EDUCATION (19D) DEPARTMENT

MS. SERIES.

①

G.O. No. 1065

Clor

DY
Rinde

DATED. 1 - 4 - 1950

(64)

Sub

Education Report of the Geological Education Committee of Govt of India Papers.

No. UNIVERSITY OF MADRAS. ⑥

From
The Registrar,
University of Madras.

9

To
The Secretary to the
Government of Madras,
Education and Public Health
Department .

A 2173

6

University Buildings,
Chepauk, Madras,

15 MAY 1947

Sir,

P 3 ante

Ref: Your letter No.15414 G 5/47, 2-5-Edn. dated the 22nd March 1947 and the 6th May 1947 regarding Report of the Geological Education Committee, 1946.

P 5 ante

4966

P 3 ante

PP 11-14 infra

I have the honour to inform you that the Syndicate considered the above reference and the report of the Geological Education Committee and resolved that copy of the enclosed note be sent to you for being forwarded to the Central Government. In this connection it may be pointed, that the most important recommendation of the Committee is for making provision in University centres for post-M.Sc. work and specialisation in Geology. This will be possible only if a Department of Geology is established in the University. The Committee has also recommended that the Central and Provincial Governments should give the necessary financial assistance. The other recommendations do not require any special consideration now as most of the recommendations with regard to the Department of Geology in the Presidency College have been accepted.

I may also invite your attention to this office communication No.A.5590, dated the 10th December 1945 forwarding a proposal for the institution of Geological Research Institute in the University and request you to be so good as to communicate to me the decision of the Government in the matter.

File in P+D.

The copy of the printed report is returned herewith.

⑨

Your obedient servant,

Enclosures (2)

for REGISTRAR.

sdg/15/5/

UNIVERSITY OF MADRAS.

Note on the Geological Research Institute to be instituted in the University.

7 (7)

The Institute will take up not only fundamental research but also research which will have a direct bearing on the Mineral Industry of the Province. The laboratory should provide enough accommodation for the following:--

(1) Testing and analysis of minerals with special reference to those of industrial value, in the province;

(2) Mineral beneficiation - research leading to improve the grade of minerals.

(3) Mineral Utilisation - research leading to economic utilisation of minerals.

The testing and analysis should engage the attention of four permanent assistants, and should be carried on as a matter of routine. The staff must be Geology graduates with training in Chemistry.

Research on mineral beneficiation and utilisation may have to be taken up by at least six members with high qualifications in Geology and Chemistry and with a genuine flare for research. Of the six members, it would be desirable if there are two with qualifications in Mining and Metallurgy.

The six research assistants and the four analyists may have to work under the direction of one Professor assisted by a Reader. The staff should consist of the following:--

One Professor
One Reader
Six Research Assistants
Four Analyists

One Museum Assistant and Librarian (B-Sc. in Geology).
Four Laboratory Assistants
One Section Cutter
Three Attenders
Three Peons,
and Two Sweepers.

With the facilities outlined, it should be possible to undertake investigations in directions which will greatly serve the needs of the Province, e.g. the following types of work may be undertaken:--

(i) The research Assistants may be deputed to survey iron deposits in Districts like Salem, and to map them and estimate the contents; the grades of ores could be analysed in the proposed laboratories and research could be undertaken to improve the grade.

(ii) The Magnasite deposits in the Presidency could be similarly surveyed and research directed towards the extraction of the metal.

(iii) Collection of radio-active minerals and their properties and the radium content in the rocks of the Province could be studied.

(iv) Collection of various kinds of sands in the province could be made and their utilisation in construction, glass and abrasive industries could be undertaken.

(v) Even if actual field work is not undertaken under the auspices of the University for the investigations, the material collected by the Departments of Industries, Public Works and Geological Surveys can afford enough material for research.

Details regarding the recurring and non-recurring expenditure are enclosed.

The proposed Institute is intended mainly to undertake research, which will be of importance in the mineral development of the Province, and not necessarily for training people for higher degrees.

UNIVERSITY OF MADRAS.

Department of Geology.

