Janwar.—This is a book on strange animals of the world, illustrated with colour drawings. The book is in Press and is expected to be out shortly.

Popular Books on Important Subjects: The manuscript of "Story of Life" has been received and is under examination, before it is taken up for publication.

About 15 entries in a prize competition for the best "History of India" have been received. A prize of Rs. 5000 will be announced to the winning author and manuscript later published in Hindi.

Publication of Foreign Classics and Biology Series: The Ministry invited the co-operation of Indian Publishers for the publication of five books each of (i) Foreign Classics Series and (ii) Biology Series at an estimated cost of Rs. 2.00 lakhs. The printing programme will be undertaken in 1958-59.

Bringing Hindi Readers to Level Corresponding to English Readers in Culture Presentation and General Knowledge.—The scheme envisages the publication of 72 books on 24 selected topics of interest for High and Higher Secondary school-going-age children at an estimated cost of Rs. 3 lakhs. The printing programme will be undertaken in 1958-59.

Purchase of Social Education Literature in Hindi: Under the scheme to encourage production of Social Education Literature in Hindi the Ministry of Education has bought copies of outstanding books in this field in co-operation with State Governments in a sharing scheme whereby the State Governments bear 50 per cent of the cost of these books, while the balance, plus the cost of packing and postage, are borne by the Government of India. During 1957-58 Social Education Literature costing about Rs. 1.2 lakhs was brought for distribution to educational centres and libraries etc. under the 50:50 sharing scheme in co-operation with State Governments.

Preparation of Eight-graded Books for Neo-literates: A scheme costing Rs. 1.546 lakhs submitted by the Hindustan Culture Society, Allahabad, for producing eight-graded books for neo-literates has been approved by the Government of India and a sum of Rs. 25,000 has been sanctioned as the first instalment towards this project, The remaining six books will be brought out during 1958-59.

Production of Literature for Social Education Workers: In order to provide suitable literature to support and guide Social Education workers professionally, the Ministry has announced a prize scheme under which manuscripts on five selected topics have been invited. Five prizes of Rs. 250 each will be awarded shortly for the best manuscripts.

The Ministry has also planned to bring out monographs on five subjects, viz., 'Democratic Group Discussion', 'Mass Education in China', 'Psychology of the Adult', 'How to Build a Good Library for a Village' and 'Eradication of Illiteracy'. These monographs will be brought out by the Idara Talim-o-Taraqqi, Jamia Millia, Delhi.

A similar prize scheme and preparation of monographs on different subjects will be taken up during 1958-59.

National Book Trust: The Trust was inuagurated on 1st of August, 1957. Its function is to encourage production of good literature at low costs. Under the Chairmanship of Shri C. D. Deshmukh, the Trustees have had several meetings to discuss its activities and have tentatively drawn up its publications programmes. Against the existing provision of Rs. 2 lakhs in the budget for 1957-58, a sum of Rs. 5 lakhs has been proposed for 1958-59.

Educational Survey of India: The object of the Educational Survey that is being carried out in collaboration with the State Governments, is to identify and enumerate every habitation and to map out and delimit the areas served by existing schools as also those that would be served by new schools at the Primary, Middle and High school stages by their appropriate location and suitable grouping of habitations.

On their return from the Central Seminar-cum-Pilot Survey held in January-February, 1957, the State Special Officers, after training the district staff in a State Seminar in the survey technique, started collecting the data through their district staff. The field work has already been completed in many districts and in other places where the survey work was begun late, it is expected to be completed before the 31st of March, 1958. Consequently the compilation of the State and the all-India Reports and other ancillary work are likely to be done in the next financial year and are to be completed by the end of June, 1958.

Of the total provision of Rs. 15 lakhs in the Plan for this scheme, a provision of Rs. 13.5 lakhs existed in the Budget for the year 1957-58 (Demand No. 21). Of this, a sum of Rs. 3,62,722 has already been sanctioned up to the end of December, 1957 and this represents the first instalment of 50 per cent. of Central assistance at the rate of 66-2/3 per cent of the estimated expenditure indicated by some of the State Governments. The first instalment for the remaining States will be sanctioned as soon as the proposals are received and the second instalment is expected to be released shortly on hearing from the State Governments regarding actual expenditure during the first six months and their revised estimates for the remaining half of the year.

As part of the survey work will be carried out during the first three months of the next financial year and the States will also incur some expenditure during those months a provision of Rs. 1.5 lakhs has been proposed for inclusion in the budget for 1958-59.

#### AUDIO-VISUAL EDUCATION

Central Film Library.—A sum of Rs. 69,000 was provided for 1957-58 for the purchase of films, filmstrips, film equipment and other audio-visual aids. During the period under review 600 films and 40 filmstrips and some equipment were added to the Central Film Library. The Preview Committee held 30 meetings and 149 films and 142 dia-maps and slides were previewed. The Library enrolled 136 members bringing the total to 1126. Four quarterly lists of films were prepared and distributed to all members of the Central Film Library. 7764 films and 20 filmstrips were issued to member-institutions.

During this period, reprints of an article "How to Make Class-Room Diorama" by B. Hughes were distributed to members of the Central Film Library and also to State Governments to acquaint teachers with the latest development in audio-visual education. Similarly, copies of a pamphlet entitled "Printing by Silk Screen" have been made available to the Directors of Public Instruction and Development Commissioners in States.

Three outstanding films "Children of Hiroshima", "Beneath the Seven Seas", and "Hello Elephant" have been acquired for the audience engaged in the promotion of film appreciation and also for the Research and Reference Section of the Central Film Library.

Mobile Cinema Unit.—A sum of Rs. 4,000 was provided for the maintenance of Mobile Cinema Unit. This year the Unit confined its activities to conducting film shows in educational institutions only, keeping in view the main aim and object of the Unit to demonstrate the proper use of audio-visual aids for classroom teaching. During the period, the Unit have organized 300 film shows and 45 preview-meetings. The Unit have also undertaken a project of assessing and evaluating the usefulness of films in education. This experiment will be conducted in half a dozen selected High/Higher Secondary schools in Delhi.

Travelling Library of Visual Aids.—The Unesco Travelling Library on Audio-Visual Education, received by the Ministry of Education and Scientific Research in December, 1956, was loaned to the Social Education Organisers' Training Centres at Nilokheri, Allahabad, Calcutta and Sriniketan besides Delhi. It is at present at Ranchi. At all these Centres, the trainees derived benefit from the Travelling Library.

Building of Audio-Visual Wing.—The finishing touches are being given to the Audio-Visual Wing building. The National Institute for Audio-Visual Education that is expected to start functioning during 1958 will be located there.

According to revised estimates, the cost of construction of the building has risen from Rs. 5 lakhs to Rs. 7,06,800.

Production of Gramophone Records.—At the request of this Ministry, the Director-General, All India Radio, has set up an Advisory Committee consisting of six members to advise and recommend to the Government of India the production of gramophone records for use in Secondary schools.

Mobile Cinema Vans under the Colombo Plan.—The four mobile cinema vans which the Government of India were to receive from Australia under the Colombo Plan are expected to be shipped to us during 1958-59.

National Institute for Audio-Visual Education.—Under the stress of national economy, the total provision for the establishment of the National Institute was reduced from Rs. 75 lakhs to Rs. 50 lakhs. Necessary steps are being taken to approach the Ministry of Finance for sanctioning various posts required for the Institute.

Technical Co-operative Mission are recruiting three Audio-Visual U.S. Experts in consultation with this Ministry. A list of equipment that is being acquired for the Institute with the list of film/filmstrips has been approved and passed on to Technical Co-operative Mission.

During the year a sum of Rs. 50,000 was provided for the project.

Production of the Educational Films.—During the year under report, the following films have been completed: (i) Jamia Millia; (ii) The Climate of India.

The following films have been included under the Production Programme of Educational Films for 1957-58; (i) Institute of Technology, Kharagpur; (ii) Birds of India; (iii) Quiz films; (iv) The Teaching of Elementary Mathematics.

Development Schemes of Audio-Visual Education.—A sum of Rs. 1.5 lakhs was provided for the implementation of the following Central Audio-Visual Schemes during the year 1957-58:—

- (a) Publication of an Audio-Visual Education Journal.—
  Signfficant event in the field of development of audiovisual education during the year is the publication of
  "Audio-Visual Education Journal". This was one of
  the recommendations of the National Board for AudioVisual Education, made at the second meeting held in
  1955. The first issue of the Journal was out in April,
  1957 and so far four issues have been published. A
  sum of Rs. 10,400 was provided for this purpose. The
  purpose of this journal is to foster interest in the use
  of audio-visual techniques in education. The journal
  also serves as a forum for teachers and social education
  workers. "Audio-Visual Education" is the only Journal
  in India exclusively devoted to audio-visual aids in
  Education.
- (b) Audio-Visual Convention.—A two-day regional Audio-Visual Convention of the Members of the Central Film Library was organized by Audio-Visual Unit of the Ministry of Education and Scientific Research on August 3 and 4, 1957, at New Delhi. The Convention was attended by 33 teacher-delegates and many observers. The Delhi Convention, the first of its kind

organised in India, was only a pilot experiment. It has been responsible for the formation of an Audio-Visual Society in Delhi and for mooting the idea of organising similar conventions in other States. An Audio-Visual Exhibition was organised on the occasion and remained open from 3rd to 7th August, 1957.

- (c) Exchange of films.—Films acquired from the following countries were previewed with a view to considering the possibility of acquiring them on the basis of exchange of negatives:—
  - 1. Malaya.
  - 2. Indonesia.
  - 3. Czechoslovakia.
  - 4. Canada.

Films already acquired from the National Film Board of Canada under this project are being dubbed in Hindi at the Films Division, Bombay. The Ministry of Information and Broadcasting have been requested to draw up estimates for the projects. A sum of Rs. 25,000 was provided for this during the present financial year.

Production of Filmstrip Projectors.—The Ordnance Factory, Dehra Dun have designed and completed a 35mm filmstrip projector for use in schools/institutions in pursuance of the recommendations of the National Board for Audio-Visual Education and it will now be finally previewed in the Ministry and its manufacture on a mass scale will be considered.

Unit for the Production of Visual Aids.—During this period, 10,000 copies of each of the two charts entitled, "Four R's of Audio-Visual Programme" and "Seven Ingredients of a Good Lesson" were prepared. A folder entitled "Care of 16mm Films", has been produced and distributed among the members of the Central Film Library.

Translation of Teaching Notes.—In implementation of the recommendations of the second meeting of the National Board for Audio-Visual Education in India, the work of translating teaching notes into Hindi has been taken up during the year. Different foreign producers of filmstrips were approached for permission to translate their teaching notes of the filmstrips into Hindi. So far permission from five producers has been acquired and the teaching notes of eight filmstrips have been translated.

Assistance to State Governments and Union Territories for Development of Audio-Visual Education.—A sum of Rs. 5.78 lakhs is estimated to be paid to State Governments and Union Territories as Central assistance for the implementation of the following schemes during 1957-58:—

- 1. Establishment of Audio-Visual Sections and Audio-Visual Libraries in the States and Union Territories.
- 2. Organising the Training Courses in Audio-Visual Education.
- 3. Establishment of the Audio-Visual Boards.
- 4. Supply of Film Equipment and Radio Sets to Educational Institutions.
- 5. Introduction of Audio-Visual Education in Teachers' Training Institutions.
- 6. Setting up of Mobile Audio-Visual Units.

Implementation of various schemes for the development of Audio-Visual education at the Centre and at State levels will continue during 1958-59.

#### SECONDARY EDUCATION

Reconstruction of Secondary Education.—From the current financial year, it has been decided to grant Central assistance for a scheme, 'Improvement of Salary Scales of Secondary School Teachers'. Central assistance during 1957-58 for schemes concerning Multipurpose Schools, Higher Secondary Schools is at 60 per cent. of the total cost, and for other schemes at 50 per cent. of the total cost. An amount of Rs. 1.91 crores has been sanctioned to State Governments up to the end of September, 1957 for their schemes on Secondary Education.

During the First Plan period, about 367 schools were converted into Multipurpose Schools. During the Second Plan period, it is proposed to raise this figure to 1,187. Two hundred and eight schools have been converted into Multipurpose Schools and 109 schools into Higher Secondary schools during 1956-57.

A provision of Rs. 7 crores has been proposed as Central assistance to State Governments for schemes relating to the reconstruction of Secondary education during 1958-59.

Introduction of Agricultural and Science Courses.—The scheme provides for the introduction of 100 Agricultural and 38 Science Courses in Rural Secondary schools. As there has been a cut of 50 per cent. in the Plan provision for the scheme (from Rs. 1 crore to half crore) only proposals for 80 Agricultural Courses and ten

Science Courses have been approved. Grants totalling Rs. 9.3 lakhs have been sanctioned to various State Governments for starting these courses. A sum of Rs. 10 lakhs was provided for this scheme during 1957-58.

A budget provision of Rs. 15 lakhs has been proposed for this Scheme for 1958-59.

Research in Problems connected with Secondary Education.—A sum of Rs. 2 lakhs was provided for this scheme for the year 1957-58. Out of this, so far Rs. 1,02,352 have been sanctioned to help various institutions in research schemes. The number of institutions that have been helped is 22 and the number of projects initiated is 28 during the current year.

These 28 projects are being carried out in various Training Colleges and University Departments of Education. Assistance will be continued in 1958-59 for such schemes as are not completed by the end of the present financial year as well as for any new scheme that may be approved. A budget provision of Rs. 2 lakhs has been proposed for this scheme for 1958-59.

Appointment of Hindi Teachers in non-Hindi Speaking Areas.— The aim of this scheme is to have one Hindi Teacher at each Secondary School in non-Hindi speaking areas. A provision of Rs. 7 lakhs for this scheme exists in the budget for 1957-58. The targets achieved during this year are as follows:—

Name o	State	3			,	No. o teachers	Amount Sanctioned
Kerala .		•	<del></del> -			159	Rs. 65,333 Rs. 25,562
Drissa' .			•	•		28	Rs. 25,562
ripura .		•		•	•	. 3	Ks. ⊿.88∧
Manipur		•		•	•	31	Rs. 15,000
Andhra	•	•	•	•	•	211	Rs. 40,178
					-	332	Rs.150,953

The rate of assistance is 60 per cent. to States barring Andhra and 100 per cent. to Centrally administered areas. The difference in rate between Andhra and other States is on account of the revision of rate from 60% to 50% in the latter part of the year.

A provision of Rs. 2 lakhs has been proposed for 1958-59 for this scheme. During the next financial year the scheme will run more or less on the same lines as in the current year.

All-India Council for Secondary Education.—The Council, an advisory body set up by the Government of India during 1955-56, expanded its activities during 1957-58. In addition to the 23 extension services departments set up during the First Plan period,

29 more departments have been opened in 1957-58 in various colleges all over the country. The Council has taken up the question of improving science teaching by establishment of science clubs at schools, laboratory planning and designing of science equipment.

In order to conduct research and improvement of examinations, a pilot Examination Unit has been set up by the Council during the current year. A full Examination Unit will start working from July, 1958 when the ten trainees deputed for six months training under Dr. B. Bloom of the Chicago University will return. The aim of the Examination Unit is to identify and clarify the purposes for improving the effectiveness of teaching various school subjects, to suggest adequate learning experiences for attaining desired results and to improve evaluation tools.

The Council has held many Regional and State Seminars of Headmasters, Subject-Teachers Seminars, All-India Seminars, and Seminar-cum-Training Courses. The Council continued to collaborate with the United States Educational Foundation in India in the organisation of their Secondary education workshops. The Council publishes a monthly journal entitled, "Teacher Education".

Assistance in Voluntary Educational Organisations (Secondary).— The pattern of assistance under the scheme has undergone a change in as much as the Central Government will contribute 50 per cent of both recurring and non-recurring as against 66 per cent of non-recurring and 50 per cent of recurring expenditure provided during 1956-57 and 60 per cent of both non-recurring and recurring expenditure available in the early period of 1957-58. Grants to the extent of Rs. 14,45,347 have been made to 27 institutions so far during the current financial year.

A provision of Rs. 14·1 lakhs has been proposed in the budget for 1958-59.

(Demand No. 21.)

Loans for the Construction of Hostels attached to Secondary Schools.—Loans were sanctioned in favour of seven institutions to the extent of Rs. 7,86,000 during the year 1956-57. A sum of Rs. 14.4 lakhs exists in the Central budget for the current financial year, and a provision of Rs. 59:04 lakhs has been made in the budget for 1958-59 for the Ministry as a whole.

(Demand No. 115.)

Promotion of Inter-State Understanding.—In implementation of a part of the scheme, copies of the first brochure "Himachal Pradesh" produced by the Ministry of Information and Broadcasting

have been distributed to various State Governments, for further distribution among Schools and Libraries. The second brochure in the Series, on the East Punjab has been taken up.

\A sum of Rs. 23,500 has been provided in the budget for 1958-59.

(Demand No. 21.)

Lawrence School, Lovedale.—Out of the total budget provision of Rs. 1,62,000 for the current financial year the Lawrence School, Lovedale has been paid a sum of Rs. 1,13,775.22 as the Government of India's share towards the expenditure on Entitled Children.

A provision of Rs. 1,15,000 has been included in the budget for 1958-59.

(Demand No. 21.)

Lawrence School, Sanawar.—Out of the total provision of Rs. 2,40,000 for 1956-57, the Lawrence School, Sanawar has been paid a grant of Rs. 1,70,000 for construction of additional buildings and for purchase of furniture.

No budget provision has been made for the School for the year 1958-59.

(Demand No. 21.)

Direct Grants to Public Schools.—It has been decided not to give any financial assistance to Public Schools after 1957-58 under this Scheme. The budget provision of Rs. 7,50,000 for the Plan period has been reduced to Rs. 3,50,000. Budget provision for the year 1957-58 has also been reduced from Rs. 1,75,000 to Rs. 50,000. Out of this amount a grant of Rs. 20,000 has been given to Daby College, Indore. Budget provision of Rs. 47,000 has been made for 1958-59.

(Demand No. 21.)

Inspection of Public Schools.—During 1957-58 four Public Schools have already been inspected by the Inspection Committees appointed by the Government of India. One more School is likely to be inspected during the present financial year. A provision of Rs. 4,000 exists to meet expenditure on these inspections during 1957-58. The same provision has been repeated for 1958-59.

(Demand No. 21.)

N.C.C. in Public Schools.—Sanction for an expenditure of Rs. 44,600 has been given to hold annual camps of the Junior Division Units in Public Schools during 1957-58. The budget provision of Rs. 51,400 for the year 1957-58 has been reduced to Rs. 45,000. Against this, the provision made for 1958-59 is Rs. 46,700.

(Demand No. 21.)

Grant to Educational and Cultural Organisations.—During the current financial year grants have been sanctioned to the following institutions—

(Demand No. 21.)

Scholarships to Cadets of Union Territories at the Sainik School, Dehra Dun.—Under this Scheme four scholarships have been renewed and one scholarship awarded to Cadets from Union territories studying at the Sanik School, Dehra Dun. The value of each scholarship is Rs. 1,000.

A provision of Rs. 8,000 has been included in the budget for 1958-59.

#### CENTRAL BUREAU OF TEXT BOOK RESEARCH

#### CURRICULAR WORK

The syllabus for Delhi Schools.—The Bureau worked with the Syllabus Sub-Committees of the Department of Delhi Education, Delhi State, in combining the present Basic and non-Basic syllabuses into a single, unified pattern for all Primary and Middle schools in the area. The detailed syllabuses for Science, English and Mathematics have been completed. The Syllabus for Social Studies is, at present, being drawn up.

United Nations Project.—The United Nations Information Centre approached the Bureau to examine the possibilities of including this subject in the Social Studies programme of Indian Schools. A list of 25 chosen plans was evolved with the help of the material furnished by the Centre to cover the needs of classes I to XII. The detailed syllabuses in terms of the objective, the actual information contained, classroom methodology, the audio-visual equipment and the attitude to be developed in the United Nations Project, are being drawn up.

Publications.—A pamphlet on State Textbook Selection Procedures has been published. Another brochure on Textbook Production Procedures is being edited for publication. The criteria for score cards for evaluating primary textbooks in language and science have been completed.

On request from the Rajasthan Government, detailed instructions to authors in Hindi, History, Social Studies, Geography and General Science were drafted. These were published by the Rajasthan Government and distributed among authors.

Research.—"Raw-Frequency"—Analysis of the concepts contained in the textbooks for the different grades at Delhi has been started. This has been started in Science and Social Studies. Later on, the basis of these texts will be evolved and the comprehension level of the given concept will be determined grade by grade. Since the syllabus is being drawn up for Delhi schools, data concerning the amount of time given to each subject, during the class period, has been collected and classified for the Delhi schools. An attempt has been made to list the possible corollary and supplementary reading material that will be built around the textbook lessons, to enliven the teaching of a class lesson and take cognizance of individual differences. This work is still in the initial stages.

A paper on "Pure Academic Research in Vocabulary Load and Concept Limitations for the Different Grades" was prepared by the Bureau and circulated to various Universities for further action. On the basis of this paper, some research will be undertaken in the next academic year, beginning from July, 1958.

Servicing Activities.—At the request of the Egyptian Government textbooks on British World and European History were selected out of the books received for the purpose from different States of the Union for onward transmission to that Government.

The proposals regarding topographical maps of various dimensions for geologists of tomorrow were submitted for transmission to the Survey of India. On a request from the Government of Kashmir, a programme of producing textbooks for 1958-59 was drawn up. The University of Mysore was advised, at their request, on the establishment and functioning of a Textbook Research Bureau in the State. The Bureau has been serving in the Committee for drawing up syllabuses for Multipurpose schools to be established in Delhi. The Science syllabus of the Madras State was at the latter's request evaluated.

'Evolving detailed curricula in Social Studies and General Science for Primary and Middle Schools and publication of Textbook analysis sheets, a small pamphlet on corollary reading material for schools and outlines for small pamphlets are among the activities to be undertaken durning 1958-59. Besides these, work on textbook analysis, concept analysis and academic research programme will be continued.

### CENTRAL BUREAU OF EDUCATIONAL, AND VOCATIONAL GUIDANCE

The Central Bureau's work during the year under review is carried out in four major assignments:

- (1) Field service which includes (a) conducting guidance services in the selected schools of Delhi and (b) research ancillary to the improvement of guidance services in school.
- (2) Preparation/adaptation of (a) psychological tests and related measures of pupil assessment (b) guidance film-strips, posters, manuals, etc.
- (3) (a) Assistance to Guidance Organisations and Teachers Colleges for conducting guidance personnel training courses.
  - (b) Conducting psychological examinations.
- (4) Publications, Committees, Conferences and Exhibitions.

The Central Bureau has conducted curricular guidance and occupational orientation in standards VIII and XI in two schools of Delhi as a continuing service. It has assisted three schools at Delhi in setting up and planning the work of their guidance units. Individual guidance was given to a number of students on request at the Bureau's office.

Pilot investigations were conducted in Delhi Schools on subjects like, 'Predictive Value of VIII Class Examination Results—for predicting success in the Higher Secondary examination', 'Follow-up Study of the School-Leavers' etc.

Four sets of psychological tests, for determining literary aptitudes in Hindi, assessing the commerce interest factor mechanical aptitude and clerical ability of the students of standards VIII and XI were constructed and these are being tried out for preliminary statistical analysis.

A new series of seven filmstrips in accordance with the seven diversified courses for the curriculum of the multipurpose schools has been in preparation. A series of 11 posters depicting the various aspects of educational and vocational guidance are being printed at the Government Photo Litho Press. A manual on multipurpose schools, entitled "Your School and Your Career" is being prepared.

A detailed scheme of a guidance unit attached to a Teachers College was prepared and sent to the Education Departments of Madras and Mysore and to a few private Teachers Colleges. A scheme of guidance and student personnel work in the college/university was prepared and sent on request to a few colleges.

The preliminary screening of candidates from Delhi area applying for the Government of India merit scholarships in Public Schools was done by the Bureau by means of psychological examinations. Psychological tests for the age range five to twelve were prepared for the Scholarships Division of the Ministry of Education. These tests were used in ten centres of selection. One-day test administration training course was held for the Officers deputed by State Education Departments.

The following printed publications prepared by the Central Bureau were sent to all Guidance Organisations, Teachers Colleges, Extension Services Departments, and to Multipurpose schools:—

- (i) A Manual of Educational and Vocational Guidance.
- (ii) Educational and Vocational Guidance in Multipurpose Schools—Proceedings of the Working Conference held at Ootacammund in June, 1956.
- (iii) A brochure on "Your Child at the Crossroads".
- (iv) Occupational Orientation Filmstrips narratives entitled, "In Farm and Field", "In Workshop and Laboratory", "Business is Business", "Dealing with People", "Public Administration and Private", "Men in Uniform", and "Crafts, Arts and Letters".
- (v) Guidance Number—a special number of the periodical published by the Central Institute of Education.

A filmstrip Committee was constituted for advising and supervising the work of filmstrip and poster production of the Bureau.

The Central Bureau participated in the Annual Conference and Guidance Seminar of the All-India Educational and Vocational Guidance Association held at Mysore in April, 1957. Four Career Conferences and Exhibitions were held in four schools of Delhi during the period under review.

Programme for 1958-59.—In view of the increasing provision for educational and vocational guidance in Secondary schools being made in many States, the need of suitable guidance aids and for training of guidance personnel has become urgent. The Central Bureau proposes to concentrate on the projects directly bearing upon them.

The programme will include (a) preparation of aptitude tests suitable for helping Secondary school pupils in the choice of the courses taught at Multipurpose schools; (b) preparation of model course content in the form of synoptic notes for guidance personnel training courses meant for (i) student-teachers in Teachers' Colleges and serving teachers of Secondary schools (ii) teacher-counsellers and (iii) counsellors.

It is also proposed to produce occupational information and guidance films to supplement orientation talks on vocational guidance.

A fourth major project proposed is the issue of "Guidance News" in printed form once in two months

#### THE CENTRAL INSTITUTE OF EDUCATION, DELHI

The following expenditure is expected to be incurred during the current financial year against the budget grant shown below:

\$	Sub-I	Iead				Likely Ex- penditure	Budget Grant
<del></del>				 		Rs,	Rs.
Pay of Officers						1,02,000	1,07,000
Pay of Establishment			• `			75,200	76,200
Allowance & Honorar	ium					78,600	81,600
Other Charges						72,800	78,800

A saving of Rs. 15,000 is anticipated.

The following is the budget provision for 1958-59:-

Sub-Head							A	Amount proposed		
Pay of Officers						•		1,01,000		
ay of Establishment								73,500		
llowances & Honora	rium					•	•	77,400		
Other Charges.								74,300		

During the session that ended on 25th April, 1957, there were on rolls of the Institute 97 students (including 45 women) in the B.Ed class, and 21 students (including 8 women) in the M.Ed. class. In addition, 11 scholars were studying for the Ph.D. degree course and one of them has since been awarded the degree. Of the 97 B.Ed students 92 passed the University examination, seven obtaining a distinction. All 21 M.Ed. students passed the University examination, three of them obtaining a distinction.

An innovation has been made this year: the organisation of special weeks devoted to the study of special aspects of education. In August, 1958 a Health Education Week was organised, the general theme of which was "The Teacher's Role in Health Education". In September the Central Institute of Education with the University of Delhi observed National Plan Week. In October a Basic Educational

Week was observed. A panel of distinguished educationists discussed the question, "Has Basic Education Succeeded?" This was followed by a symposium on different aspects of Basic Education. In November, another week was devoted to educational and vocational guidance, in the organisation of which the staff of the Central Bureau of Education and Vocational Guidance, cooperated. Next term it is proposed to hold special weeks for stressing education for citizenship and evaluation in education.

The C.I.E. Planning Forum has been addressed by visiting speakers and has met to study and discuss some of the problems connected with the second Five-Year Plan. The Unesco Club has had a number of meetings, at which members have discussed the reports published by Unesco and have observed important international days such as U.N. Day and Human Rights Day. The primary purpose of the club is to stimulate and foster international understanding. The first anniversary of the club inaugurated by Dr. Luther Evans, Director-General of Unesco, was celebrated on 29th November.

This year the seventh class was added to the Central Institute of Education Basic School which has only recently been able to move into its new building. With assistance from the Delhi Directorate of Education, the Institute this year organised a Community Centre in the Basic school. There are literacy classes for men and women and a craft class for women. About seventy adults are attending the centre. The centre provides experience in Social education programmes for B.Ed. students offering Social Education as an optional paper.

Research in the Psychology Wing of the Institute has made good progress during the last year. The first report on the individual Scale of Intelligence has already been published. The scale so far finalised can be used for children below 11 plus. Work for finalising test up to 14 plus is in progress and it is expected that by the end of this session it will be completed.

The project of finding norms for Indian children between 10 and 12 years of age on Jenkins' Non-Verbal Test has successfully been completed and permission has been obtained from the National Foundation for Education Research, London, to publish these results and also to produce this test for supply to Indian schools and other agencies.

As this test is fairly difficult for children of 10 to 12 years of age, the Institute has taken up the project of finding further norms on this test for children of 13 to 14 years. The testing for this purpose is now over and the work, it is hoped, will be completed by the end of this session.

A new project that has been taken up is the standardisation of a group test of intelligence in Hindi for the age group 15-16. Items selected have been put into two forms for the first try-out and the test is being printed

During the course of the year the following studies and reports by members of the Institute staff were published: (1) Leadership Among Children; (2) School Record; (3) The C.I.E. Individual Scale of Intelligence; (4) The Attitudes of Junior Basic School Children towards School Activities; (5) Building up a Social Studies Curriculum for the C.I.E. Basic School; (6) Selection for Secondary Education in England; (7) Education of the Handicapped in Australia.

The Child Guidance Centre, which is a part of the Psychology Wing of the Institute made good progress since it started functioning in a regular way in November, 1956. The Centre now concentrates more on working with teachers in understanding and helping problem children than on running a service centre for maladjusted children. The centre also proposes to concern itself with the education of parents in child development.

The Extension Service Department has been very active during the year. Besides, the usual study circles which meet regularly and long-term evening courses, a series of week-end seminars and workshops have been organised. A number of projects including the organisation of home rooms, the beautification of school premises, the preparation of new type tests and 'reading for pleasure' have been launched in several of the participating schools.

The Institute sought to develop a closer contact with the schools through school visits, generally at the invitation of the principals or teachers. In extension work, monthly meetings of principals specially to determine the needs of the schools and also to evaluate programmes have been found of great help.

C.I.E. publications have been specially appreciated not only by the participating schools but also by other schools in Delhi and in other parts of the country. A quarterly journal, *Educational Forum* is published at the Institute.

#### HIGHER EDUCATION

University Grants Commission.—Since the constitution of the Commission as a statutory body under the University Grants Commission Act, 1956, with effect from 5th November, 1956, there have

been a number of changes in the composition of the Commission. The present composition is as follows:

#### Chairman .

1. Shri C. D. Deshmukh

#### Members

- 2. Dewan Anand Kumar vice Dr. Zakir Husain.
- 3. Dr. K. S. Krishnan vice Dr. M. S. Thacker
- 4. Pt. H. N. Kunzru
- 5. Shri G. C. Chatterjee, Vice-Chancellor, University of Rajasthan, vice Dr. John Mathai
- 6. Dr. A. L. Mudaliar, Vice-Chancellor, University of Madras
- 7. Prof. N. K. Sidhanta, Vice-Chancellor, University of Calcutta
- 8. Shri K. G. Saiyidain, Education Secretary, Ministry of Education and S. R.
- 9. Shri N. N. Wanchoo, Secretary, Department of Expenditure.
  Ministry of Finance, vice Shri S. Ratnam.

In exercise of the powers conferred by Section 25 of the University Grants Commission Act, 1956, the Central Government have framed the "University Grants Commission (Returns and Information) Rules, 1957". These rules were laid on the Tables of both the Houses of Parliament on 19th December, 1957.

A total provision of Rs. 4·17 crores was included in the current year's budget for "Grant-in-aid to the University Grants Commission". This has been reduced to Rs. 3·89 crores in the Revised Estimates for this year. Out of this, a sum of Rs. 3·42 crores has been placed at the disposal of the Commission so far. In the Budget Estimates for 1958-59, a sum of Rs. 4·32 crores has been provided for grants-in-aid to the Commission.

During the year under report, the Commission held seven meetings. The Commission had accepted the recommendations of the Reviewing Committee and fixed the following block grants to the Central Universities for the quinquennium 1956—61:—

Aligarh Muslim University	•	•	•	. Rs.	31,86,000 p.a.
Banaras Hindu University	•	•	•	. Rs.	50,40,000 p.a.
Delhi University	•	•		. Rs.	24,40,000 p.a.
Visva-Bharati, Santiniketan	•		•	. Rs.	11,14,000 p.a.

Rs.	1,17,80,000	p.a.

On receipt of representations from all Central Universities for a higher rate of block grants the Chairman of the Commission appointed a Committee to consider these representations. The Committee recommended the following revised rates to be effected retrospectively from 1956-57:

Aligarh Muslim University	•		. Rs.	37,90,000 p.a.
Banaras Hindu University			. Rs.	55,50,000 p.a.
Delhi University			. Rs.	27,00,000 p.a.
Visva-Bharati, Santiniketan		•	. Rs.	L13,75,000 p.a.
1			Rs.	1,34,15,000 p.a.

The Commission has accepted the above recommendations.

The Commission appointed the English Committee to consider the place of English in the Universities. The Committee has submitted its report which the Commission has accepted. The Commission considered that English, should be taught for a minimum period of six years beginning at the post-junior basic or primary stage.

The Commission has considered the question of improvement of the salary scales of the teachers of affiliated colleges and has proposed to give grants to these colleges through their respective Universities for the purpose.

Visva-Bharati, Santiniketan.—The Prime Minister in his capacity as Acharya (Chancellor) of the Visva-Bharati, Santiniketan, has nominated the two following persons to the Samsad (Court) of the University:—

- 1. Professor Humayun Kabir; and
- 2. Professor A. N. Basu, former Principal of the Central Institute of Education.

The President in his capacity as Paridarsaka (Visitor) of Visva-Bharati, Santiniketan, has nominated the following persons to be members of the Samsad (Court) of the University with effect from 22nd March, 1957 for a period of four years:—

- 1. Prof. N. K. Sidhanta. Vice-Chancellor, Calcutta University, Calcutta.
- Shri A. K. Chanda, Ex. D.P.I. and Chairman, Board of Secondary Education. West Bengal.
- 3. Smt. Pratima Devi. Santiniketan.
- 4: Dr. Nalinaksha Dutta, Calcutta.

The President, has also nominated with effect from 9th May, 1957, Dr. J. P. Niyogi, Professor of Economics and Vice-President, University College of Arts, University of Calcutta, to be a member of its 345 M of Edu.-5

Selection Committee vice Shri V. K. N. Menon resigned. He will hold office up to 26th September, 1958.

In pursuance of clause (XII) sub-section (1) of Section 19 of the Visva-Bharati Act, 1951 (XXIX of 1951) read with clause (5) of Statute 10 of the First Statutes of the University the Lok Sabha has duly elected from among its own members at its sitting held on 24th May, 1957, Shri Atulya Ghose, M.P. to serve as a member of the Samsad (Court) of the Visva-Bharati.