I. NON-RECURRING CHARGES:

(a) **Building:** -	A single storeyed building with a floor area of about 15,000 sq. ft. Probable cost calculated at Rs.13/- per s.ft. including electric and sanitary fittings, etc. (The Accommodation to consist of a Chemical laboratory, a balance room, one dressing room, furnace room, x-ray laboratory, a room for microscopical work, a dark room, a rock grinding room, stores, museum and Library).		Rs 1,95,000 or Rs 2,00,000
(b) **Furniture** -			25,000
(c) **Equipment** - (Initial)	2 Nos. Petrological microscope	5,000	30,000
	1 No. Chemical microscope	2,000	
	2 Nos. Ore microscope	3,500	
	2 Nos. Simple polarising microscopes.	2,000	
	Section grinding equipment	2,000	
	Chemical and assay balances 3 Nos.	3,500	
	Chemicals	5,000	
	Platinum and nickel ware	5,000	
	Silica, glass, and porcelain ware.	2,500	
	X-ray equipment, electrometer, goniometer, ore crusher, electrical and muffle furnaces, concentration table, flourescent lamp, magnetic separators, elutriators, field equipment, etc.		40,000
(d) **Library**- Intitial expenditure			10,000
(e) **Museum Collections** - Initial expenditure			20,000
	Total Non-recurring charges		Rs 3,25,500

Note: The above does not include provision for a small workshop and a gas plant, as such provision already existing in the other laboratories can be utilised.

II. RECURRING CHARGES -

		Minimum.	Maximum.
a) **Staff:**	One Professor -750-10-1000	9,000	12,000
	One Reader - 400-25-600	4,800	7,200
	Six Research Assistants 150-10-250 Four Analysists	18,000	30,000
	One Museum Assistant and Librarian 50-125	600	1,500
	Four Laboratory Assistants 75-100	3,600	4,800
	One Section Cutter 40-2-60 Three Attenders - 23-35 Three Peons 16-24 Two Sweepers 12-15	2,200 (in round figures)	3,200
		38,200	58,700

18.2.47 - 10

14

-2-

	Minimum	Maximu
(b) **Laboratory Equipment:** (for first five years).	20,000	20,000
(c) **Library** (including Journals)	3,500	3,500
(d) Provident Fund	3,000	4,500
(e) Contingencies	2,000	2,000
Total Recurring Charges	66,700	88,700

True copy

15

SECRETARY TO GOVERNMENT
MAY 1947
EDUCATION AND PUBLIC HEALTH DEPT.

No.F.12-101/46-E.III(P) ⑨ 9/3
Government of India
Department of Education.

New Delhi 3, the 15th May 1947.

From
Sir John Sargent C.I.E., M.A., D.Litt.,
Secretary to the Government of India.

To
The Secretary to the Government of Madras,
Department of Education, Madras.

Subject:-Report of the Geological Education Committee, 1946.

4209

Sir,

I am directed to invite attention to this Department letter No.12-101(19)/46-E.III(P), dated the 21st February, 1947, on the subject mentioned above (copy enclosed for facility of reference) and to request that a reply thereto may kindly be expedited.

I have the honour to be,
Sir,
Your most obedient servant,

S. C. Sengupta 9/5

'Raman' for Secretary.

16

#21

No.F.12-101(10)/46-E.III (P).
Government of India.
Department of Education.
New Delhi 3, the 21st February, 1947.

To

10 (10)

The Secretary to the Government of Madras,
Department of Education,
Madras.

4.b

Subject:- Report of the Geological Education Committee, 1946.

Sir,

I am directed to forward herewith two copies of the Report of the Geological Education Committee, 1946 with the request that the Government of India may kindly be furnished with the views of the Bengal/Madras Government on the report at n early date.

2. I am to request that, if there is no objection, a copy of the report may be forwarded to the University of ~~Calcutta~~ Madras for comments which may be communicated to the Government of India in due course.

I have the honour to be,
Sir,
Your most obedient servant,

Sd;- S.R.Sen Gupta.
for Secretary.

19

E.& P.H.(G.3)

11

Letter/Ref. No. 1814 E3/47-4 Edn., dated 21-5-1947.

2/22/5

To

11

The Secretary to the Govt.of India,
Deptt.of Education, New Delhi, 3.

Despatched
R 23/5

Sir,

Sub:- Report of the Geological Education Committee,1946.

Ref:-Your letter No.F.12-101(19)/46-E.III(P), dated 21.2.47 and reminder dated 15-5-47.

Pl of
P.15 G

I am directed to state that the matter is under examination and a reply will be sent as early as possible.

Y.O.S.,

18/5/47

20/5/47

21.5.47

20

21

(12)

12 E.& P.H.(G.3)

Letter/Ref.No. 1541493-4 Edn., dated 2/6/ 1947.

To

The Registrar, Andhra University, Waltair.

Sir,

Sub:- Report of the Geological Education Committee, 1946

I am directed to invite a reference to the correspondence resting with your letter No.C.1/2057(2)/47dated 7-5-47 and to enquire when the views of the University will be communidated to Govt.

Y.O.S.,

2-6-47

2-6

3-6

Desp. 5/6

P.7 cf

22

225

13

[177/44 (24-11-44) 5,000.]

All official letters, packages etc., should be addressed to the Registrar by designation and not by name.

ANDHRA UNIVERSITY,
~~GUNTUR~~

TELE-GRAMS: "UNIVERSITY", GUNTUR.
TELE-PHONE: GUNTUR, No. 8.

Waltair, 23rd June 1947.

ASST. SECRETARY TO GOVERNMENT
27 JUN 1947
EDUCATION AND PUBLIC HEALTH DEPT.

No. C1-2057-2-47.

Encl.

From THE REGISTRAR, ANDHRA UNIVERSITY.

To The Secretary to the Government of Madras,
Education and Public Health Department,
Fort St. George, MADRAS.

52952

Sir,

Sub: Report of the Geological Education Committee, 1946.

P22 ante

Ref: Your letter No. 15414 G3-4. Edn. dated 2-6-47.

I have the honour to inform you that the Report of the Geological Education Committee 1946 is still under consideration and the views of the University thereon will be communicated to you after the next meeting of the Syndicate which will be held on 26th July 1947.

A

Registrar.

CR.

The further reply of the University may be awaited till 1/8/47

30/6/47

27/47

2-7-47

ANDHRA UNIVERSITY

WALTAIR, 4th August *194*7.

Recd 11/8/47

14

No. C1-2057/47.

Encl. One.

From

ASST. SECRETARY TO GOVERNMENT
8 - AUG 1947
EDUCATION AND PUBLIC HEALTH DEPT.

THE REGISTRAR, ANDHRA UNIVERSITY

To

The Secretary to the Government of Madras,
Education & Public Health Department,
Fort. St. George, MADRAS.

Sir,

Sub: REPORT OF THE GEOLOGICAL EDUCATION COMMITTEE, 1946.

64225
P3 ack

Ref: Your letter No.15443/47-2 Edu. dated 22nd March 47.

I have the honour to inform you that the Syndicate at its last meeting considered your above letter, the report of the Geological Education Committee 1946, and the views of the members of the teaching staff of the Department of Geology on the various points raised in the report. I am sending you herewith by direction a copy of the summary of views of the University on the Committee report with the request to kindly move the provincial and the Central Governments to sanction necessary grants to this University for the development of the Geological Department and to implement the other suggestions made by the University. The copy of the committee report is retained for record and reference in this office.

pp27-35 infra

K. V. Gopalaswamy
REGISTRAR.

B.A.

###

in vogue here is in the opinion of the authorities not satisfactory as the period is too inadequate to turn out working geologists and in most cases the young men find that their future career is hampered by lack of opportunities unless they are exceptionally brilliant to be absorbed to the 2 year M.Sc. Course. With regard to the M.Sc. course (ii) page 2, in this University while research is emphasized there is also insistence on an examination and the maintenance of practical records. It is therefore claimed with the experience of over 12 students having been trained for this course that it is eminently satisfactory. Field work forms an integral but not an exclusive part of this course. This is followed by laboratory work of a really advanced nature where there is scope for the development of original research. From the reception that the published work of these thesis had from geologists the University is satisfied that this is really a useful course. The ~~University~~ authorities are in entire agreement that there should be a large number of scholarships or other financial help awarded to deserving students.

Regarding para 2, under (ii) (Item No.4, p.2) it is not clear what the Committee means by stating that "there should be full facilites for transfer of students from Colleges or Universities having geology only as a cultural subject, to institutions specialising in geology." It is dangerous and absolutely uncalled for in the present conditions in this country to dub institutions as giving only cultural education in geology. Every young man taking this subject aspires for professional efficiency and no institution is worth its salt denying him this training. Speaking, anyhow, for the geological course in this University, the University might claim that the syallabus drawn under the eminent and inspiring guidance of Dr. M.S. Krishnan is a balanced course giving equal prominence to the academic and professional aspects of the subject.

Regarding para 3, under (ii), we are of opinion that there should be a provision made for not only lectures in mining and surveying but also practical training to the Honours and Post-Graduate students.

Regarding para 4, under (ii) it is measuring to learn that atleast in the future the Geological Survey of India will take young men for training. In many scheme of planned industrialisation, minerals have to play a leading role and if the Governments are really serious about their professions of increasing the wealth of the land they must provide for the training immediately of hundreds if not thousands of geologists. The object lession of U.S.S.R. in this connection cannot be ignored. The scheme envisaged appears to be very conservative and halting.