The President in his capacity as Paridarsaka (Visitor) of the University has been pleased to approve of the re-election by the Karma Samiti of Shri Tapanmohan Chatterjee to be a member of the Artha Samiti (Standing Finance Committee) of the Visva Bharati, for a period of three years with effect from 25th September, 1957.

Banaras Hindu University.—The President in his capacity as Visitor of the Banaras Hindu University, has nominated the following persons to be members of the Court of the University for a period of five years with effect from 4th April, 1957:—

- Dr. I. N. Gurtu, Ex-Vice-Chancellor, Allahabad University, Allahabad.
- Pandit Gopinath Kunzru, Advocate, Allahabad.
- Dr. K. L. Shrimali, Minister of State for Education, Government of India.
- Dr. Zakir Husain, Ex-Vice-Chancellor, Aligarh Muslim University.
- Prof. Mukat Bihari Lal, Retired Professor of Politics of the Banaras Hindu University.

The President has also appointed Pandit H. N. Kunzru as his nominee on the Executive Council of the University for a term of three years with effect from 8th November, 1957.

In exercise of the powers conferred by sub-section (2) of Section (5) of the Banaras Hindu University Act, 1915 (16 of 1915), the President in his capacity as the Visitor of the University appointed on 20th July, 1957 an Enquiry Committee to look into and report on the present academic and administrative problems and conditions at the University. The members of the Committee are as follows:

## Chairman

Dr. A. L. Mudaliar, Vice-Chancellor, University of Madras.-

## Members

Shri M. C. Mahajan, Ex-Chief Justice of India.

Dr. P. Subbarayan, M.P.

Shrimati Sucheta Kripalani, M.P.

Shri Navroji J. Wadia.

The terms of reference of the Committee are as follows:

To examine the general state of the discipline in the University. keeping in view the recent disturbances in some of the institutions; to enquire into the adequacy and effectiveness of the existing rules and procedure for ensuring proper conduct and discipline amongst the employees of the University; to examine the working of the Act, the Statutes and the Ordinances of the University in general and with particular reference to: (a) the composition of the Authorities of the Universities, (b) the institution of the Principals and their ex-officio appointment as Chief Wardens, and (c) the powers of the Vice-Chancellor vis-a-vis the administrative and the teaching personnel of the University: to suggest such remedies and measures as are necessary in respect of these matters; and to suggest such other measures of reform as are necessary for the betterment of the academic life and efficient functioning of the University.

The Committee has been empowered to frame its own programme of work and to elicit information through questionnaires, memoranda and by calling witnesses, if necessary.

Delhi University.—The President in his capacity as Visitor of the University, has nominated the following persons to be members of the Court of the University for a term of five years with effect from 4th October, 1957:—

Dewan Anand Kumar

Dr. Tara Chand, M.P.

Dr. V. K. N. Menon

Dr. S. K. Sen

Prof. M. Mujeeb

Aligarh Muslim University.—In pursuance of sub-clause (XVIII) of clause (1) of Statute 8 of the Statutes of the Aligarh Muslim University, the Lok Sabha at its sitting held on 20th May, 1957 duly elected the following members to serve on the Court of the University:

Shri M. Hifzur Rahman, M.P.

Shri Saif F. B. Tyabji, M.P.

Later on, the Lok Sabha at its sitting on the 16th December, 1957, elected Shri Ansar Harvani, M.P. to serve as a member of the Court of the University vice Shri Saif F. B. Tyabi who has since died.

Permission to hold Foreign Examinations in India.—The Government of India have permitted the holding of the Examination of the Institute of Metallurgists at the Delhi Polytechnic. The Examination was held on 15th July, 1957.

The Government of India have also permitted the holding of the Associate Membership Examination of the Institute of Chemical Engineers (London), at the Delhi Polytechnic. The Examination was held from 10th to 13th September, 1957.

Grant of £100 for Microfilming of Important Documents.—A sum of £100 has been sanctioned to Khwaja Ahmed Faruqi, Reader, University of Delhi, as an ad hoc grant out of Minister's Discretionary Fund to meet the cost of microfilming of some important manuscripts in the British Museum.

Conference on University Administration.—A Conference of Vice-Chancellors of all Indian Universities, Education Secretaries of all States and other eminent educationists was held at New Delhi from 30th July to 1st August, 1957 to discuss problems of University administrations. Dr. A. L. Mudaliar, Vice-Chancellor University of Madras acted as Director of the conference. Dr. K. L. Shrimali, Minister of State in the Ministry of Education and Scientific Research presided at the inaugural session and Dr. C. D. Deshmukh delivered the inaugural address.

The following major topics came up for discussion at the Conference: (1) Vice-Chancellor's Office; (2) Problems of University Finance; (3) Constitution and Composition of University Bodies; (4) Problems affecting University Teachers; (5) Problems affecting University Students; (6) Relation between Universities and Boards of Secondary Education.

India Wheat Loan Educational Exchange Programme.—(The funds for this Programme are not reflected in the Government of India Budget).

The implementation of the first year's Programme is now practically over, and that of the second year's Programme is well under way. Under the third year's Programme, funds were allocated to various Universities and institutions as per details given below:—

- I. Scientific Equipment
  - 13 Universities:. . . . . \$3,00,000
  - 4 Non-University Institutions . . \$75,000

#### 2. Books

	15	Universities:.			•		\$2,25,000
	28	Non-University for U.S.A.	Institu				\$1,00,000 \$15,000
	,						\$3,40,000
3.	26	nange of persons Indians sent to U Americans invited	J.S.A. I to Ind	ia	: .	:	}\$2,00,000

The receipient Universities/Institutions were asked to prepare their orders against their allocations. Under the exchange of personnel aspect, a group of 24 Indian Educationists from 12 different Universities were sent to the U.S.A. for four and half months to study the organisation of General Education Courses in some of the leading Universities there. The other two facilities were used by a member from the staff of the University Grants Commission and a scientist from the department of Chemical Technology of Bombay University.

The Ministry of Education and Scientific Research also convened a Conference of the 11 librarians who went to the U.S.A. under the second year's Programme. The participants discussed the various problems of Indian libraries in the light of their observation and study of similar problems in the U.S.A. and made certain recommendations which are under consideration.

The outline of the Programme for the fourth year (1957-58) has also been approved by the Governments of India and the U.S.A. The details are being worked out.

General Education Courses .- At the suggestion of the government of India, all Indian Universities met in five regional conference held at Hyderabad, Baroda, Delhi, Aligarh and Calcutta to discuss the recommendations of the Bhagavantam Study Team which was sent to the U.S.A./U.K. in 1956 to study the organisation of General Education Courses in some of the leading Universities there. Another group of 24 Indian teachers was sent to the U.S.A. in February, 1957 for a period of four and half months to study the problem more closely. In exchange, a group of nine experts in General Education were invited from the U.S.A. to serve as consultants to such Indian Universities as are introducing General Education Courses. The Reports of these two groups were received and discussed at a Conference convened by the Ministry of Education and Research at Hyderabad in December, 1957. The introduction of General Education Course has been accepted in principle by almost all Indian Universities. Many of them have actually introduced General Education Courses in one form or another.

Home Science Education and Research.—Under the Operational Agreement No. 41 of T.C.M. which was signed on 31st May, 1955, operative for three years, provision has been made for \$100,000 worth of books and equipment, nine U.S. technicians and 12 training facilities to Indian teachers from the eight institutions selected for the development of Home Science Education and Research in India. Books and equipment worth \$95,000 approximately were ordered and worth above \$35,000 were actually received in the institutions. Eight U. S. technicians came in their respective institutions and all except two have returned to the U.S.A. after completing their assignments. Ten training facilities have already been utilised and one more teacher is expected to leave for the U.S.A. shortly. Owing to the awakened interest of the State Governments in developing Women's Education, the scope and coverage of the present agreement has been extended till 1961 so as to operate the Project on regional basis rather than on institutional basis.

Village Apprenticeship Scheme to Selected University Students and Teachers.—In cooperation with the Ministry of Community Development 2,000 University students and teachers were selected for participation in the scheme for granting Apprenticeship in Village Development during 1957. The scheme aims at developing a realistic spirit of social service and responsible understanding of the problem of rural reconstruction in India. The success of the scheme has justified its continuation through the third year, when 2,500 more students and teachers will be awarded these apprenticeships. The scheme is being financed out of the funds made available for the purpose by the Ford Foundation in India.

## SECOND FIVE-YEAR PLAN SCHEMES

Grant of Loans to Affiliated Colleges for Construction of Hostels.—During 1956-57, a sum of Rs. 38.41 lakhs was sanctioned as interest-free loans to five colleges in each of the States of Madras, Bombay, Kerala and Uttar Pradesh. For the year 1957-58 there is a provision of Rs. 14.40 lakhs for this purpose, but only a sum of Rs. 1,29,000 has been sanctioned to the Barahseni College, Aligarh.

It is proposed to sanction loans to the colleges situated in the states of the Punjab, Andhra Pradesh, Assam, Orissa, Rajasthan and Himacral Pradesh during 1957-58.

Scheme for Grant of Loans to Universities and Constituent Colleges of Delhi University for Construction of Hostels etc.—A provision of Rs. 30 lakhs exists in the current year's budget for grant of loans to the Universities etc. for construction of hostels and staff quarters. Out of this, a sum of Rs. 64,794 only has so far been paid to the Kirori Mal College, Delhi, towards the construction of

Hostel. Loans are proposed to be sanctioned to the Agra University, Sardar Vallabhbhai Vidyapeeth and Hindu College and Ramjas College of the University of Delhi during 1957-58.

Educational Development Schemes of Union Territories for 1957-58

# Tripura

The Tripura Administration have included the two following schemes for the development of University Education during the year 1957-58 under the Second Five Year Plan:—

,	Rs.
(a) Development of M.B.B. College, Agartala	88,000
(b) Grant to Ram Krishne Mahavidyalaya as grent-in-sid to	<b>3</b>
Non-Government Colleges	50,000
	1,38,000
	<del></del>

Certain schemes in regard to the above colleges have been accepted and expenditure sanction issued.

## Himachal Pradesh

A sum of Rs. 25,000 has been sanctioned to the Himachal Pradesh Administration during the current year for opening a Degree College in Himachal Pradesh.

## Manipur

The Government of India have already accorded approval to the incurring of an expenditure on the opening of Honours classes in the subjects of History, Philosophy and Mathematics during the year 1957-58 at the D.M. College. Another proposal of the Manipur Administration for the opening of B.Sc. class in Zoology and B. Com. Course at the D.M. College is under consideration.

State Educational Development Programme—Development of Women's Education in Colleges.—In connection with the State Educational Development Programme for 1956-57, Central assistance was made available to State Governments for the Scheme of "Development of Women's Education in various types of Colleges" on the basis of 50 per cent. of total expenditure involved. It has been decided that financial assistance may be continued on the same basis to State Governments in respect of these and similar schemes which are included in the States Educational Development Programme and in the budget for 1957-58. Financial assistance has either been provided or is proposed to be provided to the States of Orissa, Mysore, Rajasthan. Bihar, Uttar Pradesh, Madhya Pracesh, and the Punjab and for certain development schemes of Women's education during 1957-58.

Three-Year Degree Course.—In accordance with the recommendations of the Education Ministers' Conference held in September, 1956, a Committee was appointed under the Chairmanship of Shri C. D. Deshmukh, Chairman, University Grants Commission, to work out the estimates of expenditure connected with the introduction of Three-Year Degree Course in Universities and affiliated colleges. The Committee submitted its Report on 1st May, 1957. According to the estimates prepared by the Committee, a sum of Rs. 25.0 crores will be required to introduce the reform. The Committee recommended that this sum should be shared between the Central Government and the University Grants Commission on the one hand. and the State Governments and private managements on the other in equal proportion. The Committee felt that a sum of Rs. 15.0 crores should be provided during the Second Five-Year Plan period, and the balance in the Third Five-Year Plan. In so far as the Central Government are concerned, it is proposed to provide a sum of Rs. 5 crores for the plan period. It is also hoped that the Commission will be able to provide Rs. 2.5 crores during the same period, bringing the Central Government's share to Rs. 7.5 crores. The Committee further recommended that the share of the Central Government/University Grants Commission should be when a University has taken a decision to introduce the Three-Year Degree Course and either the State Government concerned is prepared to pay its share to the University/College from its own resources or private resources are available to match the Central Government's grant.

The Report of the Committee was considered at Education Ministers' Conference held on 20th and 21st September, 1957 and after a full discussion of the various recommendations made by the Committee, the Conference decided to endorse these recommendations. The Conference also expressed the hope that the funds provided in the Central Plan, supplemented by the allocation made by the University Grants Commission and the State Governments would be made available for the introduction of this important reform. The Education Ministers agreed to examine the budgetary position with the object of finding out how funds can be made available by suitable adjustments.

Twenty-three universities have already approved the scheme, and have either introduced or are taking steps to introduce it. Another seven universities have accepted the scheme in principle. Of the remaining universities, a few are having some difficulty in implementing the reform, while others have not yet arrived at any decision in this regard.

Rural Higher Education.—Nine out of the ten Rural Institutes that started functioning during 1956-57 maintained good progress during 1957-58. The tenth Institute, viz., Mouni Vidyapeeth, Gargoti has started the Rural Service Diploma Course in November, 1957.

The following Institutes have started additional courses during the current year:—Jamia Rural Institute, Jamia Nagar, New Delhi: Certificates in Civil and Rural Engineering; Rural Institute, Amravati: Certificate in Civil and Rural Engineering; Ramakrishna Mission Vidyalaya, Coimbatore: (a) Rural Services Diploma, (b) Preparatory; Lok Bharati, Sanosara: Rural Services Diploma.

To enable poor and meritorious students joining the Rural Institutes to prosecute their studies, stipends of different values ranging from Rs. 40 to Rs. 60 per mensem have been instituted for 20 per cent. students on roll in each course.

Grants and stipends amounting to Rs. 18,21,698 and Rs. 1,21,185 respectively have been paid to the Rural Institutes during the period.

It has been decided that students at Rural Institutes belonging to Scheduled Castes, Scheduled Tribes and other Backward Classes should be awarded scholarships under the Scheduled Caste Scholarship Scheme.

Negotiations are under way to obtain recognition of the Universities and other bodies of the Diploma of the Rural Services to be considered at par with the first degree of a University. In the conference of State Education Ministers held on 20th and 21st September, 1957 it was decided that the Inter-University Board should be requested to consider the Diploma holders in the Rural Institutes eligible for admission to Post-Graduate classes of the Universities. With regard to the recognition of the Diploma by the Public Service Commissions and State Governments, the conference suggested that an Assessment Board with a member of the Union Public Service Commission as Chairman be constituted to examine the standard of courses of instruction provided in the Rural Institutes and to advise whether the Diploma in question can be accepted as equivalent to a first degree of a University for the purpose of employment.

Efforts are also being made in the setting up of Extension and Research Departments in all the Rural Institutes, some of which have already made considerable progress in this respect.

The first examination in the Agricultural Science Certificate Course will be held by the National Council for Rural Higher Education in April, 1958 which will award certificates to successful candidates. With regard to the employment prospects of the certificate holders the Ministry of Community Development have been

requested to suggest to the State Governments the suitability of these certificate holders for jobs of Village-level Workers.

The second and third meetings of the National Council for Rural Higher Education and its standing Committee were held in January and July 1957 respectively.

The Technical Cooperation Mission of the U.S.A. are assisting the ten Rural Institutes by supplying equipment and books worth \$25,000 and the services of an expert in Rural education to advise the institutes on their special problems. During 1958-59 additional assistance by way of \$15,000 worth of commodities will be received by the Rural Institutes.

During 1958-59, a few more courses will be added to some of the Rural Institutes. It is also likely that two more Rural Institutes will be brought within the jurisdiction of the Rural Higher Education Scheme.

A sum of Rs. 37.6 lakhs has been proposed as budget provision for this scheme during 1958-59.

(Demand No. 21)

Seminars on Rural Problems.—In place of the original scheme, "Training of Key Personnel" assisted by the Ford Foundation, a revised scheme of conducting Seminars on Rural Problems has been instituted. Under this scheme three types of seminars are envisaged, viz., Regional, Local and Inter-State.

Local seminars will be organised by the Directors of Rural Institutes to discuss problems of local importance. For the purpose of Regional Seminars, Rural Institutes have been divided into four regions according to their location. Major problems concerning Rural Institutes will be discussed in the Inter-state Seminars. The first Seminar in the series was held at Balwant Vidyapeeth Rural Institute, Agra between 25th and 30th December, 1957.

A budget provision of Rs. 47,000 has been proposed for 1958-59. (Demand No. 21)

# DEVELOPMENT OF HINDI

In view of the re-organisation of States with effect from 1st November, 1956, the composition of the Hindi Shiksha Samiti has been revised. The Samiti now consists of 23 members including a representative each of the various State Governments and the Administrations of Delhi, Himachal Pradesh, Manipur and Tripura, one member each of the two Houses of Parliament, two representatives of leading Hindi organisations and a Chairman. The tenure of

office of all the members including the Chairman is three years. The following action has been taken on the main recommendations made by the Samiti at its tenth meeting held on 20th July, 1957:—

- (i) A model syllabus has been prepared for Hindi Teachers' Training Colleges in the non-Hindi speaking States.
- (ii) The question of recognition of Hindi examinations conducted by different Hindi organisations in the country which had been under consideration since 1953, has been settled. Definite rules for recognition have been laid down and model syllabuses for different Hindi examinations have been prescribed. A form of application has also been prescribed which the organisations desirous of getting their examinations recognised were to complete and submit to Government before 28th February, 1958. The applications are being scrutinized.

The following schemes have been added to this Ministry's programme for the propagation and development of Hindi under the Second Five-Year Plan:—

- 1. Preparation of terminological work of all standard Hindi works, old and new.
- Collection and indexing of special vocabularies on Arts and Crafts with the help of existing literature and actual field work.
- 3. Investigation of terminological material in old literature.
- 4. Preparation of technical encyclopaedias, dictionaries and other reference books in Hindi.
- 5. Publishing revised and critical editions of standard Hindi works now out of print.
- 6. Publication of omnibus volumes of the works of eminent Hindi writers.
- Organisation of debating teams of schools and colleges from non-Hindi speaking areas to Hindi speaking areas and vice-versa.
- 8. Organisation of lecture tours by prominent Hindi scholars and writers of Hindi areas to non-Hindi speaking areas and vice-versa.
- 9. Holding of seminars of Hindi teachers of non-Hindi speaking areas in Hindi speaking areas and vice-versa.
- 10. Prizes on Hindi books.

The details of these schemes have been worked out and action started for their implementation. The progress so far made in their implementation is indicated below:—

Scheme No. 1.—This scheme envisages the preparation of indices verborum of 14 Hindi works in the first instance. The work has been entrusted to various Universities in India. The Universities of Patna, Allahabad, Banaras, Delhi and Punjab have been sanctioned initial grants for starting the work entrusted to them. Necessary funds will be made available to other Universities as and when their plans of work and estimates of expenditure have been received and approved by the Government of India.

Scheme No. 3.—Out of five Hindi scholars approached to undertake the work, Dr. Satya Prakash, Dr. Gorakh Prasad and Shri R. N. Misra have agreed to undertake the work of collection of terms relating to Chemistry, Mathematics and Transport and Ship Building respectively. They have been requested to start the work.

Scheme No. 5.—This scheme envisages the preparation of 13 works in the first instance. These have been entrusted to various Universities and scholars. The University of Allahabad has been sanctioned an initial grant of Rs. 5,000 for the work entrusted to it. Necessary funds will be made available to other Universities and scholars as and when their plans of work and estimates of expenditure are received and approved by the Government of India.

Scheme No. 6.—This scheme envisages the preparation of 16 works in the first instance. These have been entrusted to different scholars. The Universities of Lucknow and Saugor have been sanctioned initial grants of Rs. 1,000 and Rs. 3,000 respectively for the work entrusted to them. Necessary funds will be made available to other scholars as and when their plans of work and estimates of expenditure have been received and approved by the Government of India.

Scheme No. 9.—Two seminars of Hindi teachers from non-Hindi speaking States were held at Gwalior and Varanasi from 24th December, 1957 to 6th January, 1958.

Scheme No. 10.—This scheme has been in operation since 1952-53, but was included in the Five Year Plan only in 1957-58. Two contests had already been held in earlier years for the award of prizes on books published upto the year 1954. Under the third contest held for the award of prizes on the books published in the year 1955, about 300 books were received for consideration. These books have been examined by judges and the result of the competition is likely to be announced shortly.

Other schemes are under way and preliminary action has been completed in respect of most of them.

- 3. The following progress has been made in respect of other Plan-schemes which were carried over from the First Five-Year Plan:—
- (i) Payment of grants to Hindi organisations and individuals etc.—The following grants have been sanctioned during the current financial year:—

Name of the Organisation	Purpose of grant	Amount Rs.
Shri Ram Chander Varma, Sahitya Rattan Mala Karayalaya, Banaras.	Compilation of 'Shabda Sadhna' .	7,500
2. Hindi Sahitya Sammelan, Allahabad.	Preparation of standard Hindi Dictionary.	10,000
3. Hindi Bhawan, New Delhi.	(i) General Administration and furniture for the Bhawan.	4,600
	(ii) Hindi Library.	5,000
4. Nagari Pracharini Sabha Varanasi.	Bringing out a revised edition of Hindi Shabad Sagar and publishing Hindi classics.	25,000
5. Akhil Bharatiya Hindi Parishad, Agra.	Training of Hindi Teachers from non- Hindi Speaking States.	20,000
6. Hindi Sahitya Sammelan. Prayag.	Propagation and Development of Hindi.	40,000
7. Hindustani Prachar Sabha, New Delhi.	Propagation and Development of Hindi,	30,000

- (ii) Hindi Encyclopaedia.—The Nagari Pracharini Sabha, Varanasi, which has been entrusted with the work of preparing the Hindi Encyclopaedia has been paid a further sum of Rs. 50,000 for the purpose. The posts of two Associate Editors for the Encyclopaedia have been filled, and the work is in progress.
- (iii) Preparation of elementary Hindi readers on scientific lines for non-Hindi speaking people.—The list of 2,000 basic Hindi words to be used in the proposed Hindi readers which had been prepared earlier has been revised. A draft directive for the authors who would prepare the readers has also been prepared. It has to be referred to certain experts for comments before issue to the authors concerned.

The list of 500 basic Hindi words constituting the minimum standard of literacy in Hindi, which had been prepared earlier, has also been revised.

(iv) Preparation of Deva Nagari Alphabet Charts.—None of the entries received in response to the Second Press Note issued in this regard in March 1957 came up to the standard. Two Charts, viz.,

Hindi-Urdu and Hindi-Assamese, however, had potentialities for improvement and were referred back to the authors for revision. The revised charts are under examination.

- (v) Preparation of Manuals on the Basis of Terminologies Evolved.—On the basis of terminology evolved, the manuscripts of manuals in Botany, Chemistry and Physics have been got prepared. The manual in Botany has been finalized and is under print. Preparation of three more manuals in Mathematics, Civics and Agriculture has been undertaken.
- (vi) Grants to States.—Grants totalling Rs. 4·13 lakhs were sanctioned during 1957-58 to the various non-Hindi speaking State Governments for the promotion of Hindi. Besides these grants, an expenditure of Rs. 56,300 was sanctioned for the promotion of Hindi in the Union Territories of Manipur, Tripura and Andaman and Nicobar Islands during 1957-58.

# 4. Technical Terminology:

- (a) With the finalization of the constitution of three more Expert Committees on Electrical Engineering, Mechanical Engineering and Philosophy, the total number of Expert Committees under the Board of Scientific Terminology has risen to 23.
- (b) Finalized lists of technical terms in Hindi relating to Defence-I (Drill Words of Command), Engineering-I (Building-materials) and Post & Telegraphs have been published and are available for sale with the Publication Section of the Ministry of Education and Scientific Research, and the Manager of Publications, Civil Lines, Delhi. Terms in the following subjects have also been finalised and are under print:
  - 1. Economics.
  - 2. General Administration (Designations).
  - 3. P. & T.
  - 4. Railways.
  - Tourism.
  - 6. Transport (Highway Engineering).
  - 7. Zoology.
- (c) Revised Lists of terms pertaining to the following subjects are awaiting final approval of the Government:—
  - 1. Agriculture-II (General Terms).
  - 2. Chemistry-II (Inorganic Chemistry).
  - 3. Defence-II.

- 4. Defence-V (Notice and Signboard Terms).
- 5. Diplomacy-I (General Designation).
- 6. Economics (Commerce Terms).
- 7. General Administration-II.
- 8. Information & Broadcasting.
- 9. Mathematics-II.
- 10. Medicine-I (General Terms).
- 11. P. & T. (Overseas Communication Service).
- 12. P. & T. (Designations).
- 13. Railways (General Traffic Terms).
- 14. Transport Shipping—A-L.
- 15. Transport Shipping-M-Z.
- 16. Transport (Highway Engineering).
- (d) Provisional lists of terms relating to the following subjects have also been brought out:—
  - 1. Agriculture-III.
  - 2. Botany-III.
  - 3. Chemistry-III.
  - 4. Communication (Meteorology).
  - 5. Diplomacy-II (Foreign office organisations and International organisations).
  - 6. Economics-III (Labour economics).
  - 7. Education (General Terms).
  - 8. Education-II (Education Psychology).
  - 9. Engineering-II (Irrigation and Hydro-electric Engineering).
  - 10. General Banking and Trade.
  - 11. Law-I.
  - 12. Law-II.
  - 13. Mathematics-III.
  - 14. Medicine-I (Part I & II).
  - 15. P. &. T. (Stamps and Seals).
  - 16. Zoology-II.
  - (ii) Dictionary of Words Common to Hindi and other Regional Languages.—It has been decided to publish a dictionary of words common to Hindi and other Regional Languages. To start with, provisional lists of terms common to Hindi and each regional language will be published and circulated for comments. Two lists,

- viz., Hindi-Bengali and Hindi-Tamil have already been circulated for comments. Hindi-Malayalam, Hindi-Kashmiri and Hindi-Telugu lists have been received from the press and are being circulated for comments shortly. The remaining lists are in press.
- (iii) English-Hindi Dictionary.—The Hindustani Culture Society, Allahabad, which was entrusted with the work of preparaing a standard English-Hindi dictionary on the lines of the concise Oxford Dictionary has made substantial progress and has submitted letters A to L of the dictionary to the Government for final approval.
- (iv) Keyboard for the Hindi Typewriter and Teleprinter.—The Committee set up to evolve a Keyboard for the Hindi Typewriter and Teleprinter has submitted the second part of its report relating to the Keyboard for the Hindi Teleprinter.
- (v) Hindi Shorthand.—It has been decided to evolve a system of short-hand suited to the genius of Hindi language in particular and other regional languages in general. The Government of India have set up a Committee for this purpose. In the first instance, it has been decided to carry out the work of morpho-phonemic analysis of the major Indian languages and for this purpose different Universities/Institutions have been approached. During the current financial year, the following grants have been paid for the morpho-phonemic analysis of different languages:—

Name of the University	Purpose of grant	Amount	Remarks.		
		Rs.			
1. Universtiy of Gujrat, Ahmeda- bad.	Morpho-Phonemic analysis of Gujrati language.	2,575	First half-yearly ins- talment of the total grant of Rs. 10,300.		
2. University of Gauhati, Gauhati.	Morpho-phonemic analysis of Assa- mese language.	2,400	First half-yearly ins- talment of the total grant of Rs. 9,600.		
3. University of Andhra, Waltair.	Morpho-phonemic analysis of Telugu language.	2,150	First half-yearly ins- talemnt of the total grant of Rs. 8,600.		
4. Utkal University	Morpho-phonemic analysis of Oriya language.	2,000	First half-yaerly ins- talment, Total grant not yet deci- ded.		
<ol> <li>The Director, Deccan College &amp; Postagraduate Research Ins- titute, Poona.</li> </ol>	Morpho-phonemic analysis of Oriya languge.	3,000	Second half-yearly instalment of the total grant of Rs. 9,800.		

<sup>(</sup>vi) Teaching Hindi to non-Hindi knowing Central Government. Employees.—Hindi Classes which were being run by this Ministry outside office-hours for teaching Hindi to Central Government

employees stationed at Delhi and New Delhi have been discontinued, as they did not attract sufficient number of pupils due to the existence of similar classes run by the Ministry of Home Affairs during office-hours. The work of conducting Hindi examinations for Central Government employees, which was hitherto being done by this Ministry, has been transferred to the Board of Secondary Education, Ajmer.

## 5. Other Activities

- (i) Exhibition of Scientific and Technical Literature in Hindi.—In order to give the general public an idea of the progress and development of Hindi in the field of scientific and technical literature, an exhibition of scientific and technical literature in Hindi was held at New Delhi from 5th December, 1957 to 12th December, 1957. Another was held at Delhi University from 20th February to 1st March, 1958.
- (ii) Hindi Library.—The Library attached to Hindi Division has added 895 books during the year 1957-58 and is subscribing to 90 journals.

# THE DEMOCRATISATION OF EDUCATIONAL OPPORTUNITY—SCHOLARSHIPS

# (A) FOR STUDIES ABROAD

# I. Government of India Scholarships schemes

Central Overseas Scholarships Scheme.—This Scheme aims at raising the standard of instruction and research in the country and is, therefore, meant for teachers of Colleges, Universities and certain comparable Institutions of Higher Education. Of the 29 candidates selected under the 1957-58 Scheme 27 have gone abroad so far, and the remaining two are expected to leave shortly. Twenty-five Scholarships are expected to be awarded during 1958-59.

Rs. 3,00,500 has been provided provisionally in the budget estimates for 1958-59 to meet the expenditure on this Scheme.

Union Territories Overseas Scholarships.—The Scheme of awarding five scholarships to persons who by birth or domicile are natives of the six Union Territories of Delhi, Himachal Pradesh, Manipur, Tripura, the Andaman and Nicobar Islands, and the Laccadive, Minicoy and Amindiv Islands, was continued during 1957-58. Of the five candidates selected for 1957-58, four have gone abroad so

far and the remaining one candidate will go for the session commencing in September/October, 1958. Five candidates under the 1958-59 Scheme have also been selected.

Rs. 1,22,000 has been provided for provisionally on this account in the budget for 1958-59.

Foreign Languages Scholarships Scheme.—No selections were made during 1957-58. The question of continuing the Scheme is under consideration. A provision of Rs. 1,44,000 has been made in the budget estimates for 1958-59.

# Indo-German Industrial Co-operation Scheme

- (a) Post-Graduate Studies and Training in German Universities Technical Institutions.—Of the 25 candidates selected for award of scholarships under the 1956-57 scheme, 23 have gone abroad so far while the scholarship of one has been cancelled. The remaining one candidate will leave shortly. Twenty candidates (19 from those already in Germany and one from India) have been awarded Freeships.
- (b) Practical Training in German Industries.—Of the 80 places originally offered, selections for 35 places have been made. Twenty-four candidates have gone to Germany and the remaining 11 are awaiting placements/finalisation of passage arrangements. Selections for the remaining forty-five places will be made on receipt of details regarding working facilities from the West German Government. A provision of Rs. 4,46,700 including that for German nationals for studies in India has been made for 1958-59.

Overseas Scholarships Scheme for Scheduled Castes, Scheduled Tribes and Other Backward Classes.—Twelve candidates (four Scheduled Castes, three Scheduled Tribes and five Other Backward Classes) were awarded overseas scholarships for advanced studies abroad, during 1957-58 on the recommendations of the Union Public Service Commission. The scholarship of one candidate has been cancelled as he declined the award. Eight candidates have gone abroad so far, the remaining three will leave as soon as their admission arrangements are finalised. The question of awarding 12 scholarships during 1958-59 is under consideration.

The estimated expenditure on this item is included in the provision for the main scheme of Scholarships for Scheduled Castes, Scheduled Tribes and other Backward Classes.

Programme for Exchange of Scholars between China and India.— Five candidates, who were awarded scholarships under the 1955-56' programme, are continuing their studies in China. The proposal for the exchange of five scholars during 1958-59 is under consideration. The expenditure on this account will be met from the provision for the cultural activities of the Ministry.

Programme for Exchange of Scholars between Czechoslovakia and India.—A programme for exchange of scholars between India and Czechoslovakia has been started from 1957-58. The names of the five selected candidates have been announced, of whom two have gone Czechoslovakia so far.

The expenditure on the passage of these candidates will be met from the provision made for passage expenses to Indian students awarded scholarships/fellowships by foreign governments. The rest of the expenditure will be borne by the Czech Government.

Programme for Exchange of Scholars between Iraq and India.—A programme for exchange of scholars between India and Iraq has been started with effect from 1957-58. The names of two selected candidates have been recommended to the Government of Iraq for approval.

The expenditure on the two scholars, except the expenditure on the cost of passage (which is covered under the provision made for passage expenses to Indian students awarded scholarships/fellowships by foreign governments) will be borne by the Government of Iraq.

Agatha Harrison Fellowship.—This Fellowship was instituted in the year 1956-57, in the memory of late (Miss) Agatha Harrison and envisages study at St. Anthony's College, Oxford, the study of Asian problems with special reference to India. The duration is of five years. The Fellow is working in the College.

A budget provision of Rs. 10,700 has been made for this purpose for 1958-59.

Twenty Fully-paid Overseas Scholarships Scheme.—This Scheme for young and brilliant persons in the age group 20—25 was instituted with the object of meeting the shortage of trained personnel, improving the standard of teaching and research and manning the development schemes of the Government, Universities and Comparable Institutions of Higher Education etc. Eighteen scholarships have been awarded under the scheme during 1957-58. Four-teen candidates have gone abroad so far and one is expected to leave shortly while three will go in September, 1958. The question of continuing the scheme during 1958-59 is under consideration.

A provision of Rs. 1,35,000 has been made in the budget estimates for 1958-59 for this scheme.

Passage Grants to Scheduled Castes, Scheduled Tribes and Other Backward Classes Candidates.—During 1957-58, four Other Backward Classes candidates who received foreign scholarships, which did not carry travel grants, were granted cost of tourist class sea passages. Of these three have gone abroad so far.

It is proposed to continue the Scheme during 1958-59. The expenditure on this account is included in the provision of the main scheme of scholarships for Scheduled Castes, Scheduled Tribes and Other Backward Classes.

II. Colombo Plan and Point Four Programmes of Scholarships and Fellowships

Colombo Plan.—The purpose of the scholarships/fellowships under the Colombo Plan is to assist the fellow-members of the Commonwealth by providing them with technical experience. The Ministry of Finance (Deptt. of Economic Affairs) is the co-ordinating authority. From 1958, this Ministry is concerned with the training of personnel employed in the Ministry including its attached and subordinate offices and also of those who are employed in the All-India Integrated Schemes which are co-ordinated in the Ministry. Of the 29 candidates recommended to the Ministry of Finance (Department of Economic Affairs) for 1957, 27 have so far been approved by that Ministry, of which 21 have gone abroad so far. Placements of the remaining six candidates are awaited.

An ad hoc offer of Correspondence Course Scholarships for Indian nationals for 'Teaching Methods for Technical Instructors' and 'Technical Teachers' Certificate Course' was received from the Australian Government during 1957-58. Fifty-seven candidates have been recommended to the Ministry of Finance, of whom 18 have been approved so far.

The expenditure on scholars under the Colombo Plan is borne by the host countries.