With regard to Post-M.Sc. work (iii), page 3, the University is in agreement with the view that it should be done at the Universities as also in the laboratories of the G.S.I. which can really provide excellent material and facilities for special work for those engaged in research in different institutions in the country.

Regarding staff (iv), page 3 (a and b), the number of staff proposed for the number of students indicated is just adequate. With regard to Readers and lecturers, they should be so chosen as to represent the different branches and aspects of Geology. The salaries proposed are just adequate to attract the right sort of people and in no sense liberal or generous.

(4) Physical properities of Minerals with special reference to Elastic constants.
(5) Elastic behaviour of rocks by Ultrasonic methods.
(6) Corrleation of the Upper Gondwanas of Guntur district.
(7) Soils of Guntur Dt. in relation to Geology.
(8) Fossil Charophyta from the Inter-Trappean of Vikarabad.
1947 - (9) The Geology and Petrology of Kailasa Hills, Vizag Dt.
(10) Mica-bearing pegmatites of Tiruvur, Kistna Dt.
(11) Geology and ~~[illegible]~~ Petrology of ~~[illegible]~~ Pachipenta Zamindary Vizag Dt.
(12) On the lateritisation of the basalts of the Vikarabad Area, Hyderabad Dn.
(13) Petrology and Petro-Chemistry of the Outliers of Deccan Traps of the Godavari Dt.
(14) On the origin of Chromite in the Charnockites of Kondapalli, Kistna Dt.

D.Sc.

(1) Problems in Petrology and Petro-chemistry.
(2) Geophysics with special reference to radio-activity.
(3) Nepheline Syenites of South India and Geo-Chemistry of Fluorine-bearing minerals and copper-ores of Garimanpenta.
(4) Study of soils by Physical, Chemical and Biche-mical methods in relation to Geology.
(5) Metamorphism.

In each case particular attention is paid to the economic aspects.

The comments of the external examiners on the eight thesis submitted so far have been very complimentary and two of the M.Sc.'s have been selected for foreign scholarship and a few as Officers in the Geological Survey. The above details are given to indicate that at least as far as this University is concerned this discrimination of the subject into cultural and professional aspects is unnecessary, and the authorities are in entire agreement with the views expressed by the Universities to which reference is made at the end of page 3 and on top of page 4. In short the Andhra University has established an unequivocal claim ~~to~~ to financial aid and encouragement for the fostering of geological studies in all its varied aspects.

Item (vii) - Instruction in specialised courses - With regard to the the Committee's remarks regarding Post-Graudate instruction in specialised subjects such as geophysics and radioactive investigations of rocks and minerals, it may be seen from the subjects of research carried out in the department that it has already made much headway towards cooperative research with the physics department and some of these investigations have been published in Scientific Journals. The subvention suggested by the Committee is richly deserved by this University for the above reasons.

The Post-war planning Committee of this University has given high priority to two schemes of applied geology courses for post-graduate students and the scheme is held up for want of funds. A non-recurring grant of about 2 lakshs and a recurring annual grant of about 50,000 rupees will be adequate for this very useful post-graduate course in

2840
~~28/8~~

V. urgent

37

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E.& P.H.(G.3)

(20)

Report of the Geological Education Committee, 1946.

Memo.No 15414 G3/47-6 Edn., dated 22/8/47

A copy of letter from the Govt.of India,Deptt. of Edn., No.F.12-101(19)/46-E.III.(P) dated 21-2-47 together with its enclosure, and the ~~remarks~~ ~~comments~~ views/of the Madras and Andhra Universities thereon are forwarded to the D.P.I. He is requested to offer his ~~views on~~ remarks in the matter ~~report~~ at a very early date.

2/8/47

To
The D.P.I.(with
encl - copy of
p.p.1, ~~and~~ 9-14
and 25-35 o.f. the
original together with
the book at (V) to
be returned with the
reply.

26/8

20/8/47

20/8/47

~~**Note.**~~

~~Please see the note on p.4 ~~ante~~ cf. Public (P.& D.) may see the draft before issue.~~

20/8/47

20/8/47

38 21 (2) E-4P H (673)

12/24/9

Report of the Geological Education Committee, 1946

Memo No 15414 93/5 Edn dt- 23/9(47)

The attention of the D.P.I. is invited to Govt Memo. No 15414 G3/47-6 Edn dt- 22/8/47 on the ~~[illegible]~~ subject mentioned above and he is requested to send his reply at an early date.

S.D.
22.9

To
The DPI.

AW
22.9.47

BJ 9/9 ant

Desp.
D/25/9

~~43~~ 41

EDUCATIONAL DEPARTMENT.

ASST. SECRETARY TO GOVERNMENT
16 OCT 1947
EDUCATION AND PUBLIC HEALTH DEPT.

SUB:-Report of the Geological Education Committee, 1946 -
Remarks.

22

From

Dr. S.R.U. Savoor, M.A.,D.Sc.,I.E.S.
Director of Public Instruction,
Madras.

To

The Secretary to Government,
Education & Public Health Department,
Fort St. George.

2649

R.C.No.2181 E2/47 Dated 14th October 1947.

Sir,

P37 ante
PP39 ante

REF:-Memorandum No.15414 G3/47-6, Education, dated 22nd August 1947 and reminder Memo. dated 23-9-1947.

...

The Report suggests steps for the improvement of Geological training in India and gives an idea of the extent to which the Government of India would offer financial and other assistance for carrying out the improvements.

The Expert Committee has chosen five centres for specialisation in Geology for those taking Geology as a life-career. Madras is one of the five centres.

The institution teaching Geology which was visited by Dr. W.D. West, Director, Geological Survey of India, was the Presidency College, Madras, a Government institution.

I am of the opinion that the facilities offered by the Government of India and the improvements suggested should go towards expansion of the Geology Department of the Presidency College. It is rightly mentioned in the Report that "during the last 20 or 25 years, much money and effort have been expended in maintaining the Geological Department." Further the Report speaks of the Presidency College Geology Department as a well conducted one and suitable for expansion.

The scheme put forward by the University of Madras is mainly for post-graduate research work and in view of there being no University Department of Geology, I think that the founding of a new Institute, costing several lacs of rupees can wait till after the expansion of the Geology Department of the Presidency College takes effect.

With reference to the Andhra University, it seems to me that the development of this centre of Geology can wait as the Andhra University Department is a new one, and as far as I could understand is still being organised; the Report lays particular emphasis on the expansion of departments which are already in existence for a considerable period like Calcutta, Benares, Madras (Presidency College), Mysore University and Dhanbad School of Mines. Dr. West in his Report on "The Teaching of Geology in Indian Universities" rightly says-- "It is desirable, I think, to utter a word of warning against the institution of the teaching of Geology at too many Universities in India. Already there are a number of small centres teaching Geology in addition to the five which I have visited; and it is known that three or four other Universities are contemplating the introduction of Geology into their Honours B.Sc. course. At the moment, however, the supply of first-class Geologists in India is so limited, and is likely to remain limited so long as the G.S.I. is expanding rapidly, that insufficient competent Geologists are available to provide staff for these new departments. It would be much better to concentrate on a few good departments of Geology rather than to dissipate our slender resources over a large number of less effective departments."

A

I have specially to draw attention to this fact, viz., that the Government of India are prepared to give a subvention for initiating any special branch of Geological research. The Report rightly lays emphasis that instruction in specialised subjects like Geophysics and Radio-active disintegration of minerals will require the co-operation between the Physics and the Geology Departments. The Presidency College has got a very well-equipped upto-date Physics laboratory and with the expansion of the Geology Department on the lines referred to which do not involve a heavy cost, the institution would offer an ideal place for post-graduate research.

I have also to state that the Government are seriously considering the abolition of the Intermediate courses of studies in the Presidency College with the object, at no distant date, of imparting instruction for only Degree, ~~and~~ Post-graduate courses ~~only~~ and Research Students in the Presidency College.

Thus it seems to me that it would be highly desirable to expand the Department of Geology to train graduates with a more practical knowledge of Geology and at the same time provide facilities for post-graduate studies and research. The expansion has to be taken on the following lines:--

1. Buildings:

Extension of ground floor:

Museum	53' 6" x 23' 10½"
Chemistry Laboratory	40' 0 x 28' 0
Stores	28' 0 x 20' 0
Specimens' Storage ..	14' 0 x 10' 0
Store-keeper ..	14' 0 x 10' 0
Ore-dressing ..	14' 0 x 20' 0
Furnace room ..	14' 0 x 20' 0
Research students room	14' 0 x 10' 0

Passage 8' wide is provided in conformity with the existing one.

First Floor (Extension):

Crystal Drawing ..	20' 0 x 20' 0
Lecture Hall ..	53' 6" x 42' 4½"
X-ray	31' 6" x 12' 0
Opaque Microscopy ..	31' 6" x 16' 0
Drawing Hall	51' 6" x 28' 0
Map Room	20' 0 x 14' 0
Staff (2 rooms) ..	10' 0 x 14' 0 each

Plinth area of the double-storeyed extension block, Geology Department.