Point Four Programme.—The Government of the United States of America award scholarships/fellowships to Indian nationals for training in that country. The Ministry of Finance is the coordinating authority. From the year 1958, this Ministry is concerned with the training of personnel employed in the Ministry including its attached and subordinate offices and also of those who are employed in the All-India Integrated Schemes which are coordinated in the Ministry. Of the two candidates recommended to the Ministry of Finance (Department of Economic Affairs) for 1957, the candidature of one has been diverted to the Colombo Plan, and that of the other to the Programme for 1958. Of the 13 sandidates

(including one taken over from the 1957 programme) recommended for 1958, nine have so far been approved by the Ministry of Finance.

The entire expenditure on the scheme is met by the Government of the U.S.A.

# III. United Nations and UNESCO Scholarships and Fellowships.

U.N. Social Welfare Fellowships and Scholarships Programme.— This Programme is designed to train suitably qualified social welfare personnel through observation and study abroad to gain additional knowledge and experience in their particular subjects of specialisation. The Government of India or the Sponsoring Authority has to meet the inland cost, actual passport, visa and medical examination fees and 50 per cent. of the cost of the round trip air travel, while the rest of the expenditure is met by the U.N.

Of the seven candidates recommended for 1957, the Scholarship of one candidate has been cancelled. Of the remaining six candidates five have gone abroad, while one candidate will leave shortly. The Government of India's recommendations for five fellowships for 1958 have been communicated to the U.N.

A provision of Rs. 26,000 (including U.N.'s share of Rs. 13,000) has been made in the budget estimates for 1958-59 for defraying the travelling expenses.

# UNESCO Fellowships

Technical Assistance Programme.—Awards under the Technical Assistance Programme are made by Unesco in accordance with the approved specific requirements of National Laboratories/Research Stations/Institutions, etc. Of the 10 candidates approved for 1956-57, nine have gone abroad and the remaining candidate will go shortly.

Unesco's Participation Programme for Member States for Study/ Training in Specific Fields.—The following offers were received during 1957-58:—

- (a) Fellowships in the field of Production of Reading Material for neo-Literates.—The names of two candidates have been recommended to Unesco for award of the two Fellowships.
- (b) Fellowship for Regional Cultural Studies.—The name of one selected candidate has been recommended to Unesco for award of the fellowship.

(c) Unesco-Poland Government Fellowships for Specialised Study in certain Scientific Fields in Poland.—Names of the selected candidates have been recommended to Unesco for award of two fellowships.

The entire expenditure on the Fellowships except on the Fellowships under (c) is borne by Unesco. In the case of the Fellowships under (c), except for the cost of passage which will be borne by Unesco, the rest of the expenditure will be borne by the Government of Poland,

# IV. Fellowships/Scholarships offered by Foreign Governments

The following foreign governments offered scholarships/fellowships to Indian nationals during 1957-58:-

silips to Iliula	ıı naı	IUIIA	s during 1997-96;—
I, Belgium .	•	•	One scholarship for post-graduate research in Mining, Metallurgy, Chemical Engineering and Naval Architecture—the name of the selected candidate has been recommended to the Belgian Government.
2. Czechoslovakia	ı	•	<ul> <li>(a) 23 scholarships for post-graduate study in Czechos- lovakia—the offer has been accepted.</li> </ul>
			(b) 30 scholarships for practical training in Czechoslovakia. The offer has been accepted. Subjects for which candidates are to be sent [are being finalised.
3. East Germany	•	•	50 scholarships for post-graduate/Doctorate study of Engineering/Technical Teachers. Selection for 36 scholarships has been made so far. Of the 36 selected candidates, 15 have gone abroad.
4. Egypt .	•	•	Two scholarships for post-graduate study in Arabic Language and Literature and Arabic Civilization. The offer has been accepted and the awards will be utilised during 1958-59.
5. France .	• •	•	(a) 14 scholarships for specialised training in Agriculture, Veterinary Science, Medicine, Architecture etc. The names of 14 candidates have been announced.
			(b) Five candidates for post-graduate study in Engineering/Technology have gone abroad.
6. Italy	٠.	•	Three scholarships for post-graduate study in Fine Arts, Painting and Sculpture. The three awardees are studying in Italy.
7. Netherlands		•	One scholarship for post-graduate research work in Science, Agriculture, Medicine etc. The candidate is studying abroad.
8. Norway .	٠.	•	One scholarship for post-graduate study in Science and Humanities. The candidate is studying abroad.

One scholarship for post-graduate study in Science, Engineering and Technology. The name of the candidate recommended has not been approved

by the Swedish Government.

9. Sweden ..

- 10. Switzerland . . . Two scholarships for post-graduate study in Science Engineering and Technology. One of the selected candidates has gone abroad so far.

## 12. West Germany -

- (a) Federal Republic of 5c scholarships for post-graduate study research of Engineering/Technical Teachers and Teachers in Humanities and Basic Sciences. Selection for 50 scholarships has been made, 45 selected candidates have gone abroad so far,
- (b) Federal Republic of Germany and Students Exchange Service.
- Seven scholarships for post-graduate study/research in Science, Engineering and Technology. All the seven scholarships have been availed of.
- (c) North Rhine Westphalia Government,
- 600 scholarships for practical training in Industries.

  Details of 195 scholarships have been made available
  by the Westphalia Government. Details of the
  remaining 405 scholarships are still awaited.
- 13. Yugoslavia
- Three scholarships for post-graduate study/research in Agriculture, Medicine, Painting and Technology. Two selected candidates are studying abroad, and the scholarship of the remaining one candidate has been cancelled.

In addition to these, offers of 11 scholarships each from the Governments of U.S.S.R. and France and two each from the Governments of Austria and Japan for 1958-59 have been received. Applications for the U.S.S.R. and French scholarships have been received and selections are expected to be made shortly. For the Japanese Government Scholarships, names of two selected candidates have been announced. Applications for Austrian Government Scholarships have been invited.

In the case of these foreign awards, the Government of India meet passage expenses where not provided. In some cases where the value of the scholarship is not adequate, it has been supplemented by the Government of India. A provision of Rs. 4,22,000 has been made in the budget estimates for 1958-59 for this purpose.

# V. Fellowships/Scholarships offered by Foreign Institutions/ Organisations for Study/Practical Training

The following Foreign Institutions/Organisations offered scholarships/fellowships/training facilities to Indian nationals during 1957-58:—

British Council Scholarships.—The Council offered four scholarships during 1957-58 tenable in the United Kingdom for research in Commonwealth Studies, Social Studies, Public Administration and English Phonetics. The three selected candidates are studying in the United Kingdom.

Brush-Aboe Group Commonwealth Scholarship.—The Group offered one scholarship for practical training in mechanical and electrical engineering in the United Kingdom during 1957. The selected candidate has gone abroad.

Federation of British Industries Scholarships.—The Federation offered six scholarships for practical training in different branches of engineering in the British Industries during 1957-58. Three of these are fully paid and the remaining three are partially paid. In the latter case, the passage expenses are borne by the Government of India. Of the six selected candidates, the scholarships of one has been cancelled as he declined the award. Of the remaining five, four are undergoing training in the U.K. and one will leave shortly.

Free Hanseatic City of Hamburg Scholarships.—The Free Hanseatic City of Hamburg offered ten scholarships for post-graduate studies and research in Medicine, Biology, Chemistry, Geology, Geophysics, Nutrition Chemistry, Mathematics, Meteorology, Oceanography, Physics and Indology during 1957-58. Eight candidates have gone and the remaining two are yet to leave.

Hamburg University Students Union Scholarships.—Selections for the two Scholarships have been made. The selected candidates will go during 1958-59.

Hamburg Chamber of Commerce Scholarships.—The Hamburg Chamber of Commerce offered 100 scholarships for practical training in German Industries during 1957-58. Of these 36 scholarships are for training of Polytechnic teachers, and the remaining 64 are for training of Technicians. Selection for 36 Scholarships for Polytechnic teachers and 41 Scholarships for Technicians have been made so far.

International Association for the Exchange of Students for Technical Experience—Offers for Practical Training.—The object of this Association, of which India also is a member, is to arrange facilities for practical training of students belonging to various member-countries. The National Committee which has been set up by the Government of India acts (a) to advise on fields of training abroad to be sought for Indians and approve candidates for such training, and (b) to advise on and assist in securing facilities for training of foreign nominees in India. During 1957, offers were received for 65 places. Of these, 57 were of short duration and were availed of by the High Commission in London. Of the eight long-term offers, selections for seven only were made, as no suitable candidate for the remaining place was available. Two selected candidates have gone abroad so far.

London University Institute of Education Fellowships.—The fellowships envisage special investigation into current educational problems of the country at the London University Institute of Education for one year. The value of the fellowship is £ 550, (including £ 50 for travel within the U.K. and nearby parts of Europe) which is shared by the Government of India and the Institute on a 50:50 basis. The two selected candidates for 1957-58 are studying at the Institute.

Phillippines University Scholarships.—The University offered two scholarships for post-graduate study in History and Political Science during 1957-58. The selected candidates are studying at the University.

Practical Training with London Transport Authority.—The Authority offered to train six Indians in Traffic Operation and Engineering during 1957. Only three candidates were selected of whom two are undergoing training with the Authority and one has returned after completing his training.

Royal Commission for the London Exhibition of 1851 and Rutherford Scholarship of the Royal Society, London.—The Royal Commission has offered two London Exhibition Scholarships to Indian Nationals for research in some field of pure and applied science during 1957-58. The two selected candidates are studying in the U.K.

In addition to the above, the following offers for 1958-59 have been received:—

- (i) British Council . . . Six scholarships selections for which are expected to be finanlised shortly.
- (ii) Federation of British Industries . Six scholarships. The offer is under consideration.
- (iii) Philippines University . Two scholarships, names of the candidates for which have been recommended to the university authorities.
- (iv) Royal Commission for the London

  Exhibition of 1851 and Rutherford Scholarship of the Royal

  Society, London.

  Two scholarships, names of the condidates for which have been recommended to the commission.
- (v) London University Institute Two shcolarships. The offer is under consideration.

The expenditure on the above scholarships is borne by the awarding authority or the candidate or the sponsoring authority. A provision of Rs. 8,000 for meeting the passage expenses in the case of Federation of British Industries Scholarships and Rs. 3.670 for the London University Institute of Education Fellowships has, however, been made in the budget estimates for 1958-59.

## B. FOR STUDIES IN INDIA

## (i) For Foreign Nationals

## I. Government of India Scholarships Schemes

Colombo Plan Scholarships and Fellowships.—These scholarships and fellowships are for scholars from South and South-East Asian countries. During 1957-58 this Ministry arranged for the admission of 216 scholars. Of these, 95 (one from Malaya, four from Ceylon and 90 from Nepal) have joined their Institutions of study so far. The budget provision on this account is made by the Ministry of Finance.

Cottage Industries and Vocational Training Scheme.—Under this scheme, two scholars are still continuing their training.

The expenditure on this account will be met from the provision made for cultural activities.

French Fellowships Scheme.—Three French Fellows under the 1957—59 Scheme have joined their Institutions of study so far. Selections for three more French Fellows are in progress.

A provision of Rs. 21,000 has been made for this scheme in the budget for 1958-59.

General Cultural Scholarships Scheme.—Awards under this Scheme are made to students of certain Asian, African and other Commonwealth countries and to students of Indian origin domiciled in those countries. Of the total of 126 scholars selected for 1957-58 (excluding cancellations), 125 are studying in their Institutions in India. Selections for 131 scholarships of the total of 140 to be awarded for 1958-59 have been made so far. A provision of Rs. 16,56,600 has been made in the budget estimates for the next financial year.

Indo-German Industrial Cooperation Scheme.—Under this Scheme the Government of India offer as a reciprocal measure ten Fellowships for German nationals for study of Indian languages, religion and philosophy etc., in Indian Universities. Of the 10 Fellows who have been selected for 1956-57, eight have joined their institutions in India so far.

The expenditure on this account will be met from the provision made for the main Scheme.

Programme for Exchange of Scholars between China and India.— Eight Chinese students who came under the programme for 1955-56 are still studying in India. The proposal for the exchange of five scholars during 1958-59 is under consideration. The expenditure on this account will be met from the provision for cultural activities of the Ministry.

Programme for Exchange of Scholars between Czechoslovakia and India.—This Programme has been started with effect from 1957-58. The five Czeck Scholars are studing in India.

The expenditure on this account also will be met from the provision for cultural activities of the Ministry.

Programme for Exchange of Scholars between Iraq and India.— The Programme has been started from 1957-58. Two scholarships will be awarded to Iraqi students for studies in India. These scholarships will be awarded under the General Scholarships Scheme.

Reciprocal Scholarships Scheme.—Of the 16 candidates who were awarded scholarships for 1956-57, fifteen (six from Yugoslavia, three from Italy, two from Austria and one each from Mexico, Norway, Netherlands and Switzerland) are continuing their studies in India. One Swedish national has returned to his country. Fresh scholarships will be awarded during 1958-59. A provision of Rs. 1,36,000 has been made in the budget for the next financial year.

Scholarships to Bhutanese Students.—The 23 Bhutanese students who were awarded scholarships during 1955-56, continued to study in the Birla Vidyamandir Public School, Nainital. It is proposed to award 15 scholarships to Bhutanese students during 1958-59.

The expenditure on this account will be met from the provision for cultural activities of the Ministry.

Scholarships to Sikkimese Students.—At present 22 Sikkimese students are studying in India under the Scheme. It is proposed to award 16 scholarships to Sikkimese students during 1958-59.

The expenditure on this account also will be met from the provision for cultural activities of the Ministry.

# II. Scholarships/Fellowships offered by Unesco

Study programmes for a national each from Morocco, Pakistan, Burma, Indonesia, Vietnam, Liberia (West Africa) and the U.S.S.R. and two each from Thailand and Ceylon, under the auspices of Unesco, were arranged. The two nationals from Ceylon and one each from Liberia and Burma have returned after completing their study programmes, and a national each from the U.S.S.R. and Vietnam are at present in India. The two nationals from Thailand and one each from Morocco, Indonesia and Pakistan have yet to come. The entire expenses are borne by Unesco.

To look after the welfare of foreign students in India and to make their stay in India as valuable as possible, Advisers, Welfare Committees and Tour Committees have been appointed at the various Indian Universities.

# (ii) For Indian Nationals

Merit Scholarships in Public Schools—During 1957, 67 scholars joined their allotted schools. In all 165 scholars are at present studying under the Scheme. Besides, 75 scholars studying at the Lawrence Schools in Sanawar and Lovedale have been taken over as Government of India scholars. This has been done to centralise the administration of the scholars under the Scheme. A budget provision of Rs. 4,00,000 was originally made for 1957-58. With the taking over of these 75 scholars, an additional sum of Rs. 1,00,000 has been provided for 1957-58.

Selection for the 1958 scholarships has been completed and 65 candidates have been awarded scholarships. A sum of Rs. 5,90,000 has been provided for this scheme in the budget for 1958-59.

Research Scholarships in Humanities.—Scholarships under this Scheme are awarded to students who have already taken a Master's or an equivalent degree and who want to pursue advanced research in any branch of the Humanities.

The 16 candidates of the 1956-57 batch who availed themselves of the scholarships are doing research in their approved subjects. For 1957-58, 34 candidates have been selected, of whom 25 have commenced their research work so far.

A provision of Rs. 2,30,300 has been made in the budget estimates for 1958-59 for this scheme.

Scheduled Castes, Scheduled Tribes and Other Backward Classes Scholarships Scheme.—A budget provision of Rs. 150 lakhs was originally made for the 1957-58 scholarships to Scheduled Castes, Scheduled Tribes and Other Backward Classes students for their post-Matriculation education. In view of the increased demand for these scholarships, the funds originally provided were found to be inadequate and additional funds amounting to Rs. 50 lakhs were sanctioned, thus raising the total funds for the 1957-58 scholarships to Rs. 200 lakhs. Besides, a sum of Rs. 2.20 lakhs was made available from the unutilised balance of the 1956-57 scholarships to be spent on the 1956-57 scholars during 1957-58.

The number of scholarships expected to be awarded to the eligible Scheduled Castes, Scheduled Tribes and Other Backward Classes

candidates during 1957-58 and estimated expenditure on each of the three groups separately is as under:—

Community						Scholarships expected to	Estimated expenditure to be incur- red (in lakhs)	
			,		 	<del></del>	Rs.	
Scheduled castes				٠.		25,400	104.00	
Scheduled Tribes		•				4,400	20.20	
Other Backward Class	es	•	•	•	•	12,400	75.50	
		Тотац				42,200	200.00	

Ad hoc grant of scholarships for four months from the commencement of the 1957-58 academic session were made available to the eligible Scheduled Castes and Scheduled Tribes students (both 'Fresh' and 'Renewal') and Other Backward Classes students ('Renewal' only for the same stage of education) so as to enable them to continue their studies without being put to any financial difficulties.

The Means Test in respect of the Scheduled Castes and Scheduled Tribes students was abolished and scholarships were awarded to all the eligible Scheduled Castes and Scheduled Tribes students irrespective of their own income and the income of their parents/guardians. A provision of Rs. 200 lakhs for these scholarships (including overseas scholarships and passage grants) has been made in the budget estimates for 1958-59.

Scholarships for Higher Studies in Hindi.—The Scheme was introduced in 1955-56 to accelerate the progress of the propagation of Hindi in the non-Hindi speaking States by making available personnel to man teaching and official posts in the States. During 1956-57, 66 scholarships, of a total of 110, were awarded as suitable candidates were not available. The scholarships awarded included 44 for the Intermediate course, ten for the Graduate course and 12 for the Post-Graduate course. For 110 scholarships to be awarded during 1957-58, selection for 82 scholars has been made so far.

A provision of Rs. 2,82,000 has been made in the budget estimates for 1958-59 for this Scheme.

Scholarships to Young Workers in Different Cultural Fields.—Awards under the Scheme are open to talented young persons in certain fields of cultural activity such as Dancing (Bharat Natyam, Kathakali etc.), Music (Hindustani, Karnatak Music both vocal and instrumental, etc.), Drama and Fine Arts (Painting and Sculpture).

Thirty-one scholarships have been awarded under the fourth batch of awards for 1957-58, of whom twenty-five have so far commenced their approved courses of training.

A provision of Rs. 2,35,000 has been made for 1958-59 for this Scheme.

Scholarships for Post-Matriculation Studies.—The Scheme was started in 1956-57 and 398 scholarships were awarded on the results of the Matriculation/High School or equivalent examination and of the Intermediate (Arts or Science) or equivalent professional examinations held in 1956.

From 1957-58 onwards, 200 scholarships are to be awarded on the results of the Matriculation/High School or equivalent examinations only. The selection for these scholarships are being finalised.

A provision of Rs. 5,64,000 has been made in the budget estimates for 1958-59 for this scheme.

Grants to Hostels.—The Government of India make an annual recurring grant of £ 1,665 to the Guildford Street Indian Students' Hostel, London. £ 4,050 has been provided for in the budget for 1958-59 of the High Commissioner in the United Kingdom to meet the expenditure on the hostel.

(Demand No. 21)

Partial Financial Assistance (Loan) Scheme.—During 1957-58, out of the provision of Rs. 1,00,000, loans amounting to Rs. 34,900 have been sanctioned to 19 students towards meeting the cost of one-way passage and equipment etc. A sum of Rs. 17,855 has been sanctioned to 58 students out of the Emergency Fund Allotments placed at the disposal of the Indian Missions Abroad.

A provision of Rs. 75,000 has been made in the budget for 1958-59. (Demand No. 115)

# EDUCATION OF THE HANDICAPPED AND SOCIAL WELFARE

# **DEMAND No. 21 EDUCATION**

Training Centre for the Adult Blind, Dehra Dun.—The Training Centre for the Adult Blind that was taken over from St. Dunstan's in January, 1950 imparts training in the cottage industry type handicrafts to about 150 adult blind men from all parts of India. It also offers training in Music and Braille Shorthand typewriting. Next year it is proposed to introduce training in light engineering also.

Against the existing budget provision of a total sum of Rs. 2,93,000, a total sum of Rs. 2,64,000 has been provided in the budget for the next financial year for the administration of the Centre upto February, 1958, the expenditure has been Rs. 1,87,860.

Central Braille Press, Dehra Dun.—The Central Braille Press was set up in October, 1950 to produce literature for the blind in the principal Indian languages. The Press has so far published 40 titles covering over 100 braille volumes in the following languages:—

Hindi, Telugu, Tamil, Gujrati, Marathi and English.

At present its productive capacity is limited. It is proposed to introduce a double shift system in the Press during the next financial year.

The provision for this year as for next year is Rs. 75,000. Upto end of February, 1958, the expenditure has been Rs. 46,378.

Meetings of the Committees on the Education of the Handicapped and Social Welfare.—A National Advisory Council for the Education of the Handicapped was appointed in September, 1955, by a Government Resolution. Its main functions are to advise the Government of India on all problems concerning the physically and mentally handicapped and to formulate new schemes.

The Advisory Board on Social Welfare was reconstituted following the formation of the Central Social Welfare Board in 1953. One of the main functions of this Board is to advise the Government of India on grants to be given to institutions interested in social work for conducting research in approved fields of Social Welfare and to advise on matters concerning the preparation and standardisation of Social Welfare courses at under and post-graduate levels.

A Conference of the heads of Schools of Social work and University Departments of Sociology was held on 9th August, 1957. It discussed the minimum content of courses in schools of social work at post-graduate level.

This year there is a provision of Rs. 10,000 for convening meetings of committees on the education of the handicapped and the Advisory Board on Social Welfare. The same provision has been repeated for the next financial year. Expenditure on this account during the current financial year has been Rs. 7.113

Ad hoc Grants to Institutions Conducting Training and Research in Social Work and to Institutions for the Handicapped.—Under this scheme ad hoc grants are given to institutions imparting training in social work, or generally promoting social work and to institutions for the handicapped. These grants are normally in the shape of maintenance grants.

A sum of Rs. 2,00,000 has been provided in this year's budget for this scheme. On account of the growing demands for grants of this nature an enhanced provision of Rs. 4,00,000 has been proposed to be made in the budget for next year. Upto end of February, 1958, the expenditure has been Rs. 1,45,185, on 14 institutions.

Grant-in-aid to Institutions for the Blind for Transcribing Books into Bharati Braille.—Owing to the limited productive capacity of the Central Braille Press, Dehra Dun, it was decided to assist poorly financed private institutions for the blind in the country to transcribe their own books into Bharati Braille. However, as the Central Braille Press is to have a double shift system soon, no separate provision has been made for grants for transcription work next year.

The budget provision for this year for the scheme is Rs. 8,000. Upto end of February, 1958, the expenditure has been Rs. 400.

Grant-in-aid for the Publication of the Periodical "The Deaf in India".—A provision of a sum of Rs. 1,500 exists in the budget for the current financial year for giving grant-in-aid to the Convention of the Teachers of the Deaf in India towards the cost of publication of the quarterly periodical "The Deaf in India". A sum of Rs. 1,400 has been proposed as budget provision for 1958-59 for this purpose.

Short-term Regional Courses for Teachers of the Blind.—On the recommendation of the Seminar on the Education of the Blind held at Mussoorie in April, 1955, it was proposed to hold short-term regional courses for teachers of the blind until such time as the Model School for Blind Children, Dehra Dun, that will have a Teachers Training Department, is established. The first such course will be held at Bombay for Marathi and Gujarati speaking people next year.

Next year it is proposed to start the Model School for Blind Children in a rented building. It will have initially a kindergarten section and primary classes.

A sum of Rs. 94,000 has been provided in next year's budget for the establishment of a Model School and part of this provision will be utilised for conducting Short-Term Regional Courses.

Administration of Sheltered Workshop for Blind.—The sheltered workshop for the blind attached to the Training Centre for the Adult Blind, Dehra Dun was set up in June, 1954. Ten blind workers are now employed in this workshop in chair caning and weaving of woollen textiles. The budget provision for this year is Rs. 98,000 and for next year, Rs. 94,000. Upto end of February, 1958, the expenditure has been Rs. 30,155.

Random Sample Survey of the Handicapped.—The object of this scheme is to conduct a Random Sample Survey during the Second Plan period in order to collect first-hand information about the incidence of various handicaps and to ascertain the educational and socio-economic needs of the major groups of handicapped persons. Such a survey in accordance with the questionnaires prepared by an expert committee, has been carried out at Bombay. At Delhi the first stage of the survey has been carried out and the second stage is in progress.

The provision for this year for the survey is Rs. 50,000 and for next year Rs. 28,200 have been proposed. Next year the survey will be carried out in cities that will be recommended by the National Advisory Council for the Education of the Handicapped. Upto end of February, 1958, the expenditure has been Rs. 24,050.

Workshop for the Manufacture of Braille Appliances.—A small Workshop for the Manufacture of Braille Appliances has been functioning as part of the Central Brailee Press, Dehra Dun on an experimental basis since 1954-55. During the Second Plan period it is proposed to establish a full-fledged workshop which, it is expected, will be able to produce the majority of the appliances needed in the education of the blind. These are at present imported.

The existing budget provision for the workshop is Rs. 50,000 and the provision proposed for next year is Rs. 47,000. Upto end of February, 1958, the expenditure has been Rs. 6,916.

Voluntary Organisations for the Handicapped:—During the Second Plan period it is proposed to give financial assistance to voluntary organisations for the handicapped to develop and maintain their existing services and to initiate new services for the handicapped.

The amount provided for this in the budget for 1957-58 is Rs. 2,00,000 and Rs. 2,82,000 have been proposed for 1958-59. Upto end of February, 1958, the expenditure has been Rs. 85,815 on nine institutions.

Scholarships for the Blind.—Under this scheme scholarships are awarded to blind persons over the age of 16 for higher academic education or vocational or professional training. Sixty-six scholarships have been continued from last financial year and about 44 new awards have been made.

The existing provision for this purpose is Rs. 75,000 and the provision proposed for next year is Rs. 79,900.

Scholarships for the Deaf.—The object of this scheme is to award scholarships to deaf persons over the age of 16 to enable them to undertake technical or vocational training. This year 78 fresh awards have been made and this figure with the 33 scholarships continued from last year makes the total number of scholarships awarded 114.

The provision under this scheme for this year is Rs. 50,000 and the provision proposed for next year is Rs. 37,600.

Scholarships for Orthopaedically Handicapped.—The object of this scheme is to award scholarships to orthopaedically handicapped students at all stages of education including technical and professional training with a view to meeting the extra expenditure on account of the students' disabilities. This year 72 fresh awards have been made. Thirty-four scholarships have been continued from last year.

A sum of Rs. 35,000 is the provision for this year for this scheme and Rs. 47,000 have been proposed for next year.

Scholarships for the Mentally Handicapped.—The object of this scheme is to award scholarships to mentally retarded children of poor parents to enable them to undertake special education. The rules and regulations of this scheme are at the ultimate stage of finalisation.

The existing provision of Rs. 10,000 has been repeated for next financial year.

Grants-in-aid for Research Projects in Social Welfare.—On the advice of the Advisory Board on Social Welfare, grants are given to institutions interested in social sciences for carrying out research projects in this field.

Against the existing provision of a sum of Rs. 50,000 a sum of Rs. 37,600 has been provided in the budget for the next financial year. Upto end of February, 1958, the expenditure has been Rs. 29,500 for six research projects.

Assistance to Voluntary Organisations for Child Welfare.—During the Second Five-Year Plan it has been decided to give financial assistance to voluntary organisations for child welfare specially for purposes for which the Central Social Welfare Board cannot assist.

The provision for this year is Rs. 1,00,000 and the provision proposed for next year is Rs. 1,41,000. Upto end of February, 1958, the expenditure has been Rs. 18,500 for two institutions.

Employment Organisation for the Handicapped.—The proposed employment organisation will try to secure remunerative employment for all major groups of handicapped persons. This will consist of four pilot employment offices.

A small Employment Office of the Training Centre for the Adult Blind has been functioning at Madras since July, 1954. This office has so far been able to secure employment for 75 blind persons.

Against the existing provision of a sum of Rs. 50,000 for this purpose, a sum of Rs. 94,000 has been provided in the budget for the next financial year. An enhanced provision has been made for the expenditure that may be incurred on the three employment offices that are likely to start functioning next year. Upto end of February, 1958, the expenditure has been Rs. 13,583.

Women's Section of Training Centre for Adult Blind, Dehra Dun.—This Section is a part of the Training Centre for the Adult Blind. It provides facilities for vocational training to unmarried blind women between 18 and 30 years of age. The Section started functioning on 30th September, 1957. No provision has been made for this Section in the budget for the current financial year. The provision for 1958-59 is Rs. 47,000.

Expansion of the Training Centre for the Adult Blind, Dehra Dun.—It has been decided to introduce training in light engineering in the Training Centre for the Adult Blind. This, it is hoped, will minimise the training costs per head as the training period will be appreciably shortened.

The budget provision of Rs. 47,000 for 1958-59 has been made for the purchase of necessary machinery.

Technical Training Centre for Adult Deaf.—This scheme envisages the establishment of a Technical Training Centre which will impart training in trades like carpentry, tailoring, machine work, commercial painting, electroplating and printing and binding.

The provision proposed for this scheme in the next year's budget is Rs. 94,000.

# (Demand No. 22)

Grants-in-aid to Central Social Welfare Board and to Voluntary Social Welfare Organisations and Pay and Allowances of the Secretariat Staff.—The Central Social Welfare Board was set up in August, 1953, under the administrative control of this Ministry. One of the main objects of this Board is to assist voluntary Social Welfare Organisations in maintaining and developing their existing activities and new services and to co-ordinate these activities into the general

pattern of the Five-Year Plan. The Board also establishes Welfare Extension Projects in rural areas, urban family Welfare Projects and undertakes training for Gramsevikas, midwives and dais for these projects. It has so far established 432 Welfare Extension Projects.

Against the existing budget provision of Rs. 1,25,00,000 for the current year, a sum of Rs. 1,75,00.000 has been proposed in the budget for next financial year.

# (Demand No. 81)

Programme of Construction of Building.—It is proposed to start construction of new buildings for the Technical Training Centre for the Adult Deaf. Token provision of Rs. 20,000 has been made for this scheme in the budget for next year. A provision of Rs. 50,000 each exists in the budget for the current financial year for this scheme and for the sheltered workshop of the Blind.

## **UNESCO ACTIVITIES**

Indian National Commission for Cooperation with Unesco.—India has been a member of Unesco since its inception. The Indian National Commission for Cooperation with Unesco set up by the Government of India serves as a liaison agency between Unesco and the Indian institutions working in Education. Science and Culture. It advises the Government on all matters relating to Unesco. After the Commission was placed on a permanent footing, it has held three Conferences, one in January 1954, the other in February, 1956 and the third in February, 1958.

The Commission was formally inaugurated in January, 1954 and the term of three years of membership of those on the Commission, expired in January 1957. Fresh nominations were, therefore, invited from the Organisations represented on the Commission and the Commission has since been reconstituted. The Third Conference of the Commission was held on the 21st February, 1958. Prof. Humayun Kabir, Minister for Civil Aviation, who presided over the Conference. delivered the Presidential Address. The Commission could not continue its deliberations on the 22nd February, 1958, on account of the sad demise of Maulana Abul Kalam Azad, who had been its President since its inception. The Conference held a special session on the 22nd to mourn the loss of the President. The Commission, however, resolved that the remaining items of the Agenda may be considered by the Executive Board of the Commission. Some important activities relating to the Indian National Commission and Unesco for the year under report are given below:

## EDUCATION

The Ministry of Education and Scientific Research and Indian National Commission continued to supply Unesco with such information as the Organisation needed from time to time. They also cooperated in Unesco's Programme of educational and cultural missions. Necessary facilities for study in India were arranged for those who came from Malaya, Nepal, Afghanistan, and Thailand under various programmes of Unesco.

Education for International Understanding.—The Government of India and the Indian National Commission cooperated with UNESCO in implementing their programme of popularising the objectives and purposes of the United Nations and its specialised Agencies. At the instance of the Indian National Commission, the Education Departments of State Governments and Universities celebrated United Nations Day and Human Rights Day as in the previous years.

The Government of India also continued their participation in Unesco's Programme of Associated Schools Projects in Education for International understanding and cooperation which is designed to promote the teachings of the aims and objectives of the United Nations' and its specialised Agencies and education for living in a world community. Eight Indian schools have participated in this Scheme since 1954 and from 1957 the Scheme has been extended to cover five more institutions including teacher-training institutions. The first meeting of the Heads of the Indian participating Schools was convened at Secunderabad in December, 1955. The second meeting was held on 6th January, 1958 at New Delhi and progress made in the working of the Project was reviewed. The future programme of action, particularly in the context of the Unesco's Major Project on the Mutual Appreciation of Eastern and Western ject now has two aspets:

Unesco's Project on Production of Reading Material for Neo-Literates.—The Government of India have participated in Unesco's Project for Production of Reading Material for Neo-literates, which was initiated by the Organisation in pursuance of their resolution adopted by the General Conference at its Eighth Session. These activities have been concentrated in Burma, Ceylon and Pakistan, in addition to India. The main object of this Project is to assist Member States in the planning and production of reading materials specially designed for Neo-literates. As a result of the discussion held at the General Conference at its Ninth Session at New Delhi

and in the Executive Board of Unesco at its 47th Session, the Project now has two aspects.—

- (i) Reading material for Neo-literates; and
  - (ii) Reading material for New Reading Public.

Under the auspices of Unesco, an analytical survey is being undertaken of the existing methods of book distribution in India. On the suggestion of the Commission, Unesco has entrusted this task to Messrs. Higghinbotham Ltd., Madras, and Asia Publishing House who are actively engaged in the field of book distribution in India.

In October-November, 1957 Unesco convened an one-month Seminar at Rangoon at which four persons from each of the countries, Burma, India, Ceylon and Pakistan were given intensive practical experience in the production of reading material.

#### SCIENCE

Unesco's Major Project on Scientific Research on Arid Lands.—India has been keenly interested in the programme of Unesco relating to the Arid Zone Research. The General Conference, at its Ninth Session accorded to this programme, the status of a Major Project in which India would continue to participate. Unesco has been requested for the grant of assistance in the form of financial aid one expert, equipment and fellowships for the development of the Central Arid Zone Research Station at Jodhpur being established by the Ministry of Food and Agriculture.

Humid Tropics Research Programme.—The Government of India and Indian National Commission continued to collaborate with Unesco in their Programme of Humid Tropics Research. Seven research schemes concerning various aspects of Humid Tropics were recommended to Unesco for assistance under the Organisation's Aid Programme in 1957. One of these schemes has already been approved for assistance by Unesco's International Advisory Committee on the Humid Tropics Research and the other schemes are under consideration of Unesco.

Unesco Research Centre for Southern Asia on Social Implications of Industrialisation.—The Centre has functioned at Calcutta, as a joint enterprise of the Government of India and Unesco since January, 1956. The Government of India have signed an agreement with Unesco for providing their share of contributions and other facilities for the Centre, according to which, they are required to contribute an amount not exceeding \$35,000 (Rs. 1,66,000) annually or three years.

## **CULTURE**

Major Projects on Mutual Appreciation of Eastern and Western Cultural Values.—The Ninth Session of the General Conference held at New Delhi in November-December, 1956 approved a Major Project, of ten years' duration, on the "Mutual Appreciation of Eastern and Western Cultural Values", and authorised the Director-General to constitute an International Advisory Committee to advise him on the implementation of the Major Project. The first meeting of this Committee was held at Paris in April, 1957 and the Indian member, Sardar K. M. Panikkar was elected Chairman. The work plans relating to this Major Project for 1957-58 as suggested by the Committee and finalised by the Executive Board at its 48th Session are now under consideration of the Indian National Commission. recommended by the Executive Board of the Indian National Commission, it is proposed to constitute a small Advisory Committee to advise the Government on the implementation of the Major Project in India.

Translation of Indian Classics into Western Languages under Unesco's Programme.—The Unesco Project of Translation of Classics was started with a view to promoting international understanding and disseminating cultures between various countries. The Indian National Commission has participated in this Project since 1953. About 34 Indian Classics have been recommended to Unesco for translation and publication. The translation of 13 classics has already begun and there will soon be a steady release of translation in the market. A French translation of one of the classics namely "Tukaramache Abhang" entitled 'Psaumes du pelerin' has already been released for sale. The Heritage of Ancient India and Philosophical Hymns from the Rigveda have also been published. The Project is a joint Unesco-India enterprise and is financed from a joint fund to which the Government of India have so far contributed Rs. 60,000 including the contribution of Rs. 15,000 made for the year 1956-57. A provision of Rs. 15,000 for 1958-59 has been made in the budget estimates.

Unesco Travelling Exhibitions.—The Indian National Commission has made every effort to obtain suitable exhibitions from Unesco and circulate them in India. At present there are two exhibitions in the country, viz., (i) Unesco Travelling Reference Libraries of Visual Aids for Fundamental Education, and (ii) Unesco Travelling Exhibition of Reproduction of Persian Miniatures. As regards the first, the Library was received in India during the last quarter of 1956. It was displayed at the Ninth Session of the Unesco General Conference in November-December, 1956 and is

being circulated in the various Social Education Organisers' Training Centres in the country. It is scheduled to cover ten such centres up to 15th June 1958. Regarding the second, it was circulated in the principal cities of the country through the Lalit Kala Akadami and the Exhibition has been re-exported out of India in January, 1958 to Unesco, Paris

Unesco Project for Grants for Regional Cultural Studies in Universities.—The Government of India are participating in the Unesco Scheme for Regional Cultural Studies in Universities. The purpose of the Scheme is to enable University teachers and other specialists in Social and Cultural Studies, which include History, Languages, Literature, Art, Economics, Sociology, Psychology etc., to obtain firsthand knowledge of the culture and social life of the regions or countries visited as well as to pursue studies or research in their specialised fields of interest.

During 1956-57, Unesco offered a fellowship for an Indian national. The Unesco authorities have approved the candidate recommended by the Government of India.

As regards the foreign scholars coming to India under the Scheme, Unesco has recommended three scholars. These candidates were accommodated at Gauhati University, Banaras Hindu University and the Central Institute of Education. The Government of India have also agreed to participate in this project for 1957-58.

Seminar on the Role of Arts and Crafts at Kalakshetra, Adyar, Madras.—A Seminar on the Role of Arts and Crafts in Education and Community Development was held under the auspices of the Indian National Commission at Kalakshetra, Adyar, Madras, from 7th to 12th March, 1957. Printed copies of the report of the Seminar containing the recommendations have been sent to the participants for their information. Copies have also been distributed to the State Governments and other concerned Ministries.

#### OTHER ACTIVITIES

Unesco Coupon Scheme.—The Government of India have been participating in the Unesco International Coupon Scheme since 1949, with a view to facilitate the purchase of (a) books and publications, (b) scientific material and equipment, and (c) educational and scientific films by educational institutions and individuals from other countries. Coupons worth \$2,92,388.85 for books, \$5,26,441.06 for scientific material and \$42,203.37 for films were sold for the period ending June, 1957. The Unesco Coupon Scheme has not been in operation since July, 1957 for want of foreign exchange for the purpose.

Translation of Unesco Literature.—In addition to the publication of Hindi editions of three Unesco books, the Indian National Commission have further completed the translation/publication of eight Unesco books into Hindi with the financial assistance from Unesco. Out of these the translation of two publications has been done by the Indian Adult Education Association, Delhi, under the auspices of the Indian National Commission.

Expanded Technical Assistance Programme.—Like other specialised agencies Unesco has been operating the U.N. Expanded Programme of Technical Assistance and the Government of India continued their participation in the Programme during the year under report. Under this Programme technical assistance has been received by India in the form of services of experts, fellowships, equipment, books and journals. A number of laboratories and research institutions have received assistance under this Programme. The most important item under this Programme will be the establishment of the Western Higher Technological Institute at Bombay. The Soviet Union have offered large-scale assistance through Unesco for building up this Institution.

Technical Assistance under Normal Aid Programme.—Since 1955 Unesco's programme and budget makes a provision for technical aid to Member States for various projects by way of services, experts, fellowships and equipment under its normal programme. During 1957-58 India has obtained assistance from Unesco for the All-India Council for Secondary Education, the Ahmedabad Cultural Centre, the National Fundamental Education Centre and the Asian Theatre Institute.

Conferences Abroad.—The Government of India participated in the following conferences: Twentieth International Conference on Public Education held at Geneva, Regional Seminar on Educational Statistics held at Bangkok. International Seminar on History Eastern and Western Cultural Contacts held at Tokyo and the Regional Seminar on the Production of Reading Material for Neoliterates and Now Reading Public held at Rangoon, Besides these, experts from India participated in meetings of the various expert committees of Unesco such as, Unesco Consultative Committee on Adult Education, Meeting of Governmental Experts on the Agreement on the Importation of Educational, Scientific and Cultural Materials, Unesco International Advisory Committee on Bibliography and the Meeting of the Inter-Governmental Copyright Committee. It is proposed to participate in the Tenth General Conference of Unesco at Paris as well as other important seminars and conferences which may be organised by Unesco during 1958-59.

Contribution to Unesco.—The Government of India have been a member of Unesco since its foundation and have played an important part throughout in moulding its policy and plans with a view to promoting better international understanding and world peace.

As a member of Unesco the Government of India are committed to pay such yearly contribution as the General Conference may decide from time to time. A sum of Rs. 13,96,721 was paid to Unesco as the Government of India's contribution for 1957. A sum of Rs. 14 lakhs has been provided in the budget for 1958-59 for payment to Unesco as the Government of India's contribution for the year 1958.

(Demand No. 22).

## INFORMATION AND PUBLICATIONS

## CENTRAL EDUCATIONAL LIBRARY

During the year under review, the Central Educational Library had a budget provision of Rs. 70,000 for purchase of books and publications in India and the U.S.A. in addition to Rs. 8,500 for binding and other equipment charges.

Acquisition of Books and Publications: The Library acquired 9458 books and received 1215 pamphlets. It received 97 periodicals on subscription and over 211 periodicals in exchange with 'The Education Quarterly' and 'Indian Education Abstracts'. 3680 issues of periodicals were received during this period in addition to daily newspapers.

Reference Service: This Section compiled 106 bibliographies and reference lists in addition to attending to 2500 enquiries. Accumulative volume of Education Index (October, 1956—September, 1957) is under preparation and will be published in the 'Central Educational Library Literature Notes'.

Educational Abstracting Service (E.A.S.): The quarterly bulletin of E.A.S.—Indian Education Abstracts has been brought out regularly since March, 1955. It provides in the form of abstracts a general survey of what is being produced in the field of education in India.

E.A.S. Bulletin of Current Educational Literatures' were replaced this year by 'Central Educational Library Literature Notes'. It is issued monthly to keep educationists and educational institutions in India abreast of recent acquisitions and other services available in the Central Educational Library. Its regular features are an annotated bibliography on educational topics, evaluation of latest children's literature published in Hindi language, an Index of Educational articles published in Indian journals, list of latest additions of books to the Library and its sections, viz., Children's Section and Adult Literature Section and Graded bibliographies of Children's Books in English and Hindi.

Children's Section: This Section participated in the following exhibitions:—

- Children's Books Exhibitions organised on Library work-'shop at the Central Institute of Education, Delhi in February, 1957.
- Seminar on General Science organised by Department of Extension Services, Vidya Bhawan Govind Ram Seksaria Teachers' College, Udaipur.

During the year under review this Section prepared 23 bibliographies in English and Hindi.

An annotated, graded and classified bibliography of Juvenile Hindi books on various subjects is under preparation which will contain about 1,000 select entries.

During this period the Section issued 5047 books and received 4850 books besides 1346 enquiries received and answered.

Adult Literature Section: This Section registered 1720 borrowers during the period under review bringing the total to 6200, circulated 55,200 volumes, and 90,746 Central Government employees used the Library Reading Room during this period.

Main Section: This Section enrolled 100 members during the period under review. This Section issued 3766 books and received back 2985 books. 1081 reminders were issued.

Register of Educational Research in India: The compilation of a Register of Educational Research in India has been taken up. This Register will have a twofold objective, namely, to identify and record educational research done or being done concurrently in India, and to promote its use by bringing it to the notice of educationists. Requisite information is being collected from various Teachers' Training Institutions in India.

Union Catalogue of Periodicals: A Union list of educational periodicals available in various institutions of the country is under preparation.

## EDUCATIONAL INFORMATION

Over 11,660 enquiries received from students, teachers, parents, educational institutions, Government bodies, national and international organisations and foreign Governments, on various aspects of education in India and abroad were dealt with during the year.

About 2,090 persons visited the Information Section Library and sought information regarding educational facilities in India and abroad.

During the period under review lists of Basic Training Institutions, Secondary Training Colleges/schools, Nursery, Teachers Training Institutions, Public Libraries, Teachers' Training Colleges, Montessori, Kindergarten and Nursery Schools, Engineering and Technological institutions offering courses at post-graduate, degree and diploma level, and Medical colleges providing post-graduate and higher courses other than M.B. B.S. in this country were compiled. Information on Unesco's questionnaire regarding openings for social scientists, facilities for studies and research in Buddhism at Indian universities and studies in co-operative training, rural credit and in National Extension Service in India was collected and compiled. Secondary schools in the various States of India were categorised.

Information on facilities for advanced studies/training in Agriculture and Veterinary Science in Germany, France, Japan and U.S.S.R., courses in Engineering offered in Czechoslovakia, facilities for study/training in death duty and estate duty in the U.K. and Australia, and facilities for study in ceramics and glass technology in Japan has been collected and compiled. Information regarding the six-month diploma course in social welfare offered by the Institute of Social Studies, the Hague and graduate studies for English speaking students at the University of Stockholm has also been collected. A list of institutions conducting courses in technicolour photography in the U.K., the U.S.A., France, Spain, Italy and Poland has been compiled.

Collection as well as compilation of a list of eminent educationists in Engineering/Technology, Physics, Chemistry, Botany, Zoology, Teachers' Training, Medicine etc. and information on the introduction of a three-year degree course in Indian Universities, recognition of Higher Secondary certificate courses and Cambridge examinations by Indian Universities has been undertaken! Information on the availability of university and other non-Government scholarships for foreign students at Indian universities and facilities for study or training in co-operatives in Australia and Yugoslavia is also being collected.

For the year 1957-58 a provision of Rs. 4500 was made for the purchase of books for the Information Section's Library. A similar amount has been proposed for inclusion in next year's budget provision for this Section.

#### EDUCATIONAL PUBLICATIONS

A provision of Rs. 10,000 was made in the budget for 1957-58 for the printing of periodicals, brochures, directories, handbooks and other publications for the Publication Section of the Ministry. An equal amount has been provided for such purposes in the budget for 1958-59.

(Demand No. 21)

Out of the plan budget for Physical Education and Youth Welfare for 1957-58, a sum of Rs. 3,000 was earmarked for the publication of this Ministry's quarterly journal "YOUTH". Ar. equal amount has been provided for this purpose in the budget for 1958-59.

(Demand No. 21)

"The Education Quarterly', the Ministry's most important periodical, published in March, June, September and December entered its tenth year of publication. "Self-Reform in Schools" was the pivotal theme of the Quarterly for March, '57 number. The June, 1957 number was a special Centenary issue on Indian Universities. The September and December, 1957 number were concerned respectively with the "Teaching of Reading and Writing at Secondary Schools" and "Experiments in Teaching and Administration at various stages of the Educational Process". The March, 1958 number is a special issue on "University Reform".

The Ministry's quarterly journal "Youth" that reports Youth Welfare, Physical Education and Sports activities in India and abroad appeared first in September, 1957. The December, 1957 number was a Festival issue with a pictorial feature on the Fourth Inter-University Youth Festival, held at New Delhi in November.

During the period between April, '57 and February, '58, 11,189 copies of various publications were sold at the Ministry's Casual Sale Depot.

The publications brought out during 1957-58 are:

- 1. Leadership in Educational Administration by Chitra Naik.
- 2. Orienting Primary Schools Towards the Basic Pattern by Ramchandran (English).
- 3. Orienting Primary Schools Towards the Basic Pattern (Hindi).

- 4. The Teacher in India To-day by S. Panandikar.
- 5. Government of India Scholarships for Studies in India.
- 6. Handbook for Teachers of Basic Schools—(Hindi).
- 7. General Information for Indian Students Going Abroad.
- 8. These Schools are Ours.
- 9. Annual Report for 1956-57.
- A Review of Education in India—1956-57.
- 11. Writing Books for Adults-Revised Edition.
- 12. Proceedings of the All-India Teachers Conference on Audio-Visual Education.
- 13. My Idea of a University.
- 14. Ten Years of Freedom.
- 15. Seminar on Basic Education.
- 16. Trends in Soviet Education.
- 17. Progress of Hindi in the States of the Indian Union.
- 18. The Concept of Basic Education (Reprint).
- The Report of the Assessment Committee on Basic Education.
- 20. A Manual of Educational and Vocational Guidance.
- 21. The Field of Education.
- 22. Educational and Vocational Guidance in Multipurpose Schools.
- 23. Educational Administration: What it Means.
- 24. Living in India—A Pamphlet for Overseas Students (Revised Edition—1957).
- 25. Metric Weights and Measures—A Manual for Teachers by P. D. Sharma.
- 26. Catalogue of Publications, 1958.
- 27. Proceedings of the 24th Meeting of the Central Advisory Board of Education.
- 28. Secondary Education Commission Report-4th Reprint.
- 29. Report of the National Seminar on the Role of Arts and Crafts in Education and Community Development.
- 30. Report of the Assessment Committee on Basic Education—Hindi Edition,
- 31. Progress of Scholarships for Scheduled Castes, Tribes and Other Backward Classes—Fourth Revised Edition.
- 32. Understanding Basic Education by T. S. Avinashilingam. Second Reprint.

- 33. Scholarships for Studies Abroad—Schemes Administered by Union Ministry of Education (Reprint).
- 34. The Humanities in University Education by K. G. Saiyidain.
- 35. Statement Showing Progress of Expenditure on Central Educational Schemes under the Second Five-Year Plan.
- 36. Textbook Selection Procedures in India.
- 37. Letters on Discipline by Humayun Kabir—Reprint.
- 38. Handbook for Teachers of Basic Schools—Reprint.
- 39. A Provisional List of Technical Terms in Hindi—Labour Economics.
- 40. A Provisional List of Technical Terms in Hindi-Hospitals.
- 41. A Prov. List of T. T. in Hindi-Engineering II.
- 42. A Prov. List of T.T. in Hindi-Education (General Terms).
- 43. A Prov. List of T.T. in Hindi-Diplomacy II.
- 44. A Prov. List of T.T. in Hindi-Medicine II (Part II).
- 45. A Prov. List of T.T. in Hindi-Law.
- 46. A Prov. List of T.T. in Hindi—Chemistry III (Symbols and Abbreviations).
- 47. A Prov. List of T.T. in Hindi-Mathematics III (Statistics).
- 48. A Prov. List of T.T. in Hindi—Posts & Telegraphs (General Postal Terms).
- 49. A Prov. List of T.T. in Hindi—General Meteorology.
- 50. A Prov. List of T.T. in Hindi-Agriculture III.
- 51. A Prov. List of T.T. in Hindi—Chemistry IV.
- 52. A Prov. List of T.T. in Hindi—Botany III (Cryptogamic Botany).
- 53. A Prov. List of T.T. in Hindi-Law II.
- 54. A Prov. List of T.T. in Hindi—Economics (Reserve Bank Laws).
- 55. A Prov. List of Tech. Terms in Hindi—Zoology II.
- 56. A Prov. List of Tech. Terms in Hindi—Education (Educational Psychology).
- 57. Lists of Tech. Terms in Hindi-Defence I.
- 58. Lists of Tech. Terms in Hindi—Posts & Telegraphs.
- 59. Hindi Words Common to other Indian Languages--Hindi-Malayalam.
- 60. Hindi Words Common to other Indian Languages—Hindi-Tamil.

- 61. Hindi Words Common to other Indian Languages—Hindi-Guirati.
- 62. Hindi Words Common to other Indian Languages—Hindi-Kashmiri.
- 63. Hindi Words Common to other Indian Languages—Hindi-Telugu.
- 64. Hindi Words Common to other Indian Languages—Hindi-Oriya.
- 65. Propagation and Development of Hindi-A Review 1956-57.
- 66. Report on the Work and Programme of the Indian National Commission for Co-operation with Unesco—to be submitted to the Third Conference of the Commission.

An all-India Educational Editors' Conference was held at New Delhi on 15th and 16th April, 1957 under the auspices of the Ministry of Education to discuss problems of editing, production and management of the Educational Journals published in this country. Forty delegates and observers representing Educational Journals in nine Indian languages attended the Conference. An All-India Educational Editors' Association was formed as a result of the Conference. The proceedings, as well as the resume have been published. A sum of Rs. 24,000 was sanctioned for the organisation of the Conference.

## EDUCATIONAL STATISTICS

Collection of Statistics: The collection of educational statistics on various regular and ad hoc subjects was continued during 1957-58.

This Ministry brings out quinquennial reviews on education in the country regularly besides the annual reports. The last quinquennial review was published covering the period 1947-52, so that the next was due for 1952-57. In view of the importance of period 1947-57 as the first decade after Independence it was decided that a decennial review covering this period should be brought out in place of the quinquennial review 1952-57. The Government has, therefore, acquired the services of Shri J. P. Naik, an eminent educationist from Bombay, for this project. The requisite data was collected and the drafting of the review was taken up.

In view of the considerable demand for educational statistics about the reorganised States, the statistics of areas transferred from one State to another on 1st November, 1956 were collected and the statistics of old States recompiled for the new set-up. These have since been published on the statistical survey entitled, "Education in the Reorganised States, 1955-56".

During this year, work regarding the collection of information about Indian students studying in foreign countries was transferred to this Section. Accordingly, all the Missions were requested to send statistics on the subject as on 1-1-1958.

Short In-Service Training Courses in Educational Statistics.—In order to improve the reliability and timeliness of educational data received from the States, it was decided to hold the seventh In-service Training Course in Educational Statistics at New Delhi from 7th April to 17th May, 1958. Further, ir, order to train the nominees of the Universities also in educational statistics, it was decided to hold a separate course for the Universities during April-May, 1958.

In pursuance of the decision taken at the meeting of the Directors of Public Instruction/Education held on 7th November, 1953, that the Central Government should help the State Governments to organise In-service Training Course in Educational Statistics, this Ministry offered its services to some State Governments in this connection. In order to train the statistical staff working in the Universities and the colleges, the Universities were also brought within the purview of this scheme. Accordingly, officials were deputed to help the Universities of Gujarat, Utkal Punjab and Delhi to conduct in-service training courses. Moreover, an official from the Bureau of Economics and Statistics in the Union territory of Delhi, was given training during the year.

Unesco Seminar on Educational Statistics.—Unesco organised a regional seminar at Bangkok, Thailand, from 15th to 27th November, 1957, to standardise statistical practices in order to facilitate international comparability of educational statistics. 15 countries of the South Asia and the Far East, including India, participated in the seminar. The report of the seminar submitted to the Government, was under consideration.

Statistical Enquiries.—This Section continued to function as a clearing-house of statistical information about education. During the year, a large number of enquiries from various organs of the Central Government (particularly from the Planning Commission), State Governments, educationists, national and international organisations, were received and answered.

Publications.—The following statistical publications, were brought out during the year by December 1957:

- 1. Education in India, 1954-55 (Volume I).
- 2. Education in India, 1954-55 (Volume II).
- 3. Directory of Institutions for Higher Education, 1957.
- 4. Education in the States—a Statistical Survey 1955-56.

- 5. Education in Universities in India, 1952-54.
- 6. Education in India, 1955-56 (Volume I).
- 7. Education in India, 1955-56 (Volume II).
- 8. Education in the Reorganised States, 1955-56.

The following publications are expected to be published during the next year:

- 1. Directory of Institutions for Higher Education, 1958.
- 2. Education in the States, 1956-57.
- 3. Education in Universities in India, 1954-55.
- 4 Education in Universities in India, 1955-56.
- 5. Education in Universities in India, 1956-57.
- 6. Education in India, 1956-57 (Volume I).
- 7. Education in India, 1956-57 (Volume II).
- 8. Progress of Education in India, 1947-57—A Decennial Review.
- 9. A set of Educational Wall Charts.

A provision of Rs. 5,100 for the year 1958-59 has been made (as against the provision of Rs. 5,800 in 1957-58) for the purchase of art material, for the preparation of zinc blocks and for the consolidation of educational statistics by Hollerith system.

(Demand No. 13)

#### ADMINISTRATION

After the formation of the new Union Cabinet in April, 1957 the President issued an order on 17th April, 1957 for re-organising some of the Ministries of the Government of India. In accordance with this order the Ministry of Education and Scientific Research was constituted into the following three Departments with the allocation of work shown against each:—

# (i) Department of Education

General Educational Development; University, Secondary, Primary, Pre-Primary and Basic Education; Central Universities; Central Bureau of Textbook Research; Central Bureau of Educational and Vocational Guidance; Public Schools; Central Educational Library; Delhi Public Library; National Book Trust; Central Social Welfare Board; UNESCO; Various Schemes of Scholarships; Development of Hindi; Publications, Information and Statistics; National Institute of Basic Education; National Fundamental Education Centre; All India Council of Secondary Education; Central Institute of Education; Training Centre for the Adult Blind; Central Braille Press and University Grants Commission.

(ii) Department of Cultural Activities and Physical Education

Cultural Activities; Sangeet Natak Akadami; Lalit Kala-Akadami; Sahitya Akademi; National Theatre; Compilation of the Gazetteer; History of Freedom Movement; Copyright; Indology; Museums; Youth Welfare and Physical Culture; Sports; Cultural Relations with other countries; Indian Council for Cultural Relations; Department of Archaeology; Department of Anthropology; National Archives of India; National Gallery of Modern Art; Indian War Memorial Museum; National Library, Calcutta; Central Secretariat Library.

(iii) Department of Scientific Research and Technical Education

Scientific Research; Technical & Scientific Education; Vigyan Mandirs; All Polytechnics; All India Council for Technical Education; Delhi School of Town and Country Planning; Indian Institute of Technology, Kharagpur and similar Institutes; Indian Institute of Science, Bangalore; Compilation of National Atlas; Geological Survey of India; Survey of India; Central Board of Geophysics; Botanical Survey of India; Zoological Survey of India.

2. So far as the Departments of Education and Cultural Activities and Physical Education are concerned the budget provision for Administrative Division is made under the following Demands:—

DEMAND No. 13—"25—General Administration--Ministry of Educational and Scientific Research".

The provision under the sub-heads A—Department of Education and C—Department of Cultural Activities & Physical Education is made for the pay and allowances and other expenditure incurred on the staff employed in the Department of Education; and the Department of Cultural Activities & Physical Education. 215 non-gazetted posts and 36 additional Gazetted Posts (both for short and long durations) have been created so far during the current financial year to cope with the growing activities in the two Departments in connection with the Universal Copyright Convention, National Discipline Scheme, Revision of Gazetteers and other schemes.

"DEMAND No. 21-"37-Education-Educational Institutions Abroad".

The provision in respect of (i) Education Department, High Commission for India in the U.K., (ii) Education Department, Embassy of India in the U.S.A., (iii) Education Section, Embassy of India in West Germany and (iv) Education Section, Indian Commission in British East Africa is made under this sub-head. One of the two-

posts of Education Officers in the Embassy of India in West Germany has been upgraded to that of an Assistant Educational Adviser in view of the growing importance of West Germany in the field of training and higher studies of Indian technicians and scholars.

Coordination Unit.—The Unit continued its activities of coordinating all work of the Ministry connected with the Educational Development Programmes under the First and Second Five-Year Plans. As in 1956, a Conference of State Education Ministers was held at New Delhi in September, 1957. The Conference reviewed the progress made in the implementation of the Educational Development Programmes and recommended various measures for the removal of difficulties in the realisation of the objectives of the Second Five-Year Plan. The Conference endorsed the recommendation made by the Education Panel of the Planning Commission to the effect that education for the age group 6-11 should be made free, universal and compulsory by the end of the Third Plan period at the latest and recommended the adoption of suitable measures for the purpose. The Conference commended the study of a note on Perspective Planning prepared by the Madras Government formulating programmes in the field of Elementary education. The Conference was of the opinion that the introduction of the threeyear degree course was essential for the improvement of University Education and recommended that the State Governments should examine their budgetary position with the object of finding out how funds could be made available by suitable adjustments for the purpose of introducing the important reform.

The State scheme with which the Coordination Unit is directly concerned is "Setting up and strengthening of Planning and Statistical Unit in States' Education Departments". For the year 1957-58, a provision of Rs. 5.8 lakhs was made in the budget for assistance to State Governments on the basis of 50% of the expenditure incurred on this Scheme. During August-September, 1957 a sum of Rs. 2,04,239 was released to the State Governments as first instalment of Central contribution and a further amount of Rs. 2,17.611 has been released as 2nd instalment during the year.

(Demand No. 21)

Education of Displaced Students from West Pakistan.—Nearly a decade afer Partition, it was felt that the special task of the Ministry of Rehabilitation to assist displaced students was practically over and that the work could now with advantage be passed on to the normal Ministries. Accordingly, the work connected with direct aid to displaced students, educational arrangements at Faridabad and Rajpura, Deshbandhu College, Kalkaji, has been transferred to the Ministry of Education and Scientific Research.

The Ministry has been provided with the following ad hoc funds to meet expenditure during the remaining period of the current financial year and the remaining three years of Second Five-Year-Plan period.

Item of Work	1957-58	58-59	59-60	60-61
Direct aid to displaced students including financial assistance to destitute children living outside Homes/Infirmaries	0 • 49	27.00	15.00	12.00
Educational arrangements at Rajpura	0.26	1.52	1.05	0.53
Educational arrangements at Faridabad	0.80	3.75	2.50	1.25
Deshbandhu College, Kalkaji	• 4`94	0-30	0.30	0.30
	6.49	32.57	18.85	14.08

Direct Aid.—In order to keep expenditure within the reduced allocations, it has been suggested to the State Governments to consider whether the cash grants of Rs. 6 and Rs. 15 per annum per head to displaced students studying at the Middle and High School stages respectively could not be stopped and that the award of stipends at the college stage could not be restricted to those who secured 75 per cent marks instead of 60 per cent in their preceding University examinations.

Educational Arrangements at Rajpura and Faridabad.—A number of Basic and Post-Basic Schools at Rajpura and Faridabad were started by the Ministry of Rehabilitation for the benefit of displaced persons. These have been transferred to the Jovernment of the Punjab with effect from 1st October, 1957 on the condition that expenditure on these institutions will be refunded to the State Government on an agreed percentage basis during the remaining three years of the Plan period. In addition to Basic schools, two traditional type of High Schools—one for boys and one for girls (including one Primary Section attached to the Girls High School) are run by the Administrator, Faridabad Development Board. The question of transferring these institutions to the State Government is under consideration. So long as these institutions are not transferred to the State Government, all expenditure will continue to be borne by the Government of India.

Deshbandhu College, Kalkaji.—All expenditure on this college is at present met by the Government of India. Steps have been taken to make it a constituent college in order to entitle it to the grants of the University Grants Commission.

Indo-Pakistan Agreements on the Exchange of Educational Certificates.—An Indo-Pakistan Agreement was reached between the Government of India and the Government of Pakistan on 13th May 1955 on the issue of original and duplicate copies of certificates to Pakistani and Indian nationals who had migrated to the other country.' This was ratified by the Government of India in June 1955 and by the Government of Pakistan in December 1955. The implementation of the Agreement was withheld by the Government of Pakistan till May 1957 when they agreed to a revised Agreement which bound both the Governments to obtain these certificates at Government level. It was decided that all pending cases should be finalised by both Governments within a period of one month, and that both Governments should use their good offices and make all possible efforts to obtain the certificates within the time limit. The Government of India in implementation of this Agreement forwarded 409 certificates to its counterpart on 14th May, 1957 and another batch of 274 certificates on 25th November 1957 followed by 128 more certificates dispatched up to 10th February, 1958. This has reduced the number of pending cases of Pakistani nationals to 15. Likewise, 101 fresh cases against 147 were disposed of, leaving the balance at only 46. On the Pakistan side 117 certificates out of 602 pending cases were received in July 1957 and the second lot of 51 certificates was received in September 1957. The number of pending cases of Indian nationals is 389, and that of fresh applications. 411.

## DEPARTMENT OF CULTURAL ACTIVITIES

and

## PHYSICAL EDUCATION

## CULTURAL ACTIVITIES

Buddha Jayanti: A sum of Rs. 2,19,001 has so far been spent during the year in connection with the Buddha Jayanti Celebrations held in 1956-57. The proposal for the construction of the monument has been held in abeyance owing to financial stringency, but plans and estimates for laying out a park around the site of the monument are under consideration. A sum of rupees three lakhs has been provided in the budget for 1958-59 for the proposed park (Capital Budget) and another sum of Rs. 50,000 has been provided for miscellaneous expenditure on return of art objects lent by foreign countries for the Buddha Jayanti Exhibitions. ((Demands No. 21 Education).

Grants to Educational and Literary Organizations of All-India Status: A sum of Rs. 7,51,833 has so far been granted to all-India organisations doing useful work in the educational and literary fields, such as the Jamia Millia Islamia, Delhi, the Gurukula Kangri University, the Sanskrit Dictionary Department of the Deccan College, Poona, the Bhandarkar Oriental Research Institute, Poona, the Vedic Research Institute, Hoshiarpur etc.

A budget provision of Rs. 7,45,900 has been made for payment of such grants during 1958-59. In addition, a sum of rupees four lakhs has been provided for maintenance grant to the Jamia Millia Islamia, New Delhi. (Demand No. 21 Education).

Grants to Cultural Organisations of All-India Status: A sum of Rs. 6,08,345 including a building grant of rupees five lakhs to the Ramakrishna Mission Institute of Culture, Calcutta, has been paid so far to six all-India organisations working in the field of Culture, such as the International Children's Competition Committee, New Delhi, Anjuman-Taraqqi Urdu (Hind), Aligarh, the Jalianwala Bagh Memorial Trust Committee, Amritsar etc.

The amount provided in the budget for 1958-59 for similar grants is Rs. 4,95,000. (Demand No. 21—Education).

Indology and Institute of Indology.—The Committee which was appointed by the Government of India in March, 1953, to formulate an all-India policy for the coordination and research in Indology and to examine the requests for grant of financial assistance from institutions engaged in this field, held two meetings during 1957-58 and considered the schemes regarding the establishment of an Institute of Indology and Collection and Preservation of Rare and Ancient Manuscripts etc. The recommendations of the Indology Committee with regard to the establishment of an Institute of Indology are still under consideration of the Government of India.

A sum of Rs. 1.41 lakhs has been proposed for this scheme in the budget for 1958-59. The total provision for the scheme under the Second Five Year Plan has, however, been reduced from Rs. 12 lakhs to Rs. 7 lakhs only. (Demand No. 21—Education).

Strengthening of Existing Institutions of Higher Learning of All-India Importance.—The overall provision of rupees thirty lakhs originally included in the Second Five-Year Plan for the strengthening of existing institutions of Higher learning of all-India status has now been reduced to rupees twenty lakhs. A provision of Rs. 2:50 lakhs exists in the budget for the current year, but a sum of Rs. 21,420 only has been spent so far as grant to the Vishvesvaranand Vedic Research Institute, Hoshiarpur, for implementation of certain publication schemes. Publication schemes of some other institutions recommended by the Indology Committee are still under consideration.

A budget provision of Rs. 4.70 lakhs has been proposed for the scheme for 1958-59. (Demand No. 21—Education)

Publication of Rare Manuscripts.—A sum of Rs. 6.5 lakhs has been provided in the Second Five-Year Plan for publication of Rare Manuscripts available in India and a provision of Rs. 1.59 lakhs was made during 1957-58.

Proposals from some well-known Indologists and Indological institutions for publication of rare manuscripts have been examined.

A sum of Rs. 8,000 has been so far spent during the year in connection with the publication of two manuscripts, viz., "Sri Bhoovalaya" and "Jawamiul-Hikayat".

A budget provision for a sum of Rs. 94,000 has been proposed for 1958-59. (Demand No. 21—Education).

Development of Sanskrit Education.—The Sanskrit Commission which had been appointed to consider the question of the present state of Sanskrit education in all its aspects and to make recommendations for its improvement has since submitted its report which is under consideration.

A sum of Rs. 39,000 was paid to the Commission during the year to cover its working expenses. A sum of Rs. 1.88 lakhs has been proposed in the budget for 1958-59 for expenditure on the revival of Sanskrit. (Demand No. 21—Education).

Development of Modern Indian Languages (other than Hindi).— In view of the growing need for the study of regional languages due to increase in literacy and the replacement of English by these languages as a medium of instruction, a scheme for the development of Modern Indian Languages (other than Hindi), estimated to cost Rs. 20 lakhs in five years, has been included in the Second Five-Year Plan.

A sum of rupees two lakhs was provided for the purpose in the budget for 1956-57 and Rs. 1.5 lakhs in the budget for the current year. The scheme is now ready for implementation, and a sum of Rs. 2,000 only was spent during 1956-57 (for publication of Bengali Encyclopaedia) and Rs. 1,000 during the current year (for publication of Marathi work of late Shri Adibhotla Narayandas).

A sum of Rs. 2.82 lakhs has been proposed for the purpose for inclusion in the budget for 1958-59.

(Demand No. 21—Education).

Sahitya Akademi.—A sum of Rs. 5.5 lakhs has been provided in the budget estimates for 1958-59 for grants to the Akademi.

(Demand No. 21-Education).

Financial Assistance to Eminent Writers and Artists in Indigent Circumstances.—To implement the decision of the Government of India to assist, by the award of suitable allowance and/or lump sum grant, persons distinguished in letters, art and such other walks of life who may be in indigent circumstances, a sum of Rs. 2,00,000 was provided for 1957-58. The amount proposed in the budget estimates for 1958-59 is Rs. 1,50,000. Under the scheme 165 persons have so far been given assistance.

Reorganisation and Development of Museums.—The Central Advisory Board of Museums set up to advise the Government of India on matters relating to the reorganisation and development of museums in the country and to promote closer contacts between the different museums, held its first meeting in September, 1956. The Board approved the report of the Expert Museum Survey Committee with slight modifications. The second meeting of the Board was held in December, 1957. A provision of Rs. 9 40 lakhs has been included in the budget estimates for 1958-59 against the provision of 20 lakhs for the year 1957-58 for reorganisation and development of museums. (Demand No. 21).