(1) 1 unit measuring 109' x 41'	=	4469 Sq. Ft.
(2) -Do- 66½' x 33½'	=	2258 "
(3) Verandah extension of the present portion ..		200 "
(4) Single storeyed portion..		506 "
Total		7423

Working space of all the rooms in Ground floor and first floor..	10120 Sq. Ft.
Verandah and wall space ..	4726 "

Approximate total cost .. = Rs.1,75,000

			Rs.
2.	**Furniture:** ..	..	.. 20,000

3. **Equipment:** (Initial cost)

Chemical Microscope	1 No.	2,000
Ore Microscopes	2 Nos.	3,500
Chemical and Assay balances..	3 Nos.	3,500
Chemicals ..	..	3,000
Platinum and nickel ware		5,000
Silica, glass and porcelain ware ..	..	2,500
X-ray equipment, electrometers, goniometers, Ore crusher, electrical and muffle furnaces, concentration tables, fluorescent lamp, magnetic and other separators, elutriators, and survey equipment.		40,000

4. **Museum** Collections Type ones	15,000		
5. Workshop equipment ..	5,000		
Total	79,500	or	80,000

STAFF:		Minimum	Maximum
(1) Additional Professor, M.E.S.	1	2,400	8,400
(2) Assistant Professors (S.E.S.)	3	4,320	8,820
(3) Demonstrators (Honours graduates)	2	1,920	3,480
(4) Museum Assistant and Librarian.. (with Degree qualification in Geology)	1	960	1,740
(5) Mechanic for workshop	1	720	1,080
(6) Attenders (senior) ... Peons .. ... Sweeper	3 3 1	2,200	3,200
		12520	P

N.B: Basic pay only is given.

Three or four research assistants involving an annual expenditure of about Rs.5,000/- may have to be provided. 5000

Recurring expenditure:

	Minimum	Maximum
Laboratory equipment (for first five years) ..	10,000	15,000
Library	1,000	2,000
	18520	

Government of India - contribution:

It seems to me that if the Government would favour the expansion of the Geology Department on the lines indicated, the Government of India may be approached towards a fifty per cent contribution of the total cost, as recommended in the Report. This works out approximately as follows:

	Approximate Total cost. Rs.	Govt. of India contribution. Rs.
Buildings..	1,75,000	87,500
Equipment and furniture..	1,00,000	50,000
Recurring grant (for 5 years only)	12,000	6,000

X

The other facilities referred to, viz., the contribution towards the salary of one Professor, cost of sending overseas for further study one member of the teaching staff, annual grant for field training, subvention for initiating a special branch for Geological research, may also in due course be taken advantage of.

To conclude, in view of the rapid industrialisation contemplated by the Central and Provincial Governments, there is bound to be a need for Geologists with a better and more intensive practical training, both in the laboratory and in the field. I would strongly therefore recommend to the Government to take up the question of the expansion of the Geology Department of the Presidency College, Madras, taking advantage of the financial aid offered by the Central Government towards buildings and equipment.

M

S R U Savoor.

Director of Public Instruction,
Madras.

Enc:-One line diagram giving the proposed extension of the Geology Department of the Presidency College.

E&H (G3)

P.Ch. issue

27 49/E.H

From
The Asst. Secy, E&H Dept. Madras.

12/10
21/10
DO 28/10 ✓

To
The Dy DPI. 25

11/29-34

Ref:- DPI's Rc No. 2181 E2/47 dt. 14/6/47 re: Report of the Geological Edn Committee, 1946

Please arrange to return the enclosures sent with Govt. Memo. No. 15414 G3/47-1 Edn dt. 22/8/47, as the same have not been received with your reply quoted above

T. Messenger 20/11/47
16/10/47
17.10.47
17/X

26

(5)

C.F. 304.

OF THE 37

Date 194 . 5)

Hours Minutes

TELEPHONIC MESSAGE.

From

Asst Secy
E/P.H

To

D.P.I

26 P

Ref: D.P.I's R.C No 2181 F-2/47 d 14.10.47 re report of Geological Education Committee 1946

Pl arrange to return the enclosures sent with Govt memo No 15414 G.3/47-6 Edn d 22.8.47 as the same has not been reced with your reply quoted above.

20/10

Please write on both sides.

Enclosures

52

2

Re. 2181-E/47

26-10-47

Re-submitted with the enclosures.

4-11-47

The Director of Public Instruction

D5557

21-10-47.

To

The Assistant Secretary to Govt.,

Edn & P.H. Dept.

53

27

No. D.4285/47.E.I.
GOVERNMENT OF INDIA.
MINISTRY OF EDUCATION

New Delhi 3, the 20th December, 1947.