National Museum.—A provision of Rs. 5,71,700 against the current year's provision of Rs. 4,02,000 has been included in the budget for 1958-59. (Demand No. 20).

Building for National Museum.—About 65 per cent. of the work of first phase of the new building for National Museum has been completed. The expenditure up to the end of December, 1957 was about Rs. 25 lakhs. The first phase of the building is likely to be completed before the end of year 1958.

National Gallery of Modern Art.—A provision of Rs. 1,85,000 against the current year's provision of Rs. 1,75,000 has been included in the budget for 1958-59. (Demand No. 21).

Air Conditioning of Jaipur House.—This work is in progress.

(Demand No. 144).

Indian War Memorial.—A provision of Rs. 16,500 against the current year's provision of Rs. 21,000 has been included in the budget for 1958-59. (Demand No. 22).

Acquisition of Art Objects.—A provision of Rs. 4 lakhs has been made in the budget estimates for 1958-59 for the purchase of art objects and contribution to the National Art Treasure Fund. An equal provision exists in the current year's budget.

(Demand No. 22).

Sangeet Natak Akadami.—A sum of Rs. 9,50,375 has been provided for a grant to the Akadami in the budget estimates for 1958-59. The provision for the current financial year is Rs. 8,74,340.

(Demand No. 21).

Lalit Kala Akadami.—A provision of Rs. 3,15,900 has been made in the budget estimates for 1958-59 for a grant to the Akadami against the current year's provision of Rs. 3,10,000.

(Demand No. 21).

Building for Three National Akadamies.—A plot of land has been selected for the building of the three National Akadamies. Owing to various difficulties it has not been possible to start the construction work. A provision of Rs. 5,000 only has been included in the budget estimates for 1958-59 against the current year's provision of Rs. 9 lakhs.

(Demand No. 21).

Building for the National Theatre.—The architect appointed in the C.P.W.D. in 1956 has drawn up plans and designs for the National Theatre. In view of the acute financial stringency, however, the building work is likely to be postponed for the present. No provision has, therefore, been included in the budget estimates for 1958-59.

Indian Museum, Calcutta.—A provision of Rs. 1,28,400 has been made in the budget estimates for 1958-59 for the maintenance of the Indian Museum as compared to that of Rs. 1,39,060 for the current financial year.

(Demand No. 20).

Construction of Fire-Proof Building for Indian Museum, Calcutta.—The Fire-Proof Building is proposed to be constructed in the premises of Indian Museum to house the zoological and other specimens which are preserved in highly inflammable spirits and are exposed to constant risk of fire. The construction work has already been taken up by the C.P.W.D. (Demand No. 123).

Victoria Memorial Hall, Calcutta.—A provision of Rs. 1,41,000 has been made in the budget estimates for 1958-59 against a provision of Rs. 2,20,700. The reduction is due to less anticipated expenditure on repairs to the building, roads, and pathways of the Memorial Hall. (Demand No. 22).

Bal Bhavan.—A provision of Rs. 1.30 lakhs has been made in the budget estimates for 1958-59. Out of this a sum of Rupees one lakh is meant for normal activities of the Bhavan and the balance of Rs. 30,000 is token provision for construction of the buildings of the Bhavan. The current year's provision for the Bhavan is Rs. 8 lakhs.

(Demand No. 21).

Children's Museum.—It is proposed to establish a Children's Museum at Delhi. A plot of land has been selected on the Kotla Road where the building for the Children's Museum and Bal Bhavan will be put up. The plans and estimates for the building are being prepared by the C.P.W.D. During the year 1958-59 a token provision of Rs. 20,000 has been made for the construction of the building and the expenditure will be met from the provision made for Reorganisation and Development of Museums.

Central Reference Library.—The Government of India propose to set up a Central Reference Library at Delhi, under the Second Five-Year Plan, which will serve as a storehouse of all books printed in India and also bring out a National Bibliography as a work of reference for Scholars and Libraries in India and abroad. The Library will also, it is anticipated, act as a Centre for Exchange of Publications with other countries. Pending the Construction of the Library Building at Delhi the National Bibliography Unit of the Library has been set up in the National Library, Calcutta, which has since undertaken the work of publishing the Indian National Bibliography. (Demand No. 22).

History of Freedom Movement.—The work of writing "The History of Freedom Movement in India" has been entursted Dr. Tara Chand, M.P., former Secretary, Ministry of Education. Dr. Tara Chand will act in an honorary capacity. A budget provision of Rs. 47,000 has been made for 1958-59 for this purpose.

(Demand No. 22).

Revision of Gazetteers.—The Government of India have undertaken the work of Revision of Gazetteers as an Educational Development under the Second Five-Year Plan. The work of Revision of India Volumes of the Gazetteers will be undertaken by the Central Government and that of Revision of District Gazetteers by State Governments. The work of revision is likely to take about five years to complete. A provision of Rs. 25 lakhs has been made in the Second Five-Year Plan for the implementation of the scheme.

In connection with the revision of District Gazetteers by the State Governments, the Government of India have decided to pay a grant of 40% of the expenditure incurred by State Governments, on the revision of the District Gazetteers, subject to a ceiling of Rs. 20 lakhs for all the States. This assistance will be available only in regard to those volumes which have been certified by the General Editor to conform to the pattern and standard laid down.

The Central Organisation has started functioning from the middle of December, 1957 with a skeleton staff and it is hoped that the full complement of the Editorial Staff will be appointed very shortly. An Advisory Board has already been constituted.

(Demand Nos. 13 and 21).

Copyright.—The Parliament of India passed an Act called the "Copyright Act, 1957 (14 of 1957)" to amend and consolidate the law relating to Copyright in India. The Act received the assent of the President on June 4th, 1957 and has come into force from January, 1958. With the coming into force of the new Act, the

Indian Copyright Act, 1914 (3 of 1914) and the Copyright Act of 1911 passed by Parliament of the U.K. as modified in its application to India by the Indian Copyright Act, 1914, stand repealed.

During the year, the Government of India ratified the Universal Copyright Convention and Protocols I and II thereto and acceded to Protocol III. The Instrument of Ratification was deposited with the UNESCO Secretariat on October, 21, 1957 and the Universal Copyright Convention has come into force in respect to India with effect from January, 21, 1958. A budget provision of Rs. 2 lakhs has been proposed for 1958-59. (Demand No. 21).

## EXTERNAL CUTLURAL RELATIONS

During the current financial year, a sum of Rs. 35,00,000 (Rs. 21,80,000 for Delegations and Rs. 13,20,000 for other Cultural Activities with foreign countries) was provided in the budget for cultural relations abroad. As a measure of economy, however, a sum of Rs. 15,00,000 was surrendered, and only a sum of Rs. 20,00,000 was retained for the cultural activities programme.

The following activities have been undertaken so far during the current year:—

- (1) Cultural Agreements were concluded with Poland and Rumania.
- (2) Grants for promotion of cultural activities were given to Indo-Iranian Cultural Association, Tehran; Egyptian Association, Cairo; Indo-Turkish Cultural Association, Istanbul; Indo-German Cultural. Society. Bombay; Indo-Nepal Friendship Association, Kathmandu; Tibetan School, Kalimpong; Ramakrishna Mission Centre, London; Shanti Sadan, London; School of Oriental and African Studies, London; Indian Students Union and Hostel, London; Indian Students Association, Paris: India League, Australia; and Indian Students Associations, U.K.; Institute of Indo-Middle East Cultural Studies. Hyderabad; Indian Hospice, Jerusalam: Indian Association, Bahrein; Imperial Institute, London; financial assistance for Nepali Literary publications; assistance to Educational Institutions financial Nepal; Indian Gymkhana Club, London: Ceylon Estate Workers Education Trust: Royal Asiatic Society. London, as well as refund of Customs Duty, Income Tax etc. to the United States Educational Foundation in India, and defraying of freight charges on CARE Gift books.

- (3) Indian Teachers were recruited at the request of the Government/Institutions in Afghanistan, Ethiopia, Syria, British West Indies, Nepal, U.S.S.R. and Malaya.
- (4) The Government of India participated in Art Exhibitions organised in Australia, Colombo and Yugoslavia.
- (5) Scholarships offered by the Governments of Norway, Italy, Switzerland, East Germany, Yugoslavia, France, U.S.S.R., Rumania, Thailand, Czechoslovakia, Sweden, City of Hamburg, Hamburg University, Japan, Belgium and Rumania have been accepted.
- (6) Scholarships have been awarded to students from Laos, Sikkim and Bhutan for study in schools and colleges in India.
- (7) The Government of India invited Cultural Delegations from Nepal, U.S.S.R., Rumania, Mongolia and Bhutan.
- (8) Facilities for learning Hindi have been provided to African students studying in India.
- (9) Radio sets costing Rs. 16,000 were presented to Bhutan.
- (10) Delegates were sent to participate in the 250th Anniversary Celebrations of the Founding of the Technical University at Prague, 24th International Congress of Orientalists (Germany), the P.E.N. International Congress (Tokyo) and the New York Herald Tribune Forum (U.S.A.).
- (11) Delegates were also sent to participate in the 2500th Anniversary Celebrations of Lord Buddha in Cambodia and Thailand.
- (12) An Indian sports team was sent to participate in the Jashan Celebrations in Afghanistan and poets, musicians and dancers from India participated in the Gandhi Jayanti Celebrations and the Indian Republic Day Celebrations organised by our Embassy in Nepal.
- (13) A study team was also sent to France to study the French system of education with a view to establishing equivalence between Indian and French degrees.
- (14) Mr. Halldor Laxness, an Icelandic Writer and Nobel Prize Winner, was invited by the Government of India for a three-week tour of India.
- (15) A Sports Team was invited from Afghanistan. The team played exhibition hockey matches in Delhi and Lucknow.

(16) Prof. Julius Germanus, an Hungarian scholar of Arabic studies was invited to India for a culture tour for a period of four weeks.

The following activities feature in the programme for the remaining part of the year:—

- (1) Presentation of art objects to Malaya and presentation of a statue of Mahatma Gandhi to the City of Rio-de-Janerio, and a statue of Buddha to Ceylon.
- (2) Presentation of books and library sets worth about Rs. 80,000 to cultural and educational institutions and libraries in various parts of the world.
- (3) Purchasing copies of the Persian translation of "Letters from a Father to his Daughter" by Shri Jawaharlal Nehru.
- (4) Cultural visits of some scholars to Nepal.
- (5) Visit of a dance and music troupe to Japan.
- (6) A mongolian exhibition of photographs is being organised under the auspices of the Government of India.

A sum of Rs. 25,00,000 has been provided for cultural activities during 1958-59.

The following are some of the important activities under consideration for implementation in 1958-59:—

- (1) Grants to Cultural Associations in West Asia—S.E.A., Nepal and U.K.
- (2) Exchange of scholars with China, Poland. Yugoslavia and Japan.
- (3) Subsidising foreign versions of Indian Classics and other modern works.
- (4) Award of Scholarships to Students from Israel, Turkey, Laos, Tibet, Mongolia, Bhutan and Sikkim.
- (5) Presentation of books to Institutions/Libraries in West Asia, Ethiopia, Mauritius, Ghana, Nigeria, Madagascar,
   Dar-es-Salaam, Zanzibar, British East Africa, Rhodesia Nyasaland, Italy, Nepal, British West Indies and Japan.
- (6) Indian Art Exhibitions are proposed to be sent to Germany, Austria. Bulgaria, Czechoslovakia, Rumania, Australia, Switzerland, Yugoslavia, U.S.A., Canada and Japan.

- (7) Art Exhibitions are proposed to be invited from Bulgaria, U.S.S.R. and South Vietnam.
- (8) Cultural delegations and distinguished visitors are proposed to be invited from Afghanistan, France, Indonesia, Poland, U.S.S.R., Sikkim, Japan and Nepal.
- (9) Sending cultural delegations to Scandinavian countries, Tibet, U.S.A., U.S.S.R., Afghanistan and China.
- (10) Exchange of Professors with U.S.S.R.
- (11) Exchange of Artists, Scientists, Journalists and films with U.S.S.R., Yugoslavia, Bulgaria, Mongolia and Japan.
- (12) Setting-up of Chairs of Indian Studies in Africa and Japan.
- (13) Training of teachers from Sikkim, British West Indies and British Guiana.
- (14) Participation in Celebrations of Gandhi Jayanti etc. in Nepal.
- (15) Sending of Indian Teachers/Cultural Lecturers abroad.
- (16) Grant to Scholarships Fund in British West Indies.
- (17) Teaching of Hindi to African Students studying in India.
- (18) Participation in International Congresses and Conferences in Finland and the U.S.A.

International Students House: A sum of Rs. 4 68 lakks was provided as grant for construction of the International Students' House at Delhi. However, it was decided later not to start construction work this year as an economy measure.

A provision of Rs. 4,00,000 has been made in the budget estimates for 1958-59 for the construction of the International Students' House.

Indian Council for Cultural Relations—Maintenance Grant: Out of a sum of Rs. 3,00,000 provided for the Indian Council for Cultural Relations, a sum of Rs. 2,00,000 has been released to the Council. The balance of the grant is expected to be paid before the close of the financial year.

For the next year, a sum of Rs. 5,00,000 has been provided in the budget estimates for this purpose.

Indian Council for Cultural Relations—Building Grant: The entire amount of Rs. 4,10,000 provided in the current year's budget

for the construction of a building for the I.C.C.R. has been surrendered as a measure of economy.

Provision of Rs. 3,85,400 has been made for the purpose in the next year's budget estimate.

# PHYSICAL EDUCATION AND YOUTH WELFARE PHYSICAL EDUCATION

Establishment of National College of Physical Education: The National College of Physical Education which has now been named the Lakshmibai College of Physical Education after the late Rani Lakshmibai of Jhansi started functioning at Gwalior from 17th August, 1957. The College that is situated in a campus of about 150 acres, is the only institution of its kind in the country and will provide training facilities for a three-year degree course in Physical education at the under-graduate level. It will ultimately develop into a national centre for post-graduate studies and research in Physical education. Pending the construction of its own buildings the College has started functioning in the buildings of the former Race Course at Gwalior.

Initially the College started with 30 admissions that will progressively increase. The ultimate aim is to admit 100 students every year. Although a coeducational institution only men students have been admitted this year.

A Syllabus for a three-year degree course has also since been finalised.

The Government of India have earmarked a total provision of Rs. 70 lakhs to meet non-recurring as well as recurring expenditure on the college during the Second Five-Year Plan period. Grants amounting to Rs. 1,69,126 have been paid so far to the Board of Governors of the College during 1957-58 to meet the expenditure on the College during the year.

For 1958-59 a budget provision of Rs. 17.64 lakhs has been made for the College, out of which Rs. 12 lakhs are earmarked for the construction of the College buildings. The construction work of the College buildings has been entrusted to the Central Public Works Department.

For purposes of administration and control, the college has been placed under an autonomous Board of Governors with a Chairman nominated by the Government of India.

Scheme for the Promotion of Physical Education under Second Five-Year Plan: On the basis of the recommendations of the Central Advisory Board of Physical Education and Recreation, the Government of India have included the following schemes in their educational development programme under the Second Five-Year Plan with a total provision of Rs. 40 lakks over the Plan period for these Schemes:

- (i) Strengthening of Institutions and Colleges of Physical Education.
- (ii) Implementation of the Syllabuses of Physical Education for Boys and Girls (from Primary to Higher Secondary stage) prepared by the Central Advisory Board of Physical Education and Recreation.
- (iii) Promotion of Research in Physical Education.
- (iv) Popularisation of Norms of Physical Efficiency Tests.
- (v) Conducting Seminars on Physical Education for Physical Educationists.
- (vi) Award of Visiting Fellowships.
- (vii) Award of Scholarships for Higher Studies in Physical Education.
- (viii) Financial Assistance to Vyayamshalas and Akadas.
  - (ix) Miscellaneous measures e.g., Publication of literature, Celebration of National Physical Efficiency Weeks and Days, National Festival of Physical and Recreational Activities, Production of Documentary and Feature Films on Physical Education etc.

All these schemes have been forwarded to all State Governments/ Union Territories and the Physical Education Training Institutions with the request that proposals for financial assistance under the schemes may be forwarded to this Ministry. There has been quite a good response from the State Governments and the Universities for proposals for financial assistance.

Reconstitution of Central Advisory Board of Physical Education and Recreation: The Central Advisory Board of Physical Education and Recreation has been reconstituted. The first meeting of the reconstituted Board was held on 31-1-58. The Board, it may be added, had been set up by the Government of India in 1950 to advise on the coordination of all programmes and activities in the field of Physical Education and Recreation, but had been held in abeyance

on account of financial stringencies and was revived in 1953. The Board functioned till December, 1956 when the Government decided to reconstitute it so as to make it more broadbased.

In pursuance of one of the recommendations of the Central Advisory Board of Physical Education and Recreation as contained in the National Plan of Physical Education and Recreation, the State Governments and the Universities have been requested in a circular letter to set up State and University Boards of Physical Education and Recreation with powers and functions similar to the Central Advisory Board of Physical Education and Recreation.

Recognition of Diplomas and Certificates of Physical Education Training Institutions: The Central Advisory Board of Physical Education and Recreation had prepared Rules for the Recognition of Diplomas and Certificates of Physical Education Training Institutions in the country. The Board had also set up a Committee of its own to scrutinize the diplomas and certificates of Physical Education Training Institutions in this connection. The Committee in its report has recommended that for a proper assessment of the Diploma and Certificate courses offered by the various institutions for purposes of their recognition by the Government of India an 'on-the-spot' study of the various institutions by an Inspecting Team would be necessary. This recommendation of the Committee has been accepted by the Government and an Inspecting Team of the Government is proposed to be sent out for an 'on-the-spot' study of the various institutions. An exhaustive questionnaire has been sent out by the Government to the institutions in this connection. The information collected through the questionnaire will be utilised by the Inspecting Team during their 'on-the-spot' study of the institutions concerned.

Sports: The programme of holding Coaching Camps which was initiated in October, 1955 was continued during the period under report and Coaching Camps in Basketball, Volleyball, Badminton and Wrestling have been conducted in which nearly 80 teachers/physical instructors drawn from educational institutions in the country received training in the method and technique of the game. Before the close of the year coaching camps in Table Tennis, Hockey, Cricket, Football, Athletics, Kabaddi and Swimming are proposed to be held.

A new experiment, namely, coaching camps on regional basis, is proposed to be initiated during this winter. On an experiment basis, it has been decided to hold Regional Coaching Camps in Cricket, Athletics and Football at Madras, Bombay and Delhi respectively during the months of February and March, 1958 and if the experiment proves successful more such camps will be held.

For the promotion of Sports and Games in the country, grants have been paid to the National Sports Federation amounting to Rs. 58,538/9/-. A sum of Rs. 2,58,380 has been paid to the U.P. Council of Sports for the construction of a Sports Stadium at Lucknow and another sum of Rs. 45,000 has been paid to Mysore Government for the construction of a Guest House.

For the better coordination and organization of Sports activities paid Secretaries have been appointed to the following National Sports Organizations/State Councils of Sports:—(a) Indian Hockey Federation; (b) Badminton Association of India; (c) Basketball Federation of India; (d) National Rifle Association; (e) U.P. Council of Sports; and (f) Kerala Sports Council.

On the lines of the All-India Council of Sports, State Councils of Sports have been set up in the States of Assam, Bombay, Kerala, Madras, Rajasthan, Uttar Pradesh, Andhra, Bihar, West Bengal and in the Centrally administered areas of Delhi and the Andaman and Nicobar Islands.

Rajkumari Sports Coaching Scheme:—The Rajkumari Sports Coaching Scheme was inaugurated in September, 1953. The Scheme during the five years of its operation has made the country coaching conscious, established permanent coaching centres, offered coaching assistance to various State centres in almost all sports—outdoor and indoor—and organised coaching of coaches with the help of foreign coaching personnel. During this year it has concentrated mostly on the Youth of India by organising Coaching Camps at University and School Centres. A grant of Rupees three lakhs was made up to December 1957 and a grant of Rupees two lakhs is expected to be released by the end of the financial year 1957-58. It is proposed to organise coaching in Athletics, Tennis, Circket, Hockey, Football, Badminton, Table Tennis, Basketball, Volleyball, Swimming and Gymnastics at a total cost of Rupees five lakhs during 1958-59.

Bharat Scouts and Guides:—In order to help the expansion of the movement in the country, the Government of India have sanctioned grants to the tune of Rs. 1,58,561 during 1957-58. This figure includes a grant-in-aid of Rs. 74,448 given to the National Head-quarters of Bharat Scouts and Guides for meeting 50% of the cost on return airfare of 47 scouts and guides, who participated in the Jubilee Scouts Jamboree and World Camp of Girl Guides held at

London in July-August, 1957. A grant-in-aid of Rs. 9,113 was also sanctioned for sending a contingent of Girl Guides to participate in the Philippines Jamboree.

With a view to establishing a permanent all-India Training Centre at Pachmarhi for training of Scout-Masters and others, the National Headquarters of Bharat Scouts and Guides have submitted a proposal requesting the Government of India for financial assistance. The request is under consideration.

Health Education:—With a view to implementing the suggestion of Indian Delegation that attended the Joint Seminar organised by W.H.O./F.A.O., in Baguio (Philippine Islands) in October, 1955, the Government of India have set up a Committee on Health Education and Nutrition Education with effect from 16th December, 1957. The Committee will work out a programme and syllabus of Health Education and Nutrition for introduction in Primary and Secondary Schools and Teachers' Training Colleges.

National Discipline Scheme:—The National Discipline Scheme that has the object of imparting physical and moral discipline to children has been taken over from the Ministry of Rehabilitation by this Ministry in December, 1957. As implemented by the Ministry of Rehabilitation the Scheme is in force only in schools for displaced children in certain parts of Northern India. It is now proposed to extend the scope of the scheme to schools other than those for displaced children in three regions of the country corresponding to Bombay, Bengal and the Punjab. Shri J. K. Bhonsle has been appointed Adviser for the implementation of the National Discipline Scheme. The scheme will be implemented in 195 schools during 1957-58 and 1958-59. This figures is expected to rise to 300 during 1960-61.

Youth Welfare:—After the recent cut imposed on the entire Plan provision, a sum of Rs. 70 lakhs was provided for Youth Welfare Schemes for the Second Plan period. A sum of Rs. 6.66 lakhs was earmarked for this programme for the year 1957-58. A brief account of the progress on these schemes is as follows:

Student's Tours:—Under this programme the Government of India render financial assistance to schools and colleges for organising educational tours for small batches of students. The grant is to the extent of 75% of the railway/bus fare at students' concessional rates. Organised tours have become popular with the students. During the current financial year a sum of Rs. 1,49,475 has already been sanctioned for the benefit of about 5,207 students and teachers of 170 institutions. A sum of Rs. 2,00,000 has been provided for the

year 1958-59 for this scheme out of the total Plan provision of Rs. 10 lakhs.

Inter-University and Inter-Collegiate Youth Festivals.—The Fourth Inter-University Youth Festival was held from 1st to 10th November, 1957 at New Delhi. Sixteen hundred students from 38 universities participated.

The Fourth Festival has been the biggest in the series conducted so far; the number of participants was the largest and arrangements were more elaborate than those made in previous years. The duration of the festival was also increased from seven to 10 days. Several additional features were introduced in the recent festival, by way of an additional theatre, club room facilities and increased facilities for accommodation, sanitary conveniences etc. Another important feature of this year's festival was that the programme included Symposia on subjects of general interest to students in addition to competitions in Drama, Dance, Music and Elocution and an Arts and Crafts Exhibition.

The Ministry has also given grants to the Universities to hold Inter-Collegiate Youth Festivals prior to the Inter-University Youth Festival and 14 universities have approached the Ministry for this assistance. An amount of Rs. 2.98 lakhs was sanctioned for the Festival. A provision of Rs. 4 lakhs has been made for the year 1958-59 to meet the expenditure on the Inter-University Youth Festival and the Inter Collegiate festivals.

Youth Hostels.—In order to promote tourism, which is an effective medium of education, it is essential to provide board and lodging facilities at cheap rates at places of interest. In view of this, the Government of India have made efforts to set up a network of Youth Hostels in the country.

It is proposed to implement the scheme of promoting Youth Hostels movement in the country through the State Governments and Youth Hostels Association of India. Direct projects are also proposed to be taken up jointly by the Ministry of Transport and the Ministry of Education and Scientific Research.

During the current financial year an amount of Rs. 15,000 has been sanctioned to the Youth Hostel Association of India to carry on work in this direction. Progress has been rather slow in this direction for want of active response from the State Governments. A provision of Rupees one lakh has been made in the budget for the next year.

Youth Leadership and Dramatics Training Camps.—The object of such Camps is to impart short-term training to teachers of colleges and universities in organising various extracurricular activities in the most effective and useful way in their institutions. This Ministry has so far conducted six Youth Leadership Training Camps and three Dramatics Camps. The last Dramatics Camp was held at Matheran (Bombay) in May, 1957, and was attended by 15 trainees from various universities.

This Ministry have also offered financial assistance to the Universities and State Governments for holding such camps. The Universities of Gujarat and Annamalai have taken advantage of this assistance.

During the current financial year it was proposed to conduct two Leadership Training Camps, one at Jaipur in January/February, 1958, and the venue for the other has yet to be decided. A provision of Rs. 50,000 has been made for this scheme in the budget estimates for 1958-59.

Youth Welfare Boards and Committees.—This Ministry have offered assistance to the State Governments and Universities for setting up Youth Welfare Boards and Committees for successful implementation and co-ordination of Youth Welfare activities in their own units. Grant under this scheme is given to the extent of Rs. 10,000 for a State Youth Welfare Board and Rs. 4,000 for a University Youth Welfare Committee to meet 50 per cent. of the expenditure incurred on a Board/Committee.

The following grants have been given for this programme:-

1. Annamalai University	Rs. 2150
2. Agra	Rs. 4000
3. Sardar Vallabhbhai Vidyapeeth	Rs. 4000
4. Rajasthan University	Rs. 4000
5. Patna University	Rs. 3924
6. Jadavpur University	Rs. 3830

It is hoped that more and more Universities and State Governments will come forward for this assistance during the next year as the scheme is gaining momentum. A provision of Rs. 1.50 lakhs has been made in the budget for 1958-59.

Non-student Youth Clubs and Centres.—In order to stimulate effective participation of the voluntary Youth organisations in the promotion of Youth Welfare activities, the Ministry has offered financial assistance to the State Governments to meet 50 per cent

of the expenditure for setting up Non-student Youth Clubs and Centres, but the response has been very poor. It is, however, hoped that the State Governments will come forward for assistance in the next financial year and a provision of Rs. 80,000 has been made for this scheme.

Survey of Living Conditions of Students.—It is proposed to conduct a pilot survey and the universities of Delhi, Banaras, Bombay, Nagpur, Jadavpur and Kerala have been selected for this purpose. The work in this regard has already commenced. A provision of Rs. 20,000 has been made for 1958-59.

LABOUR AND SOCIAL SERVICE SCHEME: A provision of Rupees three crores has been made in the Second Five-Year Plan for the implementation of the Scheme of Labour and Social Service. Out of the total Plan provision, an allocation of Rs. 60 lakhs has been made in the budget for the current year for expenditure on the Scheme. The Scheme falls into two parts, namely, (1) Labour and Social Service Camps for students and other youths and (2) Campus Work Projects in Universities and Educational institutions 75 per cent of the allotment is earmarked for the former Scheme and 25 per cent for the latter. Details of the two Schemes are given below:

Labour and Social Service Camps.—The purpose of this Scheme is to inculcate a sense of dignity of manual labour among the students and other youths and to bring them into contact with the villagers where they can do some social service. The Labour and Social Service Camps are held in rural areas and the campers engage in manual labour which is of service to the community, e.g., construction of roads, bunds, digging of wells, pits, compost-making, construction of school buildings, play grounds etc. During the current financial year, Universities, State Governments, National Cadet Corps of the Ministry of Defence and voluntary organizations of which the most important are the Bharat Sevak Samai and the Bharat Scouts and Giudes, have organized a large number of camps of different types all over the country. Up to 31st December, 1957 this Ministry has sanctioned a sum of Rs. 27.5 lakhs for holding 886 camps with a total strength of 96,113 campers.

The Government subsidise youth camps on the following basis:-

For food and incidental expenses Rs. 1.75 per head per day.

For transport charges on the basis of third class railway fare (students concession) or actual bus fare.

Government grants are also paid for the conduct of Organisers' Training Camps for Camp Organizers to ensure the supply of trained and experienced personnel for the conduct of Labour and Social Service Camps.

This Ministry have also paid grants aggregating (1) Rs. 20,000 and (2) Rs. 11,364 respectively in favour of the Indian Organizing Committee for Training Projects in Work Camp Methods and Techniques in S.E. Asia, New Delhi for (1) organizing a study tour and the 11th Conference of Organizers of International Volunteer Work Camps in New Delhi during January, 1958 and (2) for conducting a Training Project in Work Camp Methods and Techniques in Calcutta in December, 1957. The Bharat Sevak Samaj is also organizing an All-India Seminar of Work Camp Organizers on the occasion of the above-mentioned conference.

For the year 1958-59 out of the total provision of Rs. 56.4 lakhs proposed for the Labour and Social Service Scheme, a sum of Rs. 42.3 lakhs is proposed to be earmarked for Labour and Social Service Camps.

Campus Work Projects in Universities and Educational Institutions.—The purpose of this Scheme is to provide for much needed amenities in Universities and other Educational Institutions, e.g., Gymnasia, Swimming Pools, Open-Air Theatre-cum-Auditoria etc. One of the conditions for making the grant is that the staff and the students of the Educational Institutions applying for grant under this Scheme should render skilled/unskilled labour on the Project. The Institutions concerned also have to bear not less than 25 per cent of the actual expenditure on the Project excluding the cost of the students labour.

Out of the sum of Rs. 15 lakhs earmarked for this purpose during the current financial year, an amount of Rs. 3.02 lakhs has been sanctioned up to 31st December, 1957 towards grants to five Universities and five State Governments for the construction of nine Recreation Halls-cum-Auditoria, three Swimming Pools, one Open-Air Theatre and one Stadium. For 1958-59, out of a total budget provision of Rs. 56.4 lakhs proposed for the Labour and Social Service Scheme, an amount of Rs. 14.1 lakhs will be earmarked for expenditure on Campus Work Projects.

# ARCHAEOLOGY, ANTHROPOLOGY, NATIONAL ARCHIVES, NATIONAL LIBRARY AND CENTRAL SECRETARIAT LIBRARY

#### DEPARTMENT OF ARCHAEOLOGY

During the financial year 1957-58 the total sanction: I budget grant under Demand No. 14 Archaeology is Rs. 96,93,0)3. This provision includes Rs. 2,00,000 for taking over Jammu and Kashmir monuments. The provision for the Plan and non-Plan items for 1958-59 is Rs. 1,09,70,000. The activities of this Department may be summarised as follows:—

Publications:—Ancient Indian No. 13 was published and No. 14 is under printing. Indian Archaeology—A review for 1956-57, was out in time. The Guide Books to Sanchi (by Mrs. Debala Mitra) and to Khajuraho, 2nd edition (by M/s S. C. Chandra, B. L. Dhama) were published. The second edition of the Guide Book to Sarnath by Dr. V. S. Agarwala is shortly expected to be out. The second edition of the guide to Ajanta by Mrs. D. Mitra is in press. A Guide Book to Bhuvaneswar by the same author is in the final stage of printing. The material for Guide Books to Nalanda, Chola temples, and to Delhi Monuments by various authors is under preparation. Steps are being taken to publish Hindi editions of several guide books. The manuscripts of the Hindi Guide Book to Sarnath, Rajgir, Kushinagar, Khajuraho and Sravasti have been sent to press. Steps are also taken to have the Album of Mediaeval Indian Paintings by Dr. V. S. Agarwala printed.

Archaeological Memoirs Memoir No. 72—Antiquities of Chamba was published. *Groups Inscriptionum Indicarum*—Vol. II on Barhut Inscriptions by Leaders has been sent to the press for printing, while the material for Vol. VI—Vakataka Inscriptions by Prof. V. V. Mirashi is under preparation.

Picture Post Cards.—The sets of Chittor, Aurangababad, Ajanta (both colour and monochrome) and Sanchi were reprinted. The following new sets will be shortly available:—

Nalanda, Khajuraho, Pattadakal, Badami, Aihole, Bhubaneswar, and Halebid.

Sets on Sarnath, Mahabalipuram, Delhi, and Elephanta will be reprinted very soon.

Epigraphia Indica—Vol. XXXII, Parts I to IV, is ready for the press; Vol. XXXI, Part III and Vol. XXIV, Part VIII have been sent to the press for final printing; Vol. XXVIII, Part VIII is in the press. Epigraphia Indica (Arabic and Persian Supplement) 1953-54, has finally been printed and its volumes for the year 1954-55 and 55-56, are in press.

Annual Reports on Indian Epigraphy.—For the years 1953-54 and 1954-55, have been printed, and the material for 1955-56, and 1956-57 is with press.

South Indian Inscriptions.—Vol. XV—Bombay Karnatak Inscriptions and Vol. XVI—Telugu Inscriptions of the kings of Vijayanagara are being prepared for the press.

Conservation of Ancient Monuments.—Monuments continued to receive care according to their normal as well as special requirements. Of the vast number of monuments where important repairs are in progress mention may be made of the following:

- 1. Special Repair to Jama Masjid, Delhi.
- 2. Special Repair to Khan-e-khan tomb, New Delhi.
- 3. Special Repair to Delhi Fort.
- 4. Special Repair to Sun Temple, Konarak.
- 5. Special Repair to Sibdol Temple, Sibsagar.
- 6. Special Repair to Brihadishwara Temple, Tanjore.
- 7. Special Repair to Taj Mahal, Agra.
- 8. Special Repair to Chittorgarh Fort.
- 9. Special Repair to Temples at Badoli.
- 10. Special Repair to Group of Temples at Khajuraho.
- 11. Special Repair to Group of monuments of Sanchi.
- 12. Special Repair to Elephanta caves.
- 13. Special Repair to Agra Fort.

The electrification of the Qutab Minar is in progress.

Chemical Branch.—The Chemical Branch of the Department of Archaeology besides attending to the treatment of monuments, paintings, museum exhibits and excavated objects, is engaged in evolving effective methods for the removal of alga¹ growth from monuments and undesirable accretions from painted surfaces. Researches including geo-chronological investigation, continued.

The chemical cleaning and preservation of paintings in the cave-temples of Ajanta and Ellora and in the Darya Daulat at

Srirangapatna were undertaken. The work of chemical treatment was also carried out in the Vadakkunnathan temple at Raichur and temples at Triprayar, Peruvanm and Chemmanthatta and Gomateswara at Sravanabelagola.

Exploration and Excavation.—Substantial progress had been recorded all over India in exploration and excavations. The excavation at Nagarjunakonda continued in full swing where apart from Buddhist remains, excavation in area below 340 contour revealed residential apartments, ritualistic constructions pertaining to Asavamedha, temples of Kartikeya and a huge brick-built embankment wall with steps at regular intervals. A number of coins and terracottas and some inscribed slabs were unearthed. A complete Sanskrit inscription in Brahmi script of Ikshvaku period found on one of the slabs is interesting.

The Excavations Branch of the Department continued excavation at Ujjain. It has yielded interesting as well as important evidences of the past history of ancient Ujjain and of the early people who lived there.

Excavations were also resumed at Lothal, an important Harappa Site at Ahmedabad District of the Bombay State. The most striking results of the season's work is that several structural remains, animal remains, beads, bangles and gold objects have been found. Seals and scalings with unicorn and Indus script have been found.

Excavations at Bahal and Tekwada on opposite banks respectively of the Girna District, East Khandesh, Bombay State revealed further evidence of the chaleolithic culture including the methods of disposal of the dead besides later historical periods.

Southern Circle, Madras, undertook excavation at Kunnattur, District Chingleput, Madras, which brought to light fresh evidence on the megalithic ritual in South India. The excavation of a habitation site at the feet of the hill at Kunnattur revealed two periods of settlement.

Exploration.—The Superintendent (Prehistory) has carried out exploration of sites located in Rajasthan, Beas valley and Madhya Pradesh.

Exploration around modern Madura revealed the existence of ancient sites—urn burials and abandoned habitation of antiquities. A palacolithic site in the Malaprabha river bed was discovered at Pittadkal. The tools consist of hand axes, cleavers and pebbletools, choppers etc.

Exploration of the lower Narmada valley brought to light a Harappan site at Mehgam near the creak at the confluence of the Narmada with the sea and a late Harappan site at Telod on the opposite bank of the Narmada.

Important Discoveries.—The ruins of an old Siva temple, a few sculptures and a stone inscription (9th Century A.D.) mentioning the name of the Goddess Trailokyavijya have been discovered on the bank of river. Suvarnarekha near Chandil in Singhbhum district.

From Nalanda sites a human skeleton was discovered which has been sent for study to the Department of Anthropology.

An ancient site near Pimpaldar, District Nasik was discovered. The site was found to contain painted black-on-red pottery usually associated with coarse grey pottery. The site is mono-cultural ascribable on the basis of pottery to Circa 1000 B.C.

Two Jaina images at Rajgir were found by the Public Health Department of the State Government along with a Tibetan coin.

#### **MUSEUMS**

Indian Museum.—The collection of this museum was further enriched by a number of new acquisitions. The galleries in general have been improved. The pre-history gallery was rearranged and now displays a map showing the distribution of Stone Age sites in India. The Archaeological Section of Indian Museum participated in an exhibition of Buddhist art and antiquities held by the Asiatic Society of Bengal in connection with its annual General meeting held in February, 1957.

C.A.A. Museum.—Substantial additions were made to the collection of the site museums. Several antiquities of the C.A.A. Museum, such as silk paintings, paper drawings, stueco, figurines etc. were chemically treated and exhibited with suitable labels. A new gallery for excavated material has been established and the potteries have been arranged typewise and sitewise in show cases with a view to facilitating their chronological studies.

The question of establishment of a new museum at Rupar is in hand.

Epigraphy.—Important records and inscriptions were reviewed by the Government Epigraphist and of the inscriptions examined the following deserve special mention:—

The earliest among the Stone epigraphs comes from Nagarjunakonda. Among the copper plates examined the earliest belong to the Vishnukundin King Vikrammdravaraman II (century 500 A.D.). The others consist of one belonging to Pallava Paramasvaravaraman I (670-690 A.D.), and one from Srikakulam district, Andhra, belonging to the eastern King Yuvaraja Rajendra Varman (Ganga year 313).

The Assistant Superintendent for Epigraphy (Arabic and Persian) copied new inscriptions from different places. Arabic and Persian supplement for 1953-54 was finally published and material for annual report has been finally compiled.

Survey of Temples.—The architectural survey of temples is in progress. Survey of ancient temples, at Badoh, Pathari, Surwaya, Kadvaha, Amrol and Gwalior all situated in Madhya Pradesh and datable from 9th—12th centuries, has been completed. A detailed comparative study of the Gupta temples of Central and Northern India was also undertaken.

The famous cave Temples at Ajanta, Ellora and Bagh, and the Temples at Badami, Aihole, Pattadakal and Mahakutesvara in Bijapur District and Alampur in Raichur District were studied with a view to exploring the problem of the genesis and early development of the Indian temple architecture. The study has provided material for the derivation of southern and northern styles from a common source and for the gradual crystallisation of the peculiarities of each style in course of its diffusion through time and space.

In the scheme of an architectural survey of temples of South India on regional, dynastic and chronological basis, the cave temples in Madurai District, relating to Pandyas (7th—9th century A.D.) were surveyed. Likewise an exploratory survey of rock-cut caves, monolithic and structural temples in the Chalukyan area in Deccan has been made. Results of all the survey so far undertaken are being completed for publication.

Gardens.—All the Archaeological Gardens are maintained in condition with special care for gardens at Taj, Agra Fort, and Sikandra Tomb. The gardens at Sarnath site and Nalanda continued to be maintained in good condition. Grass operation at Shanwarawada (Poona) was started. A preliminary planting scheme for a garden for Nagarjunakonda hill top is in hand.

Miscellaneous.—A meeting of the Central Advisory Board of Archaeology was held on 14th September, 1957. A symposium to discuss the Archaelogical problems and an exhibition of the excavated antiquities were also organised on the occasion. A revised A.M.P. Act has been introduced in Parliament.

Second Five-Year Plan.—The following projects have been included in the Second Five-Year Plan of the Department of Archaeology and the work under all projects is in progress except in case of Nos. (5) and (8) as posts were sanctioned late.

- (1) Assessing the Importance of Protected Monuments.
- (2) Survey Plan of Monuments.
- (3) Copying of Ajanta Paintings.
- (4) Survey of Antiquities.
- (5) Historical notes on Monuments and Guides to Monuments.
- (6) Acquisition of land.
- (7) Geochronological Guides.
- (8) Preparation of Archaeological Atlas.
- (9) Watch men's quarters.
- (10) Quarters for class III staff.
- (11) Libraries for Sub-Circles.
- (12) Librarians for Circle offices.

Programme for 1958-59.—During 1958-59, the Department will continue to devote its attention to the conservation of monuments under its charge. The Department proposes to continue its exploration and excavation activities all over India with the grants that will be made available for the purpose.

(Demand No. 14.)

#### DEPARTMENT OF ANTHROPOLOGY

For 1957-58 a sum of Rs. 12,28,500 was sanctioned for this Department. A sum of Rs. 11,87,600 has been proposed to be included in the budget for 1958-59 for Plan and non-Plan items.

(Demand No. 20.)

Among the important scientific activities of the Department during 1957-58, the following may be mentioned:—

Publications.

- 1. Bulletin Volume 3. No. 2
  Bulletin Volume 4. No. 1
  No. 2

  in press.
- 2. Memoir No. 3 Ollari-A Dravidian Speech.

Papers completed.—(1) Garo Family, (2) 'Mid-ph-hair and Age,' (3) Kinship and marriage of the Riang (Tripura), (4) Residence in wife's house among the Riang, (5) Riang tales, (6) Khasi goat

killing festivals, (7) Folk tales of the Malwa Bhil, (8) Effect of Social Catclysm on personality, (9) Inheritance of P.T.C. taste character in Man-Analysis of 126 Rarhi Brahmin families of West Bengal, (10) Mahua spirit and the chemical composition of the raw materials, (11) Genetic survey among the Brahmin and Muslim of Hooghly District, West Bengal, (12) Genetic Survey among the Tentalia Bagdi and the Duley of Hooghly District, West Bengal, (13) Genetic survey among the Padmaraj of West Bengal, (14) Diet surveys among the tribes of M.P. Part I—Baiga and Gond of Baiga district. (15) Should calcium of drinking and cooking water be included in daily calcium consumption, (16) A short General Background of Assam and Khasi and Jaintia Hills, (17) Creation Myth of the Santal, (18) Field notes on Nahali, (19) Short notes on Halbi and Bharti, (20) A.B.O. blood groups in Tripura, (21) A.B.O. blood groups of the Angami Nagar, (22) The Media and Nature of Hindu-Bhumii Interactions, (23) A comparative study of somatic characters and the racial affinities of Uralis of Travancore and Cochin States, and (24) Investigation of the vital capacity of the Baigas and the Gonds of Mandla district, M.P.

The following reports have been completed: (1) Potters' Crafts in Poona city, (2) Pnar of Shangpung village (Assam), (3) Integrated report on the social organisation of the Riang of Tripura, (4) Final report on field investigations among the Santal of Santal Parganas, (5) Animal remains excavated from Taxilla Archaeological sites, (6) Animal remains of the Megalithic sites at Brahmagiri, (7) Geographic and Social environment of War (Khasi) with special reference to the village Shella and Tyrne, (8) House types, and (9) Description of the village Shella and Tyrne.

# Field investigations undertaken:

- (1) Under the scheme of physical growth and skeletal maturity of Indian children 487 children have been studied anthropometrically and radiographed.
- (2) Genetic surveys (A.B.O., M.N., Rh. blood groups, etc.) have been conducted among the Brahmin, Muslim, Bagdi and Duley of Hooghly district; among the Padmaraj of 24-Parganas district, and among the Rajpur clans of Rajasthan and U.P.
- (3) Above 1400 individuals were tested for phenylthiocarbomide taste sensitivity in Behala area, West Bengal.
- (4) To study Culture change among the Muda of 24-Parganas.

- (5) To study blood haemoglobin, vital capacity, height-weight and dental caries among the Baiga and Gond of Mandla district, M.P.
- (6) Somatological survey among the Rajpur clans of Rajasthan and U.P.
- (7) Socio-economic survey among the East Bengal refugees at Sealdah (Calcutta).
- (8) A preliminary survey on the changes in rural communities due to reconstruction programme of Sriniketan.
- (9) A field-party participated in the archaeological excavations at Nagarjunakonda.
- (10) To collect materials on State Formation and its cultural consequences among and indigenous Tribe of Manbhum, the Bhumij kingdom of Barabhum.
- (11) Socio-economic study of the Dusserah festival (Bastar) and the weekly market at Jagdalpur (Bastar).
- (12) To study social organisation and culture of a Bhattra village (Jagdalpur Tahsil).
- (13) To study aboriginal influences in the traditional culture of Puri and the adjoining region.
- (14) To study some obscure tribal tongues of Koraput district.
- (15) To collect ethnographic specimens from the Urali and Kanikkar tribes (Kerala).
- (16) To study the Kukin-Chin languages in Manipur.
- (17) To study the Socio-cultural life of Pnar (Khasi and Jaintia Hills).
- (18) Linguistic and Genetic surveys among the Car-Nicobarese.

# Laboratory work:

- (1) The Morphology section conducted its regular preservative treatments, reconstructions and osteometric studies of the human and animal skeletal remains of Adittanalur, Harappa and Mohenjodaro. Studies of pathological pecularities in the Harappa skulls and identifications of the skeletal materials from Rangpur and Lothal have continued.
- (2) The Somatology section concentrated on the analysis of the anthropometric and other physical anthropological

- data on the Riang and Tripura tribes, including a study on the limb proportions.
- (3) The Human Biology section analysed the Rajpur blood groups (A.B.O., M.N., Rh.) and other genetic data; the P.T.C. taste or variation data (1400 Brahmin) and the anthropometric data of the Rajput clans. Final analyses of the Rupkund Osteometric data have been conducted. Blood group studies of Rupkund skeletal remains continued. Microcrystalline structure of prehistoric bone studied by X-ray diffraction.
- (4) The Ethnography section carries out its regular preservative work on the departmental specimens. Modernisation of the dioramas in the eastern half of the Museum anthropological gallery has been completed. Progress has been made in the modernisation of the show cases for the Garo and the Riang and the life size models for the Chenchu and the Kanikkar have been completed.
- (5) The Social Anthropology section planned a research programme to be undertaken in the rural communities near Sriniketan. This includes intensive study of the villages under the scheme of rural reconstruction of Sriniketan and aims at finding out the changes in the villages due to the activities of Sriniketan. Religious concept as a part of the chapter on 'Religion of the Riang of Tripura' has been written. 'Social Organisation of Car-Nicobarese' in the Monograph on the Car-Nicobarese has been completed. Chapters on economic life and Material culture of Car-Nicobarese are under preparation.
- The Psychology Section has analysed the data on the Rorschach test among the Riang of Tripura and a report is being prepared. The attitude scale data pertaining to the Baiga of M.P. are being analysed.
- The Linguistics Section is writing the report on the Onge language. It drew up a scheme for starting the linguistic survey of the Kuki-chin group of language, and is continuing the analysis of the Korku language.
- The Statistical Section carried out the statistical reductions of the biometric and somatometric data collected by the scientific workers of the Department. It also compiled the migration figures of a few religious towns

in India and occupational figures for migrants in five states of India. A survey of the visitors to the Indian Museum was made.

The Photography Section has completed the map showing the internal migration between States of India as well as the tribal map of India. A coloured map of Manipur area showing the distribution of the languages and dialects of the Naga and the Bodo groups has been prepared. Geneological charts of the Riang of Tripura have been drawn.

The Translation Section is translating the Memoir No. 2 entitled The Santal—A Study in Culture-Change by N. Datta-Majumder, into Bengali, Urdu and Hindi languages. Translation of the same in Tamil language is complete. Translation of scientific terminology (2200) in four languages viz. Hindi, Tamil, Bengali and Urdu has been completed.

The Library has added 2010 periodicals, 1455 books and 56 maps to its stock. It has prepared Cumulative Index to Current Literature from January 1957 to December 1957.

Programme for 1958-59.—The various programmes of field as well as laboratory investigations already undertaken but not yet completed will be continued, with the help of the scientific personnel available in the Department at present. A programme of anthropological surveys including (i) Ethnographic, (ii) Psychocultural, (iii) Linguistic, (iv) Somatological, (v) Genetic and (vi) Demographic surveys has been drawn up for the Second Five-Year Plan period.

#### NATIONAL ARCHIVES OF INDIA

Budget.—Funds to the extent of Rs. 14,16,000 were placed at the disposal of this Department and its regional Office at Bhopal for the year 1957-58 against Rs. 16,29,000 for the year 1956-57. A provision of Rs. 14,86,600 (Plan and non-Plan items) has been proposed to be included in the budget estimates for 1958-59.

(Demand No. 22)

During the current year as a measure of economy certain posts were left unfilled and the purchase of furniture and other miscellaneous items was deferred, thereby effecting a saving of Rs. 45,000 approximately. The amount provided in the Second Five-Year Plan

for the development Schemes of the department and construction of an Annexe was reduced from Rs. 10 lakhs and 55 lakhs respectively to Rs. 8 lakhs and 40 lakhs respectively. The construction of the third and fourth storeys of the building of the Regional Office at Bhopal was also suspended.

Accessions.—1,02,805 files were received for custody. Other accessions of the Department included 32 documents relating to Indian Audit Office, London and six maps received from the Survey of India.

Exchange difficulties considerably impeded the implementation of the Department's programme of acquiring historical manuscript and microfilm copies of documents of Indian interest from abroad. Five interesting manuscripts were, however, purchased including an autograph letter of Prince Dalip Singh, and 49 photographic documents illustrating the history of Burma were acquired.

Thirty-four autograph letters of Mahatma Gandhi going back to 1917 were presented to the Department by the Government of Bihar as a gift.

Checking and Arranging Accessions.—Checking and arrangement of the Department's accessions was continued and the number of records arranged and checked totalled 3,076 volumes and 2,46,529 files. Progress was also made in surveying the old accessions, consolidating disarranged series, reconstruction of the dispersed records of the late Foreign and Political Department (1890—1923) and providing with check-lists those series of records that were received without lists.

A catalogue of printed maps in the custody of this Department was compiled.

The preparation of a catalogue of microfilm copies of records of Indian interest obtained from abroad was taken in hand and about 150 rolls were checked and catalogued. An abstract hand list was also prepared and supplied to state Record Office, Universities and learned Institutions.

Research facilities.—During the year under review, 112 research scholars conducted research among the records, and 16,872 pages of excepts, 4,412 pages of photostat copies and microfilms containing 5,658 exposures were released for their use.

The hours of the Research Room were extended from 10 A.M.—5 P.M. to 9 A.M.—8 P.M.

Training in Archives-Keeping.—The four candidates who had been admitted to the One-Year Diploma Course completed their training. The department also conducted two short-term courses of three months duration each, and imparted training to 17 nominees of the Central Government agencies and State Governments in the administration and preservation of archives.

Exhibition.—The exhibition of records and manuscripts in the Department continued to attract the public and during the year over 700 visitors came to see the exhibits.

Forty-nine original documents and 20 photographs and maps belonging to this Department were displayed at the 1857 Centenary Exhibition held at the National Museum, New Delhi from 22nd August to 15th September, 1957.

Publications,—Volume II of Fort William—India House Correspondence was published and issued for sale during the year. The printing of Volumes I, IX and XIII of the same series made steady progress and the typescripts of Volume VI were sent to the press. Revision of the editorial work of Volumes XV, XVI and XIX continued and some progress made therein. The volume of Browne Correspondence is being made ready for the press.

Volume IX, No. 2 (July—December, 1955) of the *Indian Archives* was issued and the materials for a consolidated issue of Volume X (January—December, 1956) were sent for printing.

A list of Publications of the National Archives of India was completed and the Annual Report of National Archives of India, 1955 was published.

Preparation of the Handlists of the Original Persian Letters received for 1815, 1816 and 1817 and Persian Newspapers was completed.

The Department undertook a novel project of cataloguing the oriental seals found among the Persian records in its custody and made considerable progress therein. Progress was also made in preparing a catalogue of Persian, Arabic and Urdu manuscripts and documents acquired by purchase and presentation.

Preservation.—The Department undertook repair work for a few state Governments, institutions and individuals in addition to its normal repair and rehabilitation programme.

The Department introduced an improvement in the technique of lamination, which helped in saving the labour and materials necessary for providing extra guards to documents. The new technique effected a saving of Rs. 6,000 approximately.

Technical Services.—Technical advice on the preservation and rehabilitation of records was rendered to several institutions, Central Government Departments and State Governments of Punjab, West Bengal, Kerala, Rajasthan and Andhra Pradesh.

At the request of the Director, Secretariat Training School, this Department arranged a lecture on the 'preservation' for the trainees undergoing training in the said School.

Photo-duplication.—Microfilming of the records of the late Foreign Department in the custody of this Department was continued and implementation of the scheme to microfilm rare manuscripts belonging to the Raza Library, Rampur was taken up.

Photo-duplication services like microfilming, photostating and enlarging were rendered to several individuals and outside agencies.

National Archives of India, Regional Office, Bhopal.—The Regional Office continued to receive the records of the late Bhopal Government. The total accessions from the inception of the office to the end of the year under review being 3,00,000 files and 30,000 volumes. The activities of the office included checking, arrangeing and listing of the records accessioned as also the preparation of suitable reference media for the convenience of research schools etc.

Some of the important schemes proposed to be undertaken during the next are:—

- (a) Publication of Education Records,
- (b) Acquisition of Private Archives.
- (c) Microfilming of Newspapers.
- (d) Publication of Persian Akhbars of the Moghal period.
- (e) Guide to Archival Repositories.

A suitable grant under the India Wheat Loan Educational Exchange Programme has also been applied for to supplement the activities of the Department, in regard to acquisition of books, Microfilm equipment and copies of records of Indian interest from the United States of America.

## NATIONAL LIBRARY, CALCUTTA

Budget.—For 1957-58 the budget allotment for the Library is Rs. 13,12,700 as against Rs. 7,75,000 for 1956-57. The increase in the current year's allotment was due largely to the provision of additional funds for the development schemes of the National Library. A

provision of Rs. 11,37,600 has been proposed for 1958-59, of which Rs. 56,400 has been provided for the implementation of the development schemes included under the Second Five-Year Plan (Demand No. 22)

Wheat Loan Grant.—A sum of \$ 20,800 has been allotted to this Library under the India Wheat Loan Educational Exchange Programme for the purchase of books and equipment during the year 1957-58.

Acquisitions.—During the period under review the Library obtained a total number of 27,107 books and 2,688 (titles) periodicals of which 21,197 books and 2,688 (titles) periodicals have been received under the Delivery of books (Public Libraries) Act. 1954: 1,372 books on exchange basis; 1,533 books as gifts and 3,005 books and 408 (titles) periodicals have been acquired by purchase.

Cataloguing.—During the period from 1st April, 1957 to 15th December, 1957, 15,390 volumes of publications in European languages and 8,681 volumes in Asian languages have been catalouged and made available to the readers.

Sapru Political Pavers.—A dossier representing late Sir Tej Bahadur Sapru's correspondence was formally presented to the National Library by his sons. Sarvashri A. N. Sapru, P. N. Sapru and T. N. Sapru as a gift on certain conditions. The gift of this dossier has been accepted by the Governing Council of the Library. The 300 and odd papers which form this rich dossier have been some of the most cherished acquisitions of the Library and will be found to be of immense research value particularly to the student of contemporary constitutional problems of India. The dossier is a revealing political record of India in transition. The Round Table Conferences, the Constitutional Reforms, the Interim Concept of the Federal Government, Cripps' Mission and other live topics of the day figure in this correspondence.

Bibliographical and Reference work.—In response to public requests a number of small size bibliographies on different subjects of interest have been prepared by the Reference and Bibliography Division.

As regards the compilation of the Bibliography of Indology out of the fifty-six sections, the work on three sections, viz., the compilation of bibliography of (1) Indian Anthropology, (2) Indian Botany, and (3) Bengali language and literature is in progress. Besides this, 183 reference queries from the public have been attended to and Indian material consisting of 600 entries have been prepared for the

Index Translation, Volume X—an International Bibliography sponsored by the Unesco.

Exhibitions.—An exhibition called "1857 Centenary Exhibition of Printed Books, Documents and Illustrations" was arranged at the Library. On the occasion of the All-India Writers' Conference another exhibition of books and manuscripts was arranged.

Additional Accommodation for Books.—An additional floor area to the extent of 6,500 sq. ft. has been added to the Stack Room of the Library by converting the old six-unit Staff Quarters at Belvedere into a Stack Room for the Library.

Deputation of Departmental officer.—Stri B. N. Bandyopadhyay Choudhuri. Technical Assistant has been deputed to the U.S.A. for training in preservation and bookbinding methods for a period of four months with effect from 19th September, 1957, under the India Wheat Loan Educational Exchange Programme.

Programme for 1958-59.—The original provision of Rs. 10,00,000 for the Development scheme of the National Library has since been reduced to Rs. 8,00,000 and as such only the following two schemes under the Second Five-Year Plan will now be undertaken:—

- (a) Construction of an Annexe to the main building of the Library at Belvedere Rs. 7,40,000
- (b) The setting up of a Library's Home Bindery. Rs. 60,000

Rs. 8,00,000

Some important activities proposed to be carried out during 1958-59 are:--

(1) To create a separate Periodicals Division; (2) To build up the Indian language collections; acquire back volumes of learned and scientific journals and standard publications published in the Asian countries, excluding India. (3) To organise the subject card catalogue; (4) To bring out a supplement of periodicals, newspapers and gazettes for the period 1955 onwards; (5) To bring out a classified catalogue of Indian official. (i) serial publications and (ii) general publications; (6) To bring out volume II of the Catalogue of the Asutosh Collection (literature) as also Classified Catalogues of Ramdas Sen Gift Collection; (7) To compile and publish the catalogue of Sanskrit Manuscripts; (8) To instal Photoduplicating equipment and Vaccum Fumigation Chamber;

# INDIAN NATIONAL BIBLIOGRAPHY UNIT

of Indian National Bibliography is Rs. 1,00,000 A provision of Rs. 70,500 has been proposed for 1958-59 (Demand No. 22).

. Compilation of Indian National Bibliography.—A very important stage of work has been reached by the compilation of the specimen issue of the Indian National Bibliography which is designed to be a Quarterly. The scope of the Indian National Bibliography is nothing less than the scientific record of all the publications in India in all the languages recognised by the Constitution, both official and non-official. The official publications will include not only Central Government publications but also the State Governments publica-The main features of the Bibliography are that it is a classified bibliography in the Roman script with an alphabetical index of authors, titles, collaborators, series and subjects. This issue was prepared in August this year and was sent to all the senior librarians in the country and to some bibliographers abroad criticism and advice. Their comments have since been received and tabulated. The entries in this specimen have been rearranged. The matter for the first issue of the Bibliography is ready for the press and it is expected to be out in January, 1958.

Future Programme for 1958-59.—The regular publication of the Indian National Bibliography which is designed to be a quarterly will continue during 1958-59.

#### CENTRAL SECRETARIAT LIBRARY

The total budget sanctioned for the year was Rs. 1,66,000. Of this amount Rs. 1,53,000 were earmarked for the purchase of books, periodicals and other publications and Rs. 13,000 for binding and equipment.

Acquisitions.—The Library added 5,403 books, 12,246 Government documents and 1,521 pamphlets. 215 periodicals and 11 newspapers were subscribed for and 121 periodicals were received free. Under the provisions of the Agreement for Exchange of Official Publications, with the United States Government 10,297 United States Government documents were received during the year. The Library also received about 200 Russian language books on various subjects and about 40 Chinese language books from the Governments of U.S.S.R. and the Peoples Republic of China respectively. Among the notable additions to the Library during the year were the Catalogue of the British Museum and several basic reference books from the U.S.A. During the year a systematic effort was made to complete the back-files of important Indian journals.

Reference and Circulation.—The volume of reference work increased considerably during the year. About 9,000 reference questions, including quick and research reference questions, were handled. The Library received queries from almost all the Ministries of the Government of India and frequently queries from Embassies and other agencies of foreign governments in the city: Several research scholars from educational and other institutions in the city and from the country came to consult old and rare books, reports and other Government of India publications.

The number of registered borrowers is at present 11,969, which is an increase of 2,469 over that of the last year. The total number of books and other publications issued was 80,718. About 500 persons visit the Library each day to read magazines and newspapers and consult reference books.

Other Activities.—The Library has during the year completed a good part of its programme of reorganisation. Accordingly almost all the books have been re-accessioned, properly stamped and numbered. The verification of stock is in process and it is expected that the entire book stock will be verified during the course of the next financial year. Progress has been made in re-cataloguing and re-classification of these books and a new classified catalogue is being prepared.

More than 5,000 volumes were bound during the year. These include old, rare and out-of-print titles.

A monthly list of additions is issued regularly and an index of about 30 Indian periodicals has been prepared.

Several special lectures were arranged in the Library in cooperation with the Government of India Libraries Association. Among them, the talks by Dr. Luther Evans, Director General of Unesco and by Dr. S. R. Ranganathan, the internationally known library expert were the high-lights.

# Programme of 1958-59

- 1. To complete the verification of the entire book stock.
- 2. To complete the re-cataloguing and re-classification of the collection.
- Library has started keeping files of four major Indian newspapers and it is proposed to maintain an index of these newspapers for important articles.

#### DEPARTMENT OF SCIENTIFIC RESEARCH

# AND TECHNICAL EDUCATION

#### SCIENTIFIC RESEARCH

#### SURVEY OF INDIA

All 26 maps for the Hindi edition of the National Atlas of India were printed in the Map Publication Directorate.

The Western circle carried out original surveys and triangulation for subsequent surveys in Rajasthan, the Punjab and Bombay.

The Northern Circle carried out triangulation for subsequent surveys and original and revision surveys in Madhya Pradesh, the Punjab, Rajasthan, Jammu and Kashmir and Nepal; cantonment surveys in Uttar Pradesh, and the Punjab; traversing, rectangulation and sub-rectangulation in Rajasthan; sub-rectangulation-cum-levelling in Jammu and Kashmir in Ravi and Pratap Canal Projects; and surveys for I.C.A.O. approach and landing charts of Srinagar, Jammu, Agra and Lalitpur aerodromes.

The Southern Circle carried out forest surveys, plan, height control and original air-cum-ground survey, and plan control for ground survey in Bombay State; plan and height control and original air-cum-ground survey in Andhra Pradesh, Orissa and Medhya Pradesh under Ramapadasagar Dam Project; in Andhra Pradesh and Orissa under Sileru Project; in Bombay under Mula Project; in Kerala under Iddiki Project; in Bombay under Mahi Canal Project; under Hathmati Project, under Meshwa Project, under Nagarjunasagar Project, under Girna Project and under Purna Project in Bombay; in Madhya Pradesh under Kaliasota Project, and cantonment surveys in Southern India.

The Eastern Circle carried out I.C.A.O. chart survey of Baghdogra, Kumbhigram, Chaukulia and Kalaikunda Aerodromes; original and revision surveys and plan and height control in Assam, West Bengal, Bhutan, NEFA and Nepal; Andaman and Nicobar Islands surveys; Indo-East Pakistan Boundary surveys in Patharia Hills sector; Bhimkund and Rangali Project surveys in Orissa; Kopili Flood Scheme; Barak Flood Control area; and Chera-Shella Ropeway Survey in Assam and cantonment surveys in Eastern India.

The Geodetic and Research Branch carried out magnetic work, secondary levelling, Indo-West Pakistan boundary demarcation and revision surveys. Tidal observations were carried out as follows:—

31-day tidal observations and local levelling at six ports in Madras and Kerala; Secondary levelling in Madras and Bombay; Tidal stream observations in Gulfs of Kutch and Cambay; Tide gauge installation; Latitude and longitude observations; and Earth tide observations in Uttar Pradesh, Delhi, Punjab and Bombay and gravity observations in Delhi and Uttar Pradesh in connection with the I.G.Y. work.

The Air Survey and Training Directorate carried out flood control surveys in Ganga and Brahamaputra basins; survey of Wular Lake and Jhelum basin; surveys for Ken Reservoir Project in Madhya Pradesh; surveys of Trombay area for the Atomic Energy Establishment; survey of Rajasthan Lead-Zinc and surveys of Delhi area for the Town Planning Organisation.

The training of two trainees from North Borneo in draftsmanship, map printing and computing, and two trainees from Burma in Lithographic Retouching and Photo Lettering, and six trainees from Nepal in Surveyor's course was completed.

The total gross budget estimate for 1957-58 amounts to Rs. 1,64,85,000 (including Rs. 2,94,000 on account of charges in England)

Programme for 1958-59: The Northern Circle will carry out original and revision surveys in the Punjab, Nepal and Jammu and Kashmir; cantonment surveys in North India; I.C.A.O. charts surveys in Northern India; and traversing, rectangulation and mapping in Rajasthan Canal Project.

The Western Circle will carry out original and revision surveys in Rajasthan, the Punjab and Bombay.

The Southern Circle will carry out cantonment surveys in Southern India; forest surveys in Bombay State; and project surveys in Bombay, Madhya Pradesh, Andhra Pradesh and Orissa.

The Eastern Circle will carry out I.C.A.O. charts surveys; cantonment surveys; Indo-East Pakistan boundary surveys; original and revision surveys; surveys in Andaman and Nicobar Islands; and project surveys.

The Geodetic and Research Branch will carry out high precision and secondary levelling; magnetic observations; tidal work; I.G.Y.

work; Indo-West Pakistan boundary demarcation and departmental surveys.

The Air Survey and Training Directorate will carry out surveys in Nepal; Rajasthan (Lead-Zinc Zone), large scale survey of Trombay area for the Atomic Energy Commission; surveys for the Town Planning Organisation of the Ministry of Health and double tertiary and tertiary levelling and marking of spot heights on mosaics for flood control investigations required by the Central Water and Power Commission.

#### NATIONAL ATLAS ORGANISATION

The National Atlas Organisation was set up to compile the National Atlas of India in Hindi and English and in other regional languages of India.

Preparation of National Atlas: The Hindi edition of the National Atlas was brought out during the first week of October, 1957. The Atlas depicts for the first time through maps the socio-economic picture of the country as influenced by environmental factors. It contains 96 maps (including insets) in 26 sheets with explanatory notes both in Hindi and in English.

Copies of the Atlas have been printed and arrangements are being made for its copies to be made available to the public at the following prices:—

Description				•	Price to be charged from educational institutions, libra- ries and Public
احتية فيناه فيله فياد بناد ينبث بالحاريث فيل فيلم يبيلا ينت التحريث يمي بمن منب فيلم فيلم					·
(i) Atlas printed on imported paper .					Rs.125.00 per copy
(ti) Atlas printed on indigenous paper	•	•			Rs. 100 00 per copy,
(iii) Maps printed on imported paper.					Rs. 5.00 per sheet.
(iv) Maps printed on indigenous paper					Rs. 3.50 per sheet.
(v) Exlanatory notes,-					
(a) Printed in Hindi					Rs. 0.50 per set.
(b) Printed in English	•	•	•	•	Rs. 1.00 per set,

The maps included in the Hindi edition will also be made available in the form of wall atlas.

Budget estimates for 1957-58 total Rs. 5,00,000.

Professor Hans Ahlmann, President of the International Geographical Union, and Dr. W. W. William Olsson, Chairman of the I.G.U. Commission on World Population Mapping, visited the Calcutta office of the National Atlas Organisation, expressed satisfaction over

the progress made and held discussions with the Director regarding population mapping and various cartographic techniques.

Future programme: Data etc., for the main edition of the Atlas in English is being collected. As the completion of the Atlas will take considerable time, maps to be included in this edition will be made available in sets as and when they are ready.

## BOTANICAL SURVEY OF INDIA

The Botanical Survey has now under it the following organisations:—

- 1. The Office of the Chief Botanist, Calcutta.
- 2. The Central National Herbarium at Indian Botanic Garden, Calcutta.
- 3. The Industrial Section at the Indian Museum, Calcutta.
- 4. The Central Botanical Laboratory, Allahabad.
- 5. Four Regional Circles based on phyto-geographical affinities namely the Eastern, Western, Northern and Southern Circles with their headquarters at Shillong, Poona, Dehra Dun and Coimbatore respectively each under a Regional Botanist.

The headquarters establishment under the Chief Botanist at Calcutta, coordinates the activities of the various Regional Circles and attached offices for implementing the policy laid down by Government to render help, advice and guidance in the field of botanical explorations and investigations.

The National Herbarium will house the type specimens and a fully representative collection of the plants comprising of the flora of India and also of other countries. This Institution will also aid in floristic work, taxonomy, systematics, nomenclature and training in Modern Herbarium and Taxonomical methods through diploma and refresher courses.

The Industrial Section maintains a Botanical Museum on modern lines in Calcutta, with full representative collection of authentic plant specimens of Economic Survey and investigations on plant resources, supply of economic information, visual education and Museum services and training in Museum methods.

The Central Botanical Laboratory undertakes intensive investigations on Cyto-taxonomical (indicative of Plant Geography and distribution of the Indian flora in particular), Genetical, Physiological Ecological and related subjects and also in ludes Radioisotope studies on Plants.

Regional Circles explore and accurately map the flora and vegetation of the respective regions, collect specimens and data in respect of ecological groups and economic plants at regular intervals during different seasons of the year to bring them up-to-date and revise the flora of the country.

The Botanical Survey of India will collaborate with universities and research centres in the country by encouraging research students in universities to take up studies of problems relating to flora of India.

Progress of Work: Systematic surveys of the floras of the country in under-explored and un-explored areas have been undertaken by the Regional Botanists in different circles of the Botanical Survey of India.

Reprinting of Cooke's Flora of Bombay and Gamble's Flora of Madras was completed.

The Central Botanical Laboratory was shifted from Lucknow to Allahabad in December, 1957.

The activities of the different organisations under the Botanical Survey of India are given below in brief.