1093 J/48
3.1.48

From

H. S. Verma, Esquire,
Assistant Secretary
to the Government of India.

To

The Secretary to the Government of Madras
Department of Education,
Madras

678

Subject:- Report of the Geological Education Committee~~s~~, 1946.

Sir,

I am directed to refer to this Ministry's letter No. F.12-101(19)/46E.III.P, dated 21st February 1947 and subsequent reminder dated the 15th May 1947 and to request that the views of the Madras Government and ~~the~~ that of the University of Madras on the Report of the Geological Education Committee, 1946, may be communicated to this Ministry at an early date.

p. 1 ante

p. 15 ante

I have the honour to be,
Sir,
Your most obedient servant,

H. S. Verma

Assistant Secretary.

(TANEJA)

Devl.

To A.S.

May be forwarded to E. P. H. M.

3.1.48

3.1.48

4.1.48 E & P.H

Dev. Vio. 1093 J/47-1
3.1.48

OFFICE OF THE DIRECTOR OF PUBLIC
INSTRUCTION, MADRAS.
Dated 24th JULY 1947.

D.O. 57

ear Subramanian,

Please see your D.O. letters No. 10289 G3/47-2 Education dated 29—3—1947, and 77541 G3/47-1 Education dated 16—4—1947 in regard to requests for increased grants received from the Andhra and Madras Universities. I enclose a copy of the proceedings of the meeting of the University Grants Committee which met at Waltair on the 13th and 14th July 1947.

28 Yours sincerely,
Sd.________________

PROCEEDINGS OF THE UNIVERSITY GRANTS COMMITTEE.

MADRAS UNIVERSITY

(a) In view of the fact that no details have been given for the request by the Madras University that the total annual (block) grant now given to the University may be increased by 2½ lakhs, the Committee is unable to come to any conclusion in the matter.

NOTE:- (b) **Horticulture:** In the opinion of the Committee it is better that this course is organised by Government in the Agricultural College and the Committee understands that the same idea has been expressed by H.M. Agriculture.

(c) For Applied Physics, Applied Statistics, Experimental Psycholog and Diploma in Journalism, the Committee has not been supplied with any details and without these details the Committee is unable to come to any conclusion in the matter.

The Committee wants the Government to examine whether instead of opening a separate Research Department for these subjects in the University, it would not be preferable to make the Presidency College a high grade research institution, takin off the Intermediate Section from the College and thus avoiding duplication.

(d) **Geology:** The Committee is informed that the details of the proposals with regard to Geology are under examination by the Public Department who are awai ing a report from the Government of India. The Consideration of this proposal may await the report from the Government of India.

(e) **Adult Education:** The Committee recommends that the Vice-Chanc lor may be invited for a personal discussion over this matter with the Chairman of the Committee.

(f) **Institution of a Professionship in Tamil:** This Committee thank Miss Theodore Lazarus for her endowment of Rs. 68,600/- for a Tamil Professorship in the Madras University and the Committee recommends the payment of Rs.2,500/-recurring grant asked for by the University to make up the balance of the amount for the institution of a Professorship in Tamil.

(g) **Leather Technology:** Details for the grant of the 3 lakhs for Leather Technology asked for by the Madras University may be called for and the Committee recommends that in the meantime the Government of Madras may ascertain from the Govt. of India about their plans to have a Leather Technological Institute in Madras.

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72127

ANDHRA UNIVERSITY

* * *

As for the proposals of the Andhra University, the Committee is of the opinion that first preference must be given to the building of the hostels in view of the fact that the University is suffering from dearth of accommodation. This Committee, therefore, recommends that out of the two hostels for boys, half grant may be given for one hostel to accommodate 200.

As for the Girls' hostel, the Committee was informed that the University proposes to acquire the rented building on the Beach in which the hostel is at present located. Further consideration of this question will await the receipt of definite proposals in this regard.

As it is represented to the Committee that a course in Atmospherics and Meteorology is not taught in any other Indian University, the Committee recommends to Government the sanction of a grant for starting a B.S.c course in Atmospherics and Meteorology. The opening of the M.Sc. Course may be considered later after sufficient experience has been gained. The University may be asked to prepare separate proposals and submit them to Government.

With regard to Fats and Oils, and Pharmaceuticals, the Committee recommends that these may be deferred.

The Committee is also of the opinion that the strengthening of the existing Departments should have precedence over proposals for opening new courses.

With regard to the Hope Chancellory, the Committee is of the opinion that the expenditure of large sums on buildings is not advisable at the present juncture and recommends that the University be asked to limit its construction to the amount sanctioned. The Registrar pleaded that an agreement had been already entered into with the contractor for the construction of buildings according to the specifications contained in the agreement. Mr.T.R. Venkatarama Sastri who examined the terms of the agreement pointed out that the agreement created no difficulty as it provided in paragraph 2 that the University may reduce the specifications in the course of construction.

All the other building proposals put forward by the University may be deferred.

61

30

E.& P.H.(G.3)

Letter/Ref.No. 154 14-93/47-9 Edn., dated 30/1/48

30

22/2/48

22/2

To

The Secretary to the Government of India,
Ministry of Education,
New Delhi (with enclosure - ~~pxpx~~ copy of p.p.9-14, 25-35
and 41-45 c.f) and one plan in orgl. P.47-48 cf

Sir,

Sub:- Report of the Geological Education Committee, 1946.

Ref:- Your letter No.F.12-101(19)/46-E.III(P) dated 21.2.1947.

P.1 cf

PP 9-14 cf
PP 25-35 cf
PP 41-45 cf

PP 7-8 nf

P8 nf

Minutes of HM(Fin) on P8 nf

PP9-14 cf

I am directed to enclose copies of the following* correspondence containing the views of the Madras and Andhra Universities and the Director of Public Instruction, Madras, on the above Report and to state that this Government agree ~~with~~ generally with the views of the D.P.I. This Govt. are however of the view that all expenditure on the proposed course in excess of what is now spent on the Geology course at the Presidency College, Madras, should be borne by the Government of India~~, and that if the Govt.of India agree to this, the scheme may be taken up.~~ I am also to ~~state~~ add that the Geology Department of the Andhra University is working very well under an able Professor and that the Government of India may therefore ~~afford~~ create greater facilities ~~to that University also in the matter of geological survey~~ there also.

*1. Letter from the University of Madras, No.A.2173 dated 15.5.1947. _PP9-14 cf
2. Letter from the Andhra University, No.C.1-2057/47 dated 4.8.47. — PP25-35 cf
3. Letter from the D.P.I.No.R.C.N 2181-E2/47 dated 14.10.47. _PP 41-45 cf.

29.1.48

~~Y.O.S.,~~

30/1/48.

Copy to the D.P.I.
Registrar Madras Univ
" Andhra Univ

28/1/48

29.1.48

10/2/48

(3)

E & P H (G 3).

Dr. Ref No. 15414 G3/47-10 Edn dt- 16.3.48

31

69
16/3

D/R
17/3/48

To

The Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

Sir,

Sub:- Report of the Geological Education Committee, 1946

I am to invite a reference to my letter Ref No. 15414-G3/47-9 Edn dt- 30/1/48 on the subject cited above and to enquire when the orders of the Govt. of India in the matter may be expected.

Pb/cf

Yos,

What reply is expected? Our letter is reply to Govt of India's reference?
10.3.48

Dft
8/3/48

10.3.48

15.3.48

64

E HPH (G73) 65

Ref No. 15414 93/47-II Edn dt-15/4/48

To

3/2

The Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

18
16/4

Sir,

Sub:- Report of the Geological Education Committee, 1946

Ref:- My letter Ref No. 15414 93/47-9 Edndt-30/1/48 and reminder thereon dt-16/3/48

p61g + p.63g

I am to request that ~~enquire when~~ the orders of the Govt. of India in the matter may be ~~[illegible]~~ expedited.

Yrs,

15.4.48

15.4.48

66

33

67

~~E+~~ PH (G3)

Letter Ref No. 15414 G3/47. 12 Edn dt-18/5/48

To

0382/2
19/5

The Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

ppd
20

Sir,

Sub:- Report of the Geological Education Committee, 1946.

Ref:- My letter Ref No. 15414 G3/47 9 Edn dt- 30/1/48 ~~[illegible]~~ and reminders thereon dt- 16/3/48 and 15/4/48

P61 G
PP 63A
65 G

I am to request that the orders of the Govt. of India in the matter

68

matter may be expedited.

yos,

N.R.Q.7-48

18/5/48

85

18.5.48

69

34

(34)

~~E&L~~ 41 (G73)

Rr. Ref. No. 15414 G3/48 7 13 Edn dt- 10/8/48

10

11/8

11/8/48

To

The Secretary to the G. of India,
Ministry of Education,
New Delhi

Sir,

Sub:- Report of the Geological Education Committee, 1946

Ref:- My letter Ref. No. 15414 G3/47-9 Edn dt- 30/1/48 and reminders thereon dt- 16/3/48, 