Industrial Section: About 150 new exhibits were acquired and exhibited. The work on the collection and supply of genuine materials and authentic information to various correspondents was continued. Botanical collection tour to Kashmir was undertaken and many valuable specimens were collected for the new Botanical Gallery and the Industrial Section.

The Curator went to Sundarbans and collected many interesting specimens including algae amongst which were some new finds.

Central National Herbarium: The Sibpur Herbarium was transferred from the control of the West Bengal Government to the Botanical Survey of India in April, 1957.

1929 plant specimens were indentified. One hundred and seventy sheets were sent on loan to different herbaria for research work; 150 sheets were received on an exchange basis; 355 sheets were acquisitioned.

Central Botanical Laboratory: A compilation of the flora of Lucknow and Nilgiri Hills was nearing completion.

Chromosome numbers of over 150 plants were determined from the following regions:

 Lucknow and environs; (2) Nandi Hills, Nilgiris, (South India); (3) Mussoorie in North Uttar Pradesh; and (4) Salsette Island near Bombay. The potentialities of mangroves as a source of tannins were examined.

The classification of the flora of India according to Hutchinson was started and a chromosome catalogue of the flora of India was being compiled from published materials.

The cyto-geographical study of Dioscoreas was continued.

Eastern Circle: Botanical exploration of the Kameng Frontier Division up to Towang and beyond to Tibetan border in NEFA and the unexplored Rehna Reserve Forests in the Keonjhar District of Orissa, were successfully completed. Collection tours in the different districts of Assam were undertaken. A short collection tour to Jowai area in the Khasi-Jaintia Hills of Assam, was also undertaken.

More than 18,110 specimens excluding many living and preserved materials belonging to 3,826 species were collected. Most of the specimens were identified.

Northern Circle: Exploration of the flora of the Punjab Himalayas in the neighbourhood of the Dalhousie and Chamba, the Garhwal Himalayas in the Badrinath and Bhyundhar Valleys and the Kumaon Division in the Pindari and Kafni Glaciers was undertaken. Collections were also made from the Siwalik range and the forests in and around Dehra Dun. Nearly 2,400 specimens were collected.

A preliminary report on the Garhwal tour was prepared.

Southern Circle: Exploration work was being carried on in Courtallam, Singampatti, Alagar Hills, Hulical Droog Reserve and Pakkasuramalai in Madras State.

10.710 specimens consiting of 1,783 species were collected.

Western Circle: A complete bibliography was prepared on the Mangrove and coastal vegetation.

Kanara areas were explored and over 400 plants collected. Over 250 specimens were identified and 500 species were catalogued. Nine papers on the vegetation of Western Circle were communicated to Indian Science Congress Association.

Collection tours to the following areas were made:-

Mysore State: Bijapur and Badami; Kerala State; Khandesh; Bombay State; Cutch and Saurashtra; Desert and Arvallis; Central India; and Coastal vegetation of Western India.

1,227 specimens were collected and a paper on Mangrove vegetation of Western India was prepared for the Mangrove Symposium organised by the Inspector General of Forests.

Transfer of the Herbarium of the Economic Botanist, Bombay, to the Western Circle was completed.

Budget estimate for the Botanical Survey of India for 1957-58 is Rs. 10,67,000.

Future Programme: Reorganisation of the Botanical Survey of India Library and Ledger Section will be continued.

The Survey will undertake exploration work in the unexplored and underexplored areas on an intensive scale in different regional circles.

It will also undertake reprinting of floras and other publications including Records of the Botanical Survey of India.

Modernisation of the Botanical Museum on up to date lines will be undertaken.

#### ZOOLOGICAL SURVEY OF INDIA

General: The activities during the period were confined mainly to the normal work. Preliminary work in connection with some of the long-term items (such as extensive faunistic surveys, etc.) of the development programme was, however, integrated with or supplemented to the normal activities. A brief account of the work done during the period in respect of each of the functions is given below.

Faunistic Surveys: The following areas were surveyed for the collection and study of general fauna of the particular regions or in connection with particular items of study pursued in the different sections:—

- (i) Rajasthan Desert (including the Sambhar Lake):—Central (Jaipur, Nagaur, and Ajmer Districts), Western (Pali and Jodhpur Districts), and Northern (Bikaner and Churi Districts).
- (ii) South India.—Pondicherry, Madukkarai and Karaikal (Pondicherry State), Cuddalore and Porto Novo (South Arcot District, Madras) and Tranquebar (Tanjore District, Madras).
- (iii) Assam.—Garo Hills, Cherapunji, Shillong, Gauhati Sibsagar District (Kaziranga Sanctuary) and Goalpara District.

- (iv) Uttar Pradesh.—Bahraich Forest Division, Varanasi and Lucknow.
- (v) Madhya Pradesh.—Balaghat District.
- (vi) West Bengal.—Darjeeling, Sunderbans and Calcutta and its environs.

The surveys in Assam, Uttar Pradesh, Madhya Pradesh and the Darjeeling District in West Bengal were carried out by the officers of the Survey touring with the German Zoological Expedition which has been working in India since September, 1955.

Collections of insects and spiders were made from Barakar (Bihar), Balasore (Orissa) and Raniganj and Midnapore (West Bengal).

Research Work.—Eighteen papers were published (some are under publication) in the departmental and other journals and a few other papers were completed for publication.

Researches on various problems of systematics, ecology and zoogeography were conducted. Work was in progress on Acanthocephalan parasites, Turbellarians from South India, freshwater sponges in the collections of the Survey, high altitude insects of the Himalayas, beetles of the families Coccipellidae and Chrysomelidae, the revision of the oriental fishes of the genus Garra, bird fauna of Nepal, feeding habits of the birds of Sundarbans, the collections from Rajasthan, Pondicherry and Karaikal, and bibliography of locusts and other allied members of the family Acrididae.

Three special schemes of researches on locusts, termites and high altitude insects, sponsored by the Ministry of Food and Agriculture, the Indian Council of Agricultural Research and the Council of Scientific and Industrial Research respectively, functioned under the Director and the Deputy Director.

An aid to the identification of the common commercial fishes of India and Pakistan and a Handbook for the identification of the common commercial lizards exported from India were in the course of preparation. The preparation of a National Zoogeographical Atlas of India (included in the expansion programme) was taken in hand.

Publications.—One part of the Memoirs of the Indian Museum (Vol. 14, No. 2) containing a paper entitled "Fish paintings of the third millennium B.C. from Nal (Baluchistan) and their zoogeographical significance" (by the late Dr. S. L. Hora), was published. Two numbers of the Quarterly Bulletin (cyclostyled copies) on the current activities of the Zoological Survey of India were issued.

Four parts each of Vols. 53, 54 and 55 of the Records of the Indian Museum, one part (No. 3 of Vol. 14 of the Memoirs of the Indian Museum, and a Ten-Year Report on the Zoological Survey of India for the period 1941-42 to 1950-51, were in the press. Fifteen papers by the departmental staff and outside workers were edited for publication in the Records of the Indian Museum and Memoirs of the Indian Museum.

The editing of two Fauna of India volumes on Rodentia (Mammalia) by Sir John Ellerman (London) and one on Muscidae (Insecta) by Dr. F. Van Emden (London) was in progress.

Standard National Zoological Collections.—2726 specimens, including 153 type-specimens and 209 species and subspecies, new to the Survey Collections, were added in the different sections, partly as a result of the systematic studies carried out by the staff of the Survey and partly through donations and exchanges.

Identification and Advisory Service.—417 institutions and individuals, both Indian and foreign were served with the supply of identification of zoological specimens and information on various aspects of animal life, etc.

Training of Research Students.—Two Research Scholars under the Government of India Senior Research Training Scheme, one Research Fellow of the National Institute of Sciences of India, and four regular (honorary) students were given laboratory facilities and guidance on various problems of systematics, etc. Six research assistants working under the locust, termite and high altitude insects research schemes also received training in the respective researches.

Training in Taxidermy.—Eight students received training in the work of preparing animals for museum and study purposes in the short course of Taxidermy Training run by the Survey in its Taxidermy Section.

Among the distinguished visitors to Zoological Galleries of the Indian Museum during the period were:—

Dr. Hose Maza, President of the Tenth General Assembly of the United Nations.

The Emperor of Ethiopia.

The Government of India's Buddha Jayanti Invitees, including the Dalai Lama and the Panchen Lama.

The Deputy Premier of Sudan.

The Prime Minister of Poland and other dignitaries.

The Chinese Cultural Delegates.

The Indian Science Congress Delegates,

The Budget estimates of expenditure for 1957-58 totalled Rs. 10,24,000.

Programme of Work during 1958-59

The following items of work will be undertaken during 1958-59:—

Faunistic Surveys.—Extensive surveys of (i) the Western Desert Region, (ii) the Andaman and Nicobar Islands, (iii) the Pondicherry area, and (iv) the Sundarbans in Lower Bengal.

Survey of the fauna of N.E. Assam by the first regional station to be set up for the Eastern Region at Shillong.

#### Research Work:

Research on the following groups:-

Protozoa, Annelida and Arachnida.

Animal Population studies.

Marine Zoological work.

Preparation of a series of maps, etc., for National Zoogeographical Atlas.

# Departmental Publications:

Setting up of a Publication Section.

Speeding up of the publication of the Records of the Indian Museum and other departmental publications.

#### CENTRAL BOARD OF GEOPHYSICS

The Central Board of Geophysics continued to function as a coordinating body in Geophysics and as the National Committee in India for the International Union of Geodesy and Geophysics and also to arrange for the training of personnel in Geophysics. The main features of the work of the Board are given below:—

- (i) Under the 1957-58 practical training stipends scheme of the Department of Education, eight candidates were selected for training in Exploration Geophysics and Oceanography. (Of these six candidates are to undergo training in exploration Geophysics and the remaining two are to receive training in Oceanography.)
- (ii) The membership of the Board has been reconstituted for three years with effect from 1-3-57. The re-appointment

of the existing sub-committees have been kept in abeyance, pending the recommendations of the special Committee constituted on 15-4-57 to examine the question of redefining the functions of the Board and effecting any constitutional changes that may be found necessary.

- (iii) The Special Committee for bore-core legislation on 28-1-57 recommended an amended draft legislation for the collection of data and preservation of bore-cores of all bore holes or wells sunk in India. The draft is under the final scrutiny of the Board before recommendation to Government for enactment.
- (iv) The Board submitted to the International Union of Geodesy and Geophysics national reports on progress of work and developments in Hydrology, Oceanography, Seismology, Geodesy and Geomagnetism and Aeronomy. Thirteen papers were presented along with the above national reports to the International Union of Geodesy and Geophysics meetings and symposia at Toronto in September, 1957.

The scheme for the collection and analysis of sea water samples at the Central Marine Fisheries Research Station, Mandapam, was continued.

Government have approved the two schemes viz., establishment of the Geophysical Research Wing and the Oceanographic Research Wing under the Second Five-Year Plan. Steps are being taken for the recruitment of staff and for the procurement of equipment.

Steps are being taken to obtain the services of one expert in exploration geophysics for a period of two years for the Geophysical Research Wing under the Point Four Programme. It is also proposed to obtain the services of an expert for the Oceanographic Research Wing under the Colombo Plan.

The Budget estimates of the Board for the year 1957-58 amount to Rs. 4,35,600.

The Board will intensify its efforts of coordination in geophysics for the promotion and development of research and studies in the field.

The work at the Geophysical Research Wing and the Oceanographic Research Wing will be speeded up.

The Board has initiated action for the introduction of Hindi. One Hindi Translator and Hindi English typist was appointed.

The Board issues a quarterly 'Geophysical Digest' for dissemination of information relating to geophysical work. The proceedings of the 'symposium on ground Water' was to be ready for circulation by January, 1958.

# SCIENTIFIC SOCIETIES, RESEARCH INSTITUTES AND RESEARCH IN UNIVERSITIES

The development of various research institutes, laboratories and scientific societies was continued by the provision of technical assistance, grants-in-aid and supply of literature and information.

Research institutes made steady progress, while scientific societies continued to disseminate scientific knowledge.

# INTERNATIONAL SCIENTIFIC UNIONS

India continues to be a member of the International Council of Scientific Unions and the following International Scientific Unions:—

International Union of Geography;

International Union of Geodesy and Geophysics;

International Union of Astronomy;

International Union of Pure and Applied Chemistry;

International Union of Pure and Applied Physics;

International Union of Biological Sciences;

International Union of Crystallography;

International Union of Theoretical and Applied Mechanics;

International Union of History of Sciences;

International Scientific Radio Union:

International Mathematical Union;

International Commission of Table of Constants; and

International Federation of Documentation.

India also joined the International Bureau of Weights and Measures in January, 1957.

Dr. K. S. Krishnan, Director, National Physical Laboratory, New Delhi, is one of the Vice-Presidents of the International Council of Scientific Unions.

The International Astronomical Union have been informed that the following Indian members may continue to serve as "General members" of the Union from this country:—

Dr. Akbar Ali; Dr. A. C. Banerjee; Dr. Vainu Bappu; Dr. P. L. Bhatnagar; Dr. A. K. Das; Dr. D. S. Kothari; Shri N. C. Lahiri; and Prof. S. K. Mitra.

Dr. H. L. Uppal Director, Puniab Research Institute, Amritsar, has been nominated as India's representative on the Committee charged with the question of the Instruments in Hydrology of the International Association of Hydrology, Gentbrugge.

#### SCIENTIFIC DELEGATIONS

For reasons of economy, Indian delegations to International Scientific Conferences were limited during the year to the following:—

- XIth General Assembly of the International Union of Geodesy and Geophysics held at Toronto from 2nd to 13th September, 1957; Dr. K. R. Ramanathan, Director, Physical Research Laboratory, Ahmedabad, and Dr. M. V. N. Murthy, Geologist, Geological Survey of India, Calcutta, attended the Assembly.
- XIIth General Assembly of the International Scientific Radio Union held at Boulder in Colorado, U.S.A., from 22nd August to 5th September, 1957; Dr. K. R. Ramanathan, Director, Physical Research Laboratory, Ahmedabad, attended the Assembly. No expenditure was involved to Government.
- The third congress of the Pan Indian Ocean Science Association held at Tananarive (Madagescar) from 24th October to 4th November, 1957; Dr. P. K. Ghosh, Superintending Geologist and Head of the Raw Materials Division, Department of Atomic Energy and Dr. M. B. Mirza, Head of Zoology Department, Muslim University, Aligarh, attended the congress.
- Celebrations connected with the 40th Anniversary of the October Revolution of the U.S.S.R.; Prof. M. S. Thacker, Secretary, Department of Scientific Research and Technical Education, was deputed to participate in the celebration held at Moscow from 1-11-57 to 10-11-57.
- The Second World Metallurgical Congress held at Chicago from 2nd November to 8th November, 1957; Dr. B. R. Nijhawan, Director, National Metallurgical Laboratory, Jamshedpur, attended the Congress.
- The 119th Annual Session of the British Association for the Advancement of Science held at Dublin from 4th September, to 11th September, 1957; Prof. M. S. Thacker, President, Indian Science Congress Association, attended the meeting. The expenditure on the return air passage of Prof. Thacker from Indian to Dublin and back was met by the Indian Science Congress Association out of a grant paid by the Government of India to the Association for this purpose.

#### INDIAN SCIENCE CONGRESS ASSOCIATION

The 45th Session of the Indian Science Congress was held at Madras from 6th to 12th January, 1958. Scientists, research workers, and students from all parts of the country and a number of eminent foreign scientists and representatives of International Organisations like the Unesco and WHO attended the session. Among the eminent foreign scientists who attended were:—

Sir Ian Clunies Ross (Australia); Dr. D. A. Allan (British Association for the Advancement of Science); Prof. Ignat Emanuilov Igov (Bulgaria); Prof. Chou Tun Ching and Mr. Shen Chia Jui (China); Prof. Konrad Hruban and Dr. Otto Jirovoc (Czechoslovakia); Madame Y. Khouvine (France); Prof. G. Hertz and Prof. K. Mothes (German Democratic Republic); Prof. Richard Kuhn (West Germany); Dr. R. N. Mukherjee, (F.A.O.); Dr. K. Kimura (Japan); Prof. J. Litwiniszy (Poland); Dr. Currie (Unesco); Dr. W. Fox and Mr. A Amramy (W.H.O.); Dr. Leslie J. Harris and Sir Harold Hartley (U.K.); Prof. Fredrick D. Rossini (U.S.A.); Academician I. P. Bardin; Prof. S. P. Tolstov; Academician M. M. Aliev; Prof. V. P. Peshkov; Prof. S. M. Nikolsky; and Prof. V. A. Baum (U.S.S.R.).

## NATIONAL RESEARCH PROFESSOR OF PHYSICS

Prof. C. V. Raman, F. R. S., N. L., National Research Professor of Physics, continued his work at the Raman Research Institute, Bangalore. As a result, Scientific Memoirs were published on the following subjects:—

- 1. Quantum theory and crystal physics.
- 2. The specific heats of some metallic elements:
  - Part I. The analysis of the experimental data.
  - Part II. Approximate theoretical evaluation.
  - Part III. The characteristic frequencies.
  - Part IV. The residual spectrum.
- 3. The optical rotatory dispersion of quartz.
- 4. Optical properties and unit parameters of nickel nitrate hexa-hydrate.
- 5. The specific heats of crystals and the fallacy of the theories of Debye and Born.
- 6. Generalized theory of interference and its applications:—
  Part III. Interference figures in transparent crystals.

  Part IV. Interference figures in absorbing biaxial crystals.

- 7. The theory of the anharmonic oscillator.
- 8. The Raman spectrum of calcite and its interpretation.
- Dr. C. V. Raman has been informed that he has been awarded the International Lenin Peace Prize.

#### RESEARCH SCHOLARSHIPS

The scheme for training of research scholars instituted in 1950 in pursuance of the recommendation of the Scientific Man-Power Committee has been continued. Scholarships were allocated to the following institutions:—

The Indian Academy of Science, Bangolore; The Indian Association for the Cultivation of Science, Calcutta; Bose Institute, Calcutta, and Birbal Sahni Institute of Palaeobotany, Lucknow.

A number of scholars, who have been trained, have been absorbed in various universities and research institutions.

BURMAH SHELL AND ASSAM OIL COMPANIES' SCHOLAR-SHIPS.—The Council of Scientific and Industrial Research, who administer the scheme for the award of scholarships to Indian students in Commonwealth countries offered by the Burmah Shell and the Assam Oil Companies selected 10 scholars for training in the U.K. for 1957.

AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION.—THE objects of the Association are to carry on research and scientific work in connection with the textile and allied industries, such as (a) to investigate the manufacture and improvement of materials used in textile industry, (b) to investigate the utilisation of products of industry, (c) to improve various machinery and appliances, (d) to secure greater efficiency, conduct research, work time and motion studies and standardisation of methods of work, (e) to establish further laboratories and workshops, (f) to circulate books and periodicals, and (g) to encourage discovery and to investigate the nature and merits of inventions and processes and designs.

The association is managed by a Council consisting of seven elected members in addition to the Director and the Secretary of the Association, who are ex-officio members, three scientific and technical members co-opted as members and three members nominated by the Government of India. The Council have the sole control in the management of the Association and its affairs. The Ahmedabad

Textile Industry's Research Association is financed by the Textile Industry and the Government of India. The Government of India grants 50 per cent of the expenditure with a ceiling of Rs. 5 lakhs in the case of recurring expenditure and exercises control over the Association through the Cotton Textiles Fund Committee Secretariat.

Studies of human factors in organisation structure and management practices in textile mills and in methods of organisation and control, were carried out. In January, 1957, the Third Management Conference was organised.

Resin finishing of cotton textiles, suitable choice of catalysts, tear strength of fabrics on resin treatment and in bleaching of cotton textiles, were carried out in the Chemistry Section.

Molecular orientiation and viscoelastic properties in cellulosic fibres, blending short-stapled cotton with viscose fibres, carding for higher production, colloidal silica as spinning aid and indices of cotton quality, were worked out in the Physics Section.

A survey of cleaning achieved and Lint Loss in blow room and carding and the measurement of openness of cotton were part of Operational Projects.

Recurring expenditure for 1957-58 is Rs. 12-93 lakhs and non-recurring is Rs. 8.82 lakhs.

Three publications of ATIRA Research News, four other publications and two issues of ATIRA Newsletter, were brought out.

Dr. Helmut Wakeham served the ATIRA under Technical Cooperation Mission (USA), first as Director and since 1st July, 1957, as Technical Adviser to the Director.

One Junior Scientific Officer of the ATIRA proceeded to the U.K. for advance training for a period of twelve months in textile testing and quality control.

Two research Studentships of Rs. 200 p.m. one in Physics and the other in Chemistry were granted to two fellows, who have registered for the Ph.D. Degree of the Gujarat University.

SOUTH INDIA TEXTILE RESEARCH ASSOCIATION.—The South India Textile Research Association was constituted in 1951 to undertake cooperative research on behalf of the textile industry in South India.

The aim is to attain increased production and improved quality at lower costs, and to achieve this, research on machinery and processing would be undertaken.

The administration is vested in a Governing Council of eighteen members representing the Government of India, State Government, eminent scientists as well as representatives of textile industry. Control is exercised by the Government of India, through the Cotton Textiles Fund Committee.

Construction of buildings for the Laboratory and the Administrative Block is proceeding rapidly and the buildings were ready by the end of March, 1958.

Almost all the testing instruments have been delivered now and installed. Machinery for Pilot Plant have started arriving and all the principal items of equipment would be installed by March, 1958.

Projects under Statistical Quality Control and Industrial psychology were investigated. Studies of problems in Textile Technology have also been taken up from June, 1957.

Important studies completed were:-

Comparative study of the number of Doffing Boys in the Fly Frame Section employed at present and those to be engaged according to different methods; Labour Productivity in Cotton Spinning; A study of the methods of classification on recording and consolidation of waste spinning; Control of Flat Speed in Cards: A study for increasing Doff weight in Ring Spinning; Labour Productivity—A comparison with 1956 survey; and A study of absenteeism in textile mills.

Publication of the SITRA Research Reports and SITRA Abstracts were started.

Revised estimate for capital expenditure for 1957-58 is Rs. 9,53,605 and budget estimate for 1958-59 is Rs. 6,10,000.

BOMBAY TEXTILE RESEARCH ASSOCIATION.—The Millowners' Association, Bombay, promoted the Bombay Textile Research Association in 1954 with the object of establishing the Bombay Textile Research Institute for conducting fundamental and applied research in textile technology and engineering. The Research Association has been registered under the Societies Registration Act XXI of 1860 and has at present 34 mill companies as its ordinary members, who have contributed nearly Rs. 30 lakhs towards the capital expenditure involved in the establishment of the Research Institute and

will also contribute towards the recurring expenditure. The Cotton Textiles Fund Committee under the Ministry of Commerce and Industry, Government of India, will meet 50 per cent of the capital expenditure, subject to a ceiling of Rs. 50 lakhs, as well as recurring expenditure of the proposed Institute.

The Research Association is administered by a Governing Council comprising eight millowners, who are members of the Association; three nominees of the Government of India, including the Textile Commissioner and representatives of the Department of Scientific Research and Technical Education and of the Ministry of Finance; the Joint Director of the Bombay Textile Research Institute, and Directors of the Ahmedabad Textile Industry's Research Association and the South India Textile Research Association and three scientists as co-opted members.

The Cotton Textiles Fund Committee is kept informed about the progress made, through quarterly progress reports, annual reports, and minutes of the meetings of the Governing Council.

The Association has acquired a 23-acre plot of land in the suburb of Ghatkopar on the main Bombay-Agra Road. The foundation stone of the laboratories was laid on the 1st April, 1957, by Honourable Shri Y. B. Chavan, Chief Minister, Government of Bombay. The plans for the various buildings have been approved by the Bombay Municipal Corporation.

The Council has acquired on lease a building in Sion-Matunga Estate with approximate floor area of 8,000 sq. ft. to accommodate the offices, Physical Testing and micro-spinning laboratories, Library and to expand the miscellaneous activities, such as, technical liaison, standards engineering, statistical quality control and training within industry.

The Governing Council has, with the approval of the Government of India, invited Dr. A. J. Turner, ex-Director of Research, Linen Industries Research Association, Belfast, to come to India for two months (January-March, 1958) to advise the Research Association on the scheme for the Research Institute.

Budget estimate for 1957-58 for recurring expenditure is Rs. 1,62,317.68.

# INDIAN SCIENTIFIC LIAISON OFFICE, LONDON

The Indian Scientific Liaison Office, London, was set up in 1948 and was to be responsible for (1) facilitating the movement of Indian scientists within the Commonwealth and for providing adequate facilities for them and their work; (2) keeping abreast of the

latest scientific and technical developments and making this information available to India; (3) facilitating exchange of scientific information and experimental material; and (4) attending scientific and technical conferences in the U.K. and Europe not attended by delegates from India.

The chief function of the office is to procure and disseminate information to Indian scientists and scientific institutions.

The Scientific Liaison officer maintains personal contacts with scientists and scientific institutions in U.K., and procures official and non-official scientific and technical reports and information and brings promptly to the attention of the Ministry any new developments of scientific interest in the U.K., and Commonwealth countries.

He also attends scientific meetings on behalf of Indian institutions when these institutions do not send their own delegation.

The Scientific Liaison Officer also brings to the attention of the Commonwealth countries scientific work done in India. Through these means and through newsletters, technical reports and special reports, scientists in India are kept informed of recent developments in their specialised fields.

During 1957, the Scientific Liaison Officer represented India on Commonwealth Committee on Fuel Research, Commonwealth Aeronautics Advisory Research Committee, Commonwealth Committee on Forestry and Food Investigation and pest Investigation Boards of the Department of Scientific and Industrial Research, U.K. He represented the High Commission at several of the scientific meetings and functions held in the U.K. He also represented India as a delegate to International Standards Organisation for Technical Committee on "Aromatic Hydrocarbons", Commonwealth Conference on the "Future of Research on Application of Electricity to Increased Food Production" and a meeting of the heads of the "National Documents Exchange Centres" held in Paris. He visited several research organisations in the U.K.

He sat on Committees to interview candidates for posts in India. The total sanctioned budget for 1957-58 is Rs. 1,04,000.

The weekly science newsletter, covering about 200 items of interests to research workers in science and technology included the following subjects:—

Plastic lenses much in demand; Metals tested in solar heat; Use of Gamma radiation for the destruction of wood boring insects; Evidence of life on Mars; Synthesis of

penicillin announced by U.S. dentists; Banana fibre used for manufacturing grain bags; The use of errors science; X-Rays from the sun; Boundary lines between species; Value of hypnotism in therapy and mental study; New method of measuring deep ocean currents; Longevity and sleep; Sun flares up; Checking the drugs; supplies: Australia Effect of afforestation on water making its own rain; British contribution to radio astronomy; Insects resistance to insecticides; ceramic engineering material-Phyroceram; Widening applications for permanent magnets; Cooperation among Geophysicists; Plant de-salts brackish water; Detergents from sugar; Learning how to live longer; Milk from maize oil; Rare element; Problems of skin pigmentation still to be unravelled: First artificial earth satellite launched in Soviet Union; Department of Scientific and Industrial Research; Drug discovery gains Nobel Prize; Pure manganese-bismuth alloy gives powerful, easy to fashion magnets, highly resistant to demagnetisation; Disposing of radioactive materials; Sunspot numbers. highest ever recorded; and World's most powerful radio telescope.

# NATIONAL RESEARCH DEVELOPMENT CORPORATION OF INDIA

The main function of the Corporation is to stimulate development of patents and inventions arising out of the researches conducted in research institutions financed out of public funds and, where feasible, in the public interest, of patented inventions made by individuals also.

Development is secured by arranging large-scale trials in cooperation with industry, financing pilot plant investigations in laboratories, or licensing out patents and inventions to the industrialists for large-scale production, depending upon the nature of the work and the stage to which laboratory investigations have been pursued.

The Corporation is managed by a Board of Directors nominated by the President of India.

During the year 34 new inventions have been reported for development by the Council of Scientific and Industrial Research and other institutions, thus bringing the total number of inventions reported for development to 422.

Four new applications for patents were filed, three from the Ministry of Defence and one from the Ministry of Food and Agriculture.

Seven Licence Agreements with firms for the commercial development of the following six processes were executed:—

lanufacturing
Co., Quilon.
d., Calcutta
dustries Ltd.,
Regd., New
Mining Co.,

A project for the setting up of pilot plant on 'Fluidised Bed for Textile Processing' at the Shri Ram Institute for Industrial Research at an estimated cost of Rs. 3.56 lakhs was approved. Experiments on a 'One-inch Ribbon Model' have shown that the quality of dyeing obtained by the new technique compares favourably with existing processes, crease and shrink resistant effects are superior to those obtained by conventional methods and the cost of textile drying is almost 50 per cent. less than that of the tenter drying.

A six inch model was fabricated and brought into operation.

A project for the setting up of a pilot plant to develop the work on making white cement has been recently sanctioned.

The development of Indian patents in Italy and France by publishing information free of charge in certain prominent scientific and industrial bulletins of these countries was arranged.

Notable achievements during the year include:-

De-ionisation of Cane Juice Project at the National Sugar Institute, Kanpur;

Bamboo Mechanical Pulp Project at the Orient Paper Mills, Brajrajnagar:

· Copper Chlorophyll Project at the Shri Ram Institute for Industrial Research, Delhi;

Pine Oil project at the Shri Ram Institute for Industrial Research, Delhi.

Infant Food Project at the Kaira District Milk Producers' Union Ltd., Anand;

Thermo-electric Generators; and Phthalic Anhydride.

At the close of 1956-57 the Corporation had in hand assets totalling Rs. 7,67,850. The year closed with a balance of Rs. 7,26,702.

Revised estimates for expenditure for 1957-58 are:-

Capital Expenditure-Rs. 4,22,000.

Recurring Expenditure—Rs. 3,11,000.

Work proposed for 1958-59.—The projects intended to be undertaken in 1958-59 relate to the production of Coalene or ashless carbon from Indian coals and refining of Cotton Seed Oil.

Work will be continued on the projects already instituted.

Partial Financial Assistance to Eminent Indian Scientists Going Abroad.—The Department of Scientific Research and Technical Education administers the scheme for "Partial Financial Assistance to Indian Scientists Going Abroad." The financial assistance is given for any one or more of the following purposes:—

- (a) to visit well-known overseas centres of research;
- (b) to study at first hand the latest methods and developments in foreign countries in their special subject;
- (c) to attend international conferences of a high standard;
- (d) to make contacts with their counterparts in foreign countries; and
- (e) to give lectures at various universities and institutions to explain the result of their own research work in India.

The six following scientists were awarded assistance during 1957-58. The financial assistance is of the order of Rs. 2,500 per scientist.

- Dr. B. D. Nagchaudhuri, Palit Professor of Physics, Calcutta University, and Acting Director, Institute of Nuclear Physics, Calcutta.
- Professor T. R. Seshadri, Professor and Head of the Chemistry Department, Department of Chemistry, Delhi University, Delhi.
- Dr. Vishwa Nath, Professor of Zoology, Punjab University, Hoshiarpur.
- Shri Dinesh Mohan, Assistant Director, Central Building Research Institute, Roorkee.

- Dr. P. N. Wahi, Professor and Head of the Department of Pathology, S. N. Medical College, Agra.
- Dr. S. P. Sinha, Head of the Department of Physics, L. S. College, Muzaffar Pur.

Dissemination of Scientific and Technical Information.—Scientific and technical information is disseminated for the benefit of the general public with a view to creating science consciousness in the following ways:—

- (a) Publication of non-technical notes, describing in simple language the scientific work being carried out in India and results achieved, are prepared monthly and sent to the Press Information Bureau of the Government of India for circulation to English and Indian language newspapers and journals.
- (b) Non-technical notes, about research carried out by scientific and industrial research organisations in the United Kingdom and other countries of Europe as reported by the Indian Scientific Liaison Officer, London, in his weekly science newsletters, are prepared periodically.
- (c) In the Sunday issues of Newspapers, one or more scientific topics of wide appeal are discussed in non-technical language. Weeklies and monthlies, intended for popular reading and issued in regional languages, devote space to achievements in science and technology. Background material for such publications is prepared and supplied by scientific societies and scientific surveys and information divisions of research institutions.
- (d) Various scientific societies in India publish journals, parts of which are devoted to the discussion of topical scientific problems and to the publication of articles devoted to advances in scientific research. Notes and news sections of the journals give information relating to the discoveries; and achievements in the field of science.
- (e) The Zoological Survey of India issues three publications of a more or less regular nature, viz.,
  - (i) Records of the Indian Museum (Quarterly),

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- (ii) Memoirs of the Indian Museum (Occasional) and
- (iii) Volumes in the "Fauna of India" Series, as and when ready.

The Council of Scientific and Industrial. Research continues to disseminate scientific and technical information by:—

- (i) Issue of press releases in English and Hindi on scientific work done in the National Laboratories and results achieved.
- (ii) Preparation of non-technical notes on processes developed at the National Laboratories. These notes are published and circulated to various commercial and industrial bodies and interests with an invitation to those interested to apply for the rights to exploit the processes commercially.
- (iii) Publication of "Wealth of India—Dictionary of raw materials and industrial products of India". This work, it is expected, will be published in 10 volumes each consisting of two parts—one devoted to raw materials and the other devoted to industrial products.
- (iv) Publication of the following periodicals regularly:-
  - (1) The Journal of Scientific and Industrial Research (Monthly).
  - (2) Vigyan Pragati—a monthly journal in Hindi devoted to small-scale and cottage industries.
  - (3) Council of Scientific and Industrial Research News—a fortnightly newsletter, giving information about the activities of various laboratories and research committees of the Council.
  - (4) Annual Technical Reports of the Council.
  - (5) Various bulletins and monographs.
  - (6) Research and Industry (Monthly).
  - (v) Maintenance of Survey and Information Divisions by the Council and the National Laboratories for supplying information on scientific subjects to those interested.

Museums and exhibitions have been organised by the National Laboratories of the Council.

Symposia, Lectures, Seminars and Colloquia.—Various symposia were held under the auspices of the following organisations:—

National Institute of Sciences of India

- 1. "Geophysical Research including Geodesy" at New Delhi in October, 1957.
- 2. "Radioisotopes" at Bombay in May, 1957.
- 3. "Scientific Research in Relation to the National Development Plan" at Calcutta in January, 1957.

## Indian Chemical Society

"Recent advances on Terpenoids" at Calcutta in December, 1957.

# Institute of Chemists (India)

"Chemistry and Technology of Food" at Calcutta in September, 1957.

#### Indian Mathematical Society

"Teaching and Development of Mathematical Research in India" at Cuttack in December, 1957.

#### LECTURES

#### Indian Academy of Sciences

- "The Specific Heats of Crystals and the Fallacy of the theories of Debye and Born". (By Dr. C. V. Raman in May, 1957.)
- 2., "The Theory of the Anharmonic Oscillator" (By Dr. D. Krishnamurti, in August, 1957).
  - 3. "X-Ray Photography of the Reciprocal Lattice of Crystals" by Mr. A. Jayaraman, in October, 1957.

# Indian Chemical Society

- 1. "Boiling points of Elements and Compounds" by Professor S. R. Palit in August, 1957.
- "Some applications of Raney nickel reduction and desulphurisation to constitutional and synthetic problems" by Dr. K. Vankataraman in August, 1957 (Acharya P. C. Ray Memorial Lecture).

#### Bose Institute

- 1. "Hereditary Galactosemia—a molecular disease" by Professor H. M. Kalckar, in October, 1957.
- 2. "Enzymatic Synthesis of Deoxyribonucleic acid" by Professor Authur Kornbug in November, 1957.

# Birbal Sahni Institute of Palaeobotany

- 1. "Cryptogamic Sore Types" by Dr. K. P. Srivastava, m October, 1957.
- 2. "Investigation of Atmospheric Pollen" by Mr. P. K. K. Nair in November, 1957.

# Institution of Chemists (India)

1. "Quinine" by Mr. S. Mukherjee, in September, 1957.

#### SEMINARS

#### Bose Institute

- 1. "Absolute differential range spectrum of sea level umesons at 12 degrees N" in September, 1957.
- 2. "Development of streptomyces mutants for antibiotic production" in September, 1957.

#### VIGYAN MANDIRS'

Functions.—The Vigyan Mandirs are intended to educate the villagers on the potentialities of the methods of science in their day-to-day life.

Progress regarding the establishment of Vigyan Mandirs.—At the end of the last year 1956-57, there were in existence 14 Vigyan Mandirs at:

Kapashera (Delhi); Masauli (U.P.); T. Kalupatti (Madras);
Arunchal (Assam); Ormanjhi (Bihar); Dimoria
(Assam); Shapur (Bombay); Sehore (Madhya Pradesh); Sri Ramakrishna Mission Vidyalaya (Madras);
Vicarabad (Andhra Pradesh); Pisangan (Rajasthan);
Sumerpur (Rajasthan); Hinjlicut (Orissa); and Pudur
Ramavarmapuram (Kerala).

In the budget for the current year 1957-58, a provision of Rs. 3·25 lakhs was included for the Vigyan Mandirs. This allowed funds to equip and run the existing Vigyan Mandirs and to establish not more than four additional Vigyan Mandirs to be set up during the current year. Out of these four Vigyan Mandirs proposed to be set up during the current year, one was actually started with effect from July, 1957, at Sundernagar, District Mandi (Himachal Pradesh). The remaining three additional Vigyan Mandirs are expected to be established by the end of February, 1958, at Nilokheri in Punjab; Barsul, District Burdwan, West Bengal; and Ranbirsingh Pura, District Jammu. As far as practicable, the Vigyan Mandirs are located in the areas covered by the Community Projects and National Extension Service programme.

Each Vigyan Mandir is equipped with necessary scientific appliances, film projectors and slide projectors. Each Vigyan Mandir also possesses a small library containing simple literature and pamphlets dealing with the matters connected with the village life. A small rural science museum has also been established in each of the Vigyan Mandirs. The museums contain specimens of local flora and fauna, minerals, diseased plants and other objects of scientific interest. The muesum will also be equipped with scientific models showing various scientific phenomena. A rural Science Club has

been established in each Vigyan Mandir. These Clubs are open to all the people living in the locality without payment of any fee. The clubs arrange shows of films on subjects connected with plant protection, health, hygiene, sanitation, agriculture, popular science, village industries, etc., and also arrange discussions and talks on matters connected with agriculture, health and sanitation and demonstrate scientific experiments of popular nature.

The Vigyan Mandirs also undertake work of the analysis of soil and water, etc., and indentification of insects and pests damaging the plants and crops and advising the agriculturists on their control and remedy. Medical practitioners have been attached in a few of the Vigyan Mandirs to help the villagers in regard to pathological examination of stool, urine, blood, etc.... The Vigyan Mandirs work in liaison with the National Laboratories.

Future Programme.—A provision of Rs. 5.8 lakhs is being made for the Vigyan Mandirs in the budget for 1958-59 and within these funds, it is expected to establish 15 additional Vigyan Mandirs during the next year.

#### TECHNICAL EDUCATION

#### All-India Council For Technical Education

During the year under review two meetings of the Coordinating Committee and one meeting of the All-India Council for Technical Education were held. The important recommendations and decisions made by the All-India Council for Technical Education and its organs are summarised below:—

- (i) Commercial Education.—As the state of Commercial Education in the University and non-University courses was not considered satisfactory, the Council recommended that a Joint Committee of the Inter-University Board, the All-India Council for Technical Education and the University Grants Commission should be constituted to examine the question of re-organization and development of University and non-University Commerce Courses and submit detailed proposals in this behalf.
- (ii) Central Assistance for the Establishment of new Technical Institutions.—The Council modified the pattern of financial assistance to non-Government institutions and the revised basis is as follows:

Private agencies which fulfil the following conditions may only be assisted in the establishment of new institutions:—

(a) The private agencies by themselves or in association with the State Governments concerned should meet at least 50% of the approved non-recurring cost. Wherever State Governments make contribution, that amount should be provided in its Five-Year Plan.

- (b) The private agencies should have adequate resources including income from tuition fees to meet at least 50 per cent of the approved recurring expenditure. The balance be provided by the State Governments and the Central Government in agreed proportions subject to the condition that the State Government would assume the entire responsibility after the current Plan period.
- (iii) Affiliation of Institutions to the Council.—The Council has so far affiliated institutions conducting the National Certificate and Diploma Courses in Engineering and Technological subjects and holding their examinations for these awards. With the formation of State Boards in almost all the States on the basis of the earlier recommendations of the Council, it was decided that the function of affiliating institutions and holding of examinations should be taken over by the respective State Boards. The Council will, however, endorse the awards of the State Boards as equivalent to its own.
- (iv) Facilities for Chemical Engineering, Metallurgy and Tele-communication.—The Council endorsed the recommendation of the All-India Board of Technical Studies in Chemical Engineering that the facilities for first degree course in Chemical Engineering should be expanded in order to meet the rising demand of the country. Further, the admission capacity in such institutions should be increased to 30, in cases where it was less. A department of Chemical Engineering should be established in the Bihar Institute of Technology, Sindri, for the first degree course in Chemical Engineering, with an admission capacity of 30 students per year.

In regard to Metallurgy and Tele-communication the matter was under the consideration of the appropriate Boards of the Council.

- (v) Pay Scales for Teachers of Technical Institutions.—The question of attracting the right type of personnel for teaching posts in Technical Institutions has engaged the attention of the Council for a considerable time. To solve this urgent problem, the Council had set up an Expert Committee under the Chairmanship of Dr. J. C. Ghosh, Member, Planning Commission, to prepare a detailed scheme for rationalizing and improving the staff and salary structure for technical institutions. The Expert Committee prepared a scheme in consultation with State Governments, University Grants Commission and technical institutions and classified technical institutions into three categories, viz.,
  - (a) institutions functioning primarily at post-graduate level;
  - (b) institutions functioning primarily at the first degree level; and
  - (c) institutions offering diploma courses.

The Committee recommended model salary scales which should be uniform for institutions all over the country. As an immediate step the Committee suggested that the salary scales in technical institutions should be equated to those for corresponding posts in the State Public Works Departments, equating the posts of Lecturers to the posts of Assistant Engineers in the Stae Public Works Departments.

- (vi) All-India Board of Technical Studies in Textile Technology.—After expiry of its term, the Board was reconstituted and Lala Shriram re-elected Chairman. The Board has re-emphasized the need for producing suitable text-books on this subject.
- (vii) All-India Board of Technical Studies in Architecture.—On reconstitution of the Board after expiry of its term, Shri S. H. Parelkar was re-elected Chairman. The Board felt the need for expansion of training facilities in Town and Country Planning and appointed a Committee to suggest suitable additional centres.
- (viii) All-India Board of Technical Studies in Commerce.—On reconstitution of the Board, Dr. V. K. R. V. Rao was elected Chairman. While reviewing the question of commercial education the Board recommended that a high-powered Committee should be appointed to survey the whole field of commercial education as well as to assess the present state of employment of commerce graduates with a view to suggesting an integrated pattern of commercial education at all levels.
- (ix) All-India Board of Technical Studies in Engineering and Metallurgy.—After expiry of the term, the Board was reconstituted and Shri N. K. Mitra was elected Chairman. The Board approved a scheme for undergraduate course in Agricultural Engineering and recommended that such courses should be started at select centres having regard to the requirements of the Agricultural Engineering graduates.

The Board also felt the need for training facilities at the diploma level and for this purpose they recommended a one-year course after the National Certificate course in Mechanical Engineering.

Regarding Production Engineering and Industrial Engineering Courses, the Board's recommendations are as follows:—

- (i) at the under-graduate level, Production Engineering may be an elective subject for the Mechanical Engineering Branch; and
- (ii) Industrial Engineering should be offered only at the postgraduate level and should include Production Engineering and Management subjects.

The Board laid down the standard of staff, equipment and accommodation for institutions conducting National Certificate or equivalent Courses in Civil, Electrical and Mechanical Engineering.

- (x) All India Board of Technical Studies in Chemical Engineering and Technology.—On reconstitution of the Board Dr. J. C. Ghosh was re-elected as its Chairman. The Board at its meeting held on 8th March 1958 considered inter-alia a revised draft scheme for four-year degree course in Chemical Engineering and approved generally the structure of the course, content and standard of subjects, provision for electives and other aspects. The Board also decided that in view of the fact that the Coordinating Committee had approved that as a sequel to reorganised pattern of Secondary Education, the first degree course in Engineering and Technology should be five-year integrated course with Higher Secondary as admission qualification, the Courses Committee should prepare a five-year integrated course for Bachelor's Degree in Chemical Engineering.
- (xi) All-India Board of Technical Studies in Management.—The first meeting of the reconstituted All-India Board of Technical Studies in Management was held in May, 1957. The Board approved the report of the Courses Committee in respect of the new structure of management studies.
- (xii) Joint Committee of the All-India Council for Technical Education and Inter-University Board.—As a sequence to the re-organisation of the Secondary education in the country, the need had arisen for structural changes in admission qualifications to the professional courses. For this purpose the Council set up a Joint Committee of the Council and the Inter-University Board which met in September, 1957. The following principal recommendations made by the Joint Committee have been accepted by the All-India Council for Technical Education:—
  - (1) The first degree course in Engineering or Technology should be reorganised into a five-year integrated course with at least six months practical training. Admission to the course should be made from candidates possessing Higher Secondary qualifications.
  - (2) The duration of the diploma course should remain the same as at present, viz., three years, admission being made from candidates who have passed the S.S.L.C., Higher Secondary Certificate or Junior Technical School Certificate Examination.
  - (3) All technical institutions working at the degree or equivalent should establish full-fledged departments of Mathematics and Physics. Certain provisions have also been made for the transition period by the Joint Committee.

The Council, while accepting all the board recommendations as stated above, referred the Joint Committee's detailed recommendations to the various Boards for examination and preparing revised detailed scheme. The Council also recommended that revised standards of building, equipment and staff should be prepared by the appropriate Boards and that the Central and State Governments, in conjunction with the University Grants Commission, may offer assistance to the institutions to bring them up to the new standards.

(xiii) Amendment to the Resolution of the All-India Council for Technical Education.—The resolution of the Government of India in the late Department of Education (Now Ministry of Education and Scientific Research) No. F. 16-0/44-F3 dated the 30th November, 1945 setting up the All-India Council for Technical Education as subsequently amended upto 6th September, 1957 was further amended on 23rd January, 1958 incorporating the following main changes:

- (i) Education Adviser (Tech) will be the ex-officio member of the Council.
- (ii) In addition to the representative of each of the 14 States four representatives of Union Territories will also be nominated on the Council.

Recognition of Technical and Professional Qualifications.—The Board of Assessment of Technical and Professional Qualifications met in November, 1957.

Establishment of new Non-Government Institutions.—On the recommendation of the All-India Council for Technical Education the proposals received from the following private agencies for setting up new technical institutions were approved:—

# Engineering Colleges.

- (i) Engineering College at Coimbatore by Rangaswamy Naidu Educational Trust:
- (ii) Engineering College at Madurai by Thiagaraja Endowment Trust;
- (iii) Engineering College at Ludhiana by Nankana Sahib Educational Trust;

# Polytechnics

- (i) Polytechnic at Hyderabad with the donation offered by Mir Akbar Ali Khan;
- (ii) Polytechnic at Madras by A. M. M. Charities Trust;

- (iii) Polytechnic at Pollachi by Nachimuthu Industrial Corporation;
- (iv) Polytechnic at Quilon by the S.N.D.P. Yogam;
- (v) Polytechnic at Pandamal by Nair Service Society; and
- (vi) Polytechnic at Kalady by Ramakrishna Advaitasramam.

The establishment of five new Engineering colleges by State Governments was provided for originally in the Second Five-Year Plan. The State Governments of Kerala, Assam and Bombay have since readjusted their Plans providing for one more Er.gineering college each, raising the total number to eight.

Review of the Recommendations of the Engineering Personnel Committee by Ghosh-Chandrakant Committee.—The Ghosh-Chandrakant Committee recommended that the object of securing additional technical personnel required for the Second Five-year Plan projects, as estimated by the Engineering Personnel Committee, could be best achieved by (i) expanding selected existing institutions and (ii) establishing new institutions. The progress on expansion of technical institutions has been reported in another section of this report. As regards new institutions, the matter is again under review and the decision of the Government is expected to be taken in due course.

Progress made in the schemes included in the Second Five-Year Plan on Technical Education.—

- (i) Grant-in-aid to Non-Government Scientific and Technical Institutes for development and improvement.—During the year 1956-57, grants totalling Rs. 65.76 lakhs have been paid to the various Engineering Technological institutions on the recommendations of the All-India Council for Technical Education for the following purpose:—
  - (1) Development and expansion of post-graduate course and advanced training and research in Engineering and Technology.
  - (2) Development of affiliated colleges conducting post-graduate courses in basic schemes.
  - (3) Development of instructional facilities at Degree and Diploma levels in Engineering and Technological subjects in non-Government Institutes.
  - (4) Establishment and development of specialised courses such as Printing Technology, Industrial Administration and Business Management, Ore dressing, Architecture, etc.

- (5) Expansion of training facilities in Mining Engineering at degree and diploma level.
- (6) Assistance to the Biophysics Department of the Institute of Nuclear Physics, Calcutta, as recommended by the Expert Committee.

Grants amounting to Rs. 66·12 lakhs are expected to be disbursed for the same purpose by end of the year. This by the end of the current financial year, grants totalling Rs. 131·38 lakhs would have been disbursed against the plan provision of Rs. 320 lakhs.

(ii) Expansion of Technical Institutions.—In order to meet the requirements for technical manpower for the implementation of the Second Five-Year Plan, a scheme for the expansion of technical institutions was undertaken by the Central Government on the recommendations of a Committee consisting of Dr. J. C. Ghosh, Member Education, Planning Commission and Shri L. S. Chandrakant, Deputy Educational Adviser (Technical).

The proposals so far accepted by the Central Government involve the conversion of 19 selected existing engineering colleges and 41 polytechnics into larger units so as to yield 2458 additional seats for the degree course and 4370 additional seats for the diploma courses.

The Central Government has agreed to meet the entire non-recurring cost involved in the expansion of these institutions. As regards recurring expenditure, the Central Government will meet it in the following proportions:—

1957-58	••	100%
1958-59	• •	80%
1959-60	• •	50%
1960-61		50%

The total cost of the scheme, in so far as the Central Government is concerned, amounts to Rs. 13.05 crores as per details below:—

•	Rs.	in lakhs
Non-recurring	Rs.	647.664
Recurring for the Plan period towards		
Central Government's share	Rs.	296.677
Loan for Hostel	Rs.	361.375
	Rs.	1305.716

Most of the institutions have admitted additional students from the academic year 1957-58. Rest of the institutions will effect the increase from the next year.

Grants totalling Rs. 97.46 lakhs have been disbursed to end of February, 1958. For the year 1958-59, a budget provision of Rs. 100.0 lakhs has been proposed.

(iii) Loan to State Governments and non-Government institutions for construction of hostels for Engineering and Technological students.—The object of this scheme is to provide hostel facilities for students in degree and diploma institutions in Engineering and Technology. Interest-free loans repayable over a period of 33 years are sanctioned to the institutions on the recommendations of the All-India Council for Technical Education.

For the Second Five-Year Plan period, a total provision of Rs. 250.0 lakhs has been made for loans for construction of hostels as also staff quarters. In view of the scarcity of essential building materials like cement and steel, the entire plan provision of Rs. 250.0 lakhs is proposed to be utilised for construction of students' hostels.

During the year 1956-57, loans to the tune of Rs. 42.94 lakhs were disbursed to the Government and non-Government engineering and technological institutions for construction of students' hostels. In terms of hostel seats, this meant on a rough basis provision of 1,560 additional seats for the students. By the end of the year, loans totalling Rs. 39.0 lakhs are estimated to be disbursed for the purpose. This amount would enable the institutions to construct about 20% additional hostel seats for the students.

Under the Ghosh-Chandrakant Expansion Scheme, interest-free loans of the order of Rs. 361.4 lakhs for construction of students' hostels are also required to be paid during the Second Plan period. This amount will be met from the present allocation of Rs. 974.53 lakhs and also allocation to be made in future for the Expansion Scheme. During the current financial year, hostel loans aggregating Rs. 9.0 lakhs are proposed to be disbursed. In terms of hostel seats, this would be about 321 additional seats for the students.

(iv) Loans to State Government and Non-Government institutions for construction of staff quarters pertaining to Engineering and Technological studies.—The All-India Council for Technical Education has recommended that as in the case of the Labour Housing Scheme, 50% of the cost on the staff quarters to be built by the Technical institutions should be sanctioned by the Government as grant and the balance 50% as loan, bearing 4½% annual interest, which would be repayable in 25 annual instalments. As stated earlier under the "Loans for construction of students' hostel", there is very little likelihood of the scheme being implemented during the current Plan period in view of the scarcity of essential building materials like cement and steel. The budget provision of Rs. 10 lakhs for the current financial year is proposed to be utilised for grant of hostel loans. No loan has been sanctioned so far for construction of staff quarters.

(v) Establishment of three Specialised Central Institutions Administrative Staff College, and Institutes of Business Management and of Printing.—The Planning Commission had approved a provision of Rs. 25.0 lakhs for the establishment of three specialised central institutes. Schemes for setting up the institutes of Business Management and of Printing are still under consideration. The Administrative Staff College has, however, been established in Hyderabad during the year 1956-57. The object of this institution is to bring together young administrators from all walks of national life to study the principles and techniques of organisation, administration and leadership.

The College conducts three courses in a year, with an in-take of 60 students to each course. The admissions to the first batch of three-month courses took place in December. 1957.

The School is at present housed at Bella Vista, a palatial building made available by the Government of Andhra Pradesh on rental basis. The cost of additions and alterations to Bella Vista and equipment for the College has been estimated at Rs. 7:0 lakhs. The recurring expenditure is estimated at Rs. 6:20 lakhs (per annum). The Government of India sanctioned a non-recurring grant of Rs. 7:0 lakhs during the year 1956-57 and has agreed to sanction a recurring grant of Rs. 3:0 lakhs for the first three years.

- (vi) Training of Foremen and Supervisors.—The All-India Council for Technical Education has recently approved the Scheme for training of Foremen and Supervisors and proposals for implementation of the scheme are under consideration.
- (vii) Scholarships for students in Technical Institutes,—The Scheme has not been finalised.

Recommendations of the Scientific Manpower Committee.—The following Schemes which were initiated in 1949-50 on the recommendations of the Scientific Manpower Committee continued to make good progress:—

(A) Award of Practical Training Stipends.—During the year under report about 1400 seats were secured in various establishments. Against these seats 450 graduates and 355 ciploma-holders have already commenced their training.

A sum of Rs. 8 lakhs has been included in the budget estimates for 1958-59 for the scheme and also a provision of Rs. 3.0 lakhs for construction of hostels for trainees.

(B) Award of Research Training Scholarships and National Research Fellowships.—The Scholarships and Fellowships that were in force during the preceding year were continued during the year under report. No fresh allocation of scholarships or fellowships was made during the year. It is proposed to raise the number of scholarships and fellowships to 800 and 80 respectively during the ensuing year and a sum of Rs. 17 lakhs has, therefore, been included in the budget estimates for 1958-59 as against the budget provision of Rs. 13 lakhs for the current year.

Grants for Fundamental Research.—The Scheme was continued during the year under report. In all 148 applications for grants were received and were scrutinized by the Fundamental Research Grants Committee which recommended grants for 93 applicants. On the recommendations of the Committee grants amounting to Rs. 2·34 lakhs have already been paid to 50 research workers. The recommendations of the Committee in respect of the remaining research workers are under consideration of Government.

For the year 1958-59 a sum of Rs. 4.00 lakhs has been included in the budget estimates for the continuation of the Scheme.

Training of Teachers' for Technical Institutions:—On the recommendation of the Ghosh-Chandrakant Committee, Government have under consideration a scheme for the institution of 100 Senior and 200 Junior Fellowships for training of teachers for Technical Institutions. Under the Scheme trainees would be paid fellowships of the value of Rs. 350-25-400 in case of Senior Fellows and Rs. 250-25-300 in case of Junior Fellows. A total provision of Rs. 23 lakhs was made for the Scheme in the Second Five-Year Plan. During the year 1958-59 it is proposed to institute 75 Senior and 50 Junior Fellowships and for this purpose a sum of Rs. 4.00 lakhs has been included in the budget estimates for that year.

Grant-in-aid to Professional Bodies.—In recognition of the services rendered in the matter of development of Technical education in the country, recurring grants are being paid by the Government of India to the Association of Principals of Technical Institutions (India) and also to the Institute of Town Planners. During the year 1956-57

grants totalling Rs. 15.000 and 2,500 were paid to the Association of Principals of Technical Institutions (India) and to the Institute of Town Planners respectively. During the year under review grants totalling Rs. 15,000 have been paid to the Association of Principals of Technical Institutions (India).

Technical Institutions for the Centrally Administered Areas.—During the year under review the proposal of the State Government for starting of a polytechnic at Tripura was approved. The institution is expected to start functioning from the next academic year. Proposals for starting of a Polytechnic at Pondicherry and a Trade School at Port Blair and certain other development schemes for Technical education in other Union Territories were under consideration.

Indian Institute of Science, Bangalore.—The student population at the Institute increased from 396 during 1956-57 to 490 during the year under report. Seventy-six students were awarded the diploma of the Institute in various subjects during the year on the basis of research work done in the various departments at the Institute. One student was awarded membership of the Institute and nine were given the Associateship of the Institute. One student obtained M.Sc. and 11 others obtained Ph.D degrees from Indian Universities after working at the Institute.

A new post-graduate diploma course in Soil Mechanics and Foundation Engineering was started during the year with nine students.

For the implementation of the recommendations of the Reviewing Committee appointed by the Visitor under the Chairmanship of Dr. J. C. Ghosh, a provision of Rs. 6 lakhs recurring was made in the budget for 1958-59. The views of the Council on the recommendations of the Reviewing Committee have been received by the Government and orders of Visitor will be obtained shortly. The constitution of the Council of the Institute was amended to give representation to the University Grants Commission.

Prof. Robet D. Vold, a T.C.M. Expert in Physical Chemistry, left the Institute on the completion of his two years' assignment. Prof. H. A. Havenmann, Head of the Department of Internal Combustion Engineering, retired from the services of the Institute. The services of Dr. P. H. Craig were made available to the Institute by the T.C.M. authorities and he joined the institute as Visiting Professor in the Department of Electrical Communication Engineering. It is proposed to obtain during 1958 services of two experts unders the Colombo Plan and three under the T.C.M. Programme.

Delhi Polytechnic, Delhi.—The Institute continued to make good progress with the degree courses started in 1952. During the year, the number of students on the rolls of the Polytechnic was about 2000. The development plan of the Polytechnic, for the implementation of which an allocation of Rs. 80 lakhs was made in the Second Five-Year Plan, was under the consideration of the Government. The Plan envisages consolidation and expansion of the existing courses and the introduction of new courses in various branches of Engineering and Technology including a course in Printing Technology. A course in Civil Engineering was started with an annual in-take of 20 students.

On the recommendations of the Governing Body of the Polytechnic, it was decided to reorganise the staff structure of the Polytechnic and to revise the scales of pay of the teaching posts in order to attract the right type of teachers for these posts.

Building Activities:—A token provision of Rs. 2 lakhs was made for new major works of the Polytechnic during 1957-58, but the decision of the D.D.P.A. to widen the Lothian Road along a line runing through the Polytechnic campus necessitated a review of the plans for the construction of buildings for the institution. During the year 1958-59 the building programme of the institution envisages the following works at an estimated cost of Rs. 12.57 lakhs:—

- (i) Three-storeyed block at the site of old Commerce Block.
- (ii) Three-storeyed block at the site of the present Commerce Block.
- (iii) Extension to the West Hostel.

Regional Offices.—The Regional Offices of the Ministry at Bombay and Calcutta completed their 8th year and the Southern and Northern Offices at Madras and Kanpur their third year of existence. They continued to make good progress with the functions assigned to them. A post of Education Officer (Training) in connection with the work of Practical Training Stipends Scheme was created for each of these Offices.

A provision of Rs. 3,19,400 has been included in the budget estimates for 1958-59 for all the four Regional Offices as against Rs. 3:20 lakks during 1957-58.

Indian Institute of Technology, Bombay.—Preliminary steps were taken to enable the Institute, to admit the first batch of 100 students in first degree courses by July, 1958 in Mechanical Engineering, Civil Engineering, Electrical Engineering, Chemical Engineering, Metallurgical Engineering.

As it is intended that the Institute should work as an autonomous body, steps were taken to register the Institute under the Societies Registration Act of 1860 until it is incorporated by an Act of Parliament. A Board of Governors under the Chairmanship of Shri Kasturbhai Lalbhai was constituted and the Memorandum of Association and the Rules of the Institute as a Society were drawn up. The registration will be done soon and the Board will take over the task of administration and development of the Institutes.

In accordance with the Agreement reached between Government of India, Government of USSR and Unesco, 13 Soviet Experts and 3 translators have already arrived and pending the establishment of the Institute were posted at Indian Institute of Technology, Kharagpur, Indian Institute of Science, Bangalore and Department of Chemical Technology, Bombay University. An non-Soviet expert in Switchgear Design post has also been made available for the Institute under Unesco programme. Twelve posts of Assistant Professors and 30 posts of Lecturers were created and advertised. Of these twelve posts of Assistant Professors and 12 Lecturers would work as understudy to the Soviet Experts so that they could take over when the Russian Experts have completed their assignment. 20 Indian teachers will be sent to USSR for training in different branches of Engineering and Technology and they will on return work at the Institute at Bombay.

Unesco have placed orders for supply of equipment to the Institute worth Roubles 5,048,952 from the USSR, £3,518 from the U.K. \$5,035 from the U.S.A. and DM 15,650 from Germany. Equipment costing about Rs. 3 lakhs have already arrived in India and more equipment is expected during the next few months. Nucleus of the Institute Library has been formed.

During 1958-59 when the Institute will start functioning, undergraduate courses, post-graduate training, training of teachers, colloboration with Industry and like activities would constitute the framework around which the efforts of the Institute would be directed.

Building Activities.—During the year 1957-58 a token provision of Rs. 5 lakhs was made. The construction of the buildings were sanctioned at a cost of Rs. 29.56 for the Institute during 1957-58 for works on Staff quarters, Workshop sheds, Storage-cum-teaching accommodation, Hostel for 40 officers and Hostel for 200 students.

Construction work on some buildings has started and the work on the remaining will commence soon. For the year 1958-59 a provision of Rs. 25 lakhs has been made for the completion of the above

works and an additional provision of Rs. 25 lakhs has been made for the construction of two hostels, Staff quarters—2nd instalment, and Institution Building (Lecture Rooms), and development of site.

A master plan for the entire site of the Institute has been drawn up. A phased building programme for the next three years as well as plans for the main institutional building would be finalised during the next year.

Indian Institute of Technology, Madras.—Under the Scheme for the establishment of three Higher Technological Institutions in the country during the Second Five-Year Plan, it is proposed to start an Institute of Higher Technology at Madras in July 1959. The assistance promised by the West German Government by way of equipment, experts and training facilities for the establishment of a Higher Technological Institute in India is proposed to be utilised for this Institute. A Planning Committee under the Chairmanship of Dr. A. L. Mudaliar was constituted to draw up plans for the establishment of this Institute and to consider the scope and fields of study which should be available at the Institute. Efforts are being made to complete the preliminaries during 1958-59, so that the Institute could be in a position to admit the first batch of students in 1958-59 and function as an autonomous body registered under the Societies Act until it is incorporated by an Act of Parliament. An allocation of Rs. 200 lakhs has been set apart in the Second Five-Year Plan for the establishment of this Institute.

Indian Institute of Technology, Kharagpur.—The Indian Institute of Technology, Kharagpur, was established in 1951, on the recommendations of the Sarkar Committee as the first of the four higher technological institutions recommended by the Committee. This is a fully residential institute. In pursuance of the Indian Institute of Technology (Kharagpur) Act 1956, the institution has become an autonomous body with effect from first April, 1957 and is governed by a Board of Governors consisting of:—

- (a) the Chairman, nominated by the Visitor,
- (b) one non-official to be nominated by the Central Government,
- (c) one person to be nominated by the All-India Council for Technical Education,
- (d) the Chairman, University Grants Commission, ex-officio
- (e) the Director of Scientific and Industrial Research, exofficio,
- (f) the Director, ex-officio.

- (g) three persons nominated by the Central Government, one to represent the Ministry of Education, another the Ministry of Finance and the third the other Ministries,
- (h) three members of Parliament, two to be elected from among themselves by the members of the House of the People and one from among themselves by the members of the Council of States.

The present in-take capacity of the institute at the under-graduate courses is as under:

(i) Agricultural Engineering	30
(ii) Chemical Engineering	15
(iii) Civil Engineering	100
(iv) Electrical Engineering	75
(a number of students specialised in Electrical Com Engineering in the Final Year).	munication
(v) Mechanical Engineering	75
(vi) Metallurgical Engineering	25
(vii) Mining Engineering	25
(viii) Naval Arch & Marine Engineering	12
(ix) Architecture	30
(x) Geology & Geophysies	20

The Institute offers post-graduate courses in (i) Applied Botany, (ii) Farm Machinery & Power, (iii) Technical Gas Reactions and High Pressure Technology, (iv) Regional Planning (Town and Country Planning), (v) Combustion Engineering & Fuel Economy, (vi) Chemical Engineering, Plants-Design & Fabrication, (vii) Structural Engineering, (viii) Dam Construction & Water Power Engineering, (ix) Electrical Machine Design, (x) Radio Broadcast Engineering, (xi) Ultra High Frequency and Micro-wave Engineering, (xii) Applied Geology, (xiii) Exploration Geophysics, (xiv) Non-Linear Mechanics, (xv) Production Technology, (xvi) Industrial Engineering, (xvii) Machine Design, (xviii) Design of Refrigeration and Air Conditioning Plant, (xix) Meteorology.

The normal in-take capacity for post-graduate courses is eight per course.

Four hundred and thirty-three candidates were selected to the under-graduate Course 1957-58 on the basis of a competitive examination held at various centres in the country. Two students from Nepal and one from Burma sponsored under the Colombo Plan were also admitted to the Institute. Four hundred and fifty nine candi-

dates applied for admission to post-graduate courses, 108 students were selected of which 88 students joined the Institute. The present students population in the Institute is given below:

(a) Under-graduate	1320
(b) Post-graduate	83
(c) Research Scholars	48
(d) Post-doctorate fellow	1

The development of the Institute is included in the Second Five-Year Plan and an allocation of Rs. 250 lakhs has been made for this purpose.

School of Town and Country Planning, Delhi.—The School of Town and Country Planning was established in July, 1955 to conduct courses in all aspects of rural, urban and regional planning. It is fully residential post-graduate institution. It is administered by an autonomous Board of Governors, consisting of the following members:

- (1) The Secretary to the Government of India, Ministry of Education, Chairman (ex-officio).
- (2) A representative of Ministry of Works, Housing and Supply, Government of India.
- (3) A representative of the Ministry of Health, Government of India.
- (4), (5) & (6) Three representatives of the Institute of Town Planners, India.
- (7) A representative of the Institute of Engineers, (India).
- (8) A representative of the All-India Council for Technical Education.
- (9) A representative of the Indian Institute of Architects.
- (10) The Director, School of Town and Country Planning, New Delhi, Secretary (ex-officio).

During the year the second batch for the intensive course has been admitted. A site of two acres of land has been allotted to the School in Indraprastha Estate for the construction of School and Hostel Buildings. The number of students admitted is shown below:

# Diploma Courses 1956-58 1957-59 6 Intensive Course 1956-57. 1957-58 2 5

Indian School of Mines and Applied Geology, Dhanbad.—The undian School of Mines and Applied Geology, Dhanbad was established in 1926 and is a fully residential institute. The School is under the charge of a Director and imparts training in Mining Engineering, Applied Geology, Applied Geophysics and Petroleum Tecnology.

The number of admissions in the Indian School of Mines and Applied Geology, Dhanbad has been increased from 48 to 150 (90 for Mining Engineering, 20 for Applied Geology, 20 for Geophysics and 20 for Petroleum Technology) during the year 1957-58. The development of the School is included in the Second Five-Year Plan and a sum of Rs. 134 lakhs has been approved by the Planning Commission for the Expansion Programme.

The total budget provision during the year is 11:73 lakhs, out of which 4.28 is for the development plan.

Northern Higher Technological Institute, Kanpur.—The Northern Higher Technological Institute, Kanpur, is one of the four Institutes recommended by the Sirkar Committee. A sum of Rs. 200 lakhs has been set apart for the establishment of the Institute under the Second Five-Year Plan. American assistance is also being sought for this purpose. A budget provision of Rs. 9 lakhs has been made for the year 1958-59 for construction of buildings, equipment and recurring expenditure. A Planning Committee has been set up for preparing a detailed plan for the establishment of the Institute.

#### TECHNICAL ASSISTANCE

#### T.C.M. Programme

- (a) Under the programme approved upto the fiscal year 1957 the services of 43 American experts, training facilities of technical institutions in the U.S.A. for 49 staff members, visit of five Heads of technical institutions to the U.S.A. and equipment worth \$352,000 has been obtained for the development of technical institutions.
- (b) Under the programme for fiscal year 1958 (July 1957 to June 1958) it is proposed to obtain the services of 11 American experts, training facilities for 20 staff members and equipment worth \$80,000 for the use of the experts. The services of the experts will be utilized for the development of post-graduate courses and teacher-training programme at (1) Bengal Engineering College, Howrah, (2) Indian Institute of Technology, Kharagpur, (3) College of Engineering, Guindy, Madras, (4) College of Engineering, Poona (5) Roorkee University, Roorkee.

## II. Expanded Technical Assistance Programme of UNESCO.

- (a) Under this Programme, the services of 40 experts, including 17 Russians from the USSR for Indian Institute of Technology, Bombay, 26 fellowships and equipment worth \$334,335 have been obtained so far.
- (b) Proposals for assistance under this Programme for 1958 include requests for 38 experts, 23 fellowships and equipment worth \$ 1,510,180 under categories I & II of the programme. This includes requests for 23 experts, 12 fellowships and equipment worth \$ 1,490,180 (including 18 experts, 6 fellowships and equipment worth \$ 1,300,180 from the U.S.S.R.) for the Indian Institute of Technology, Bombay under both the categories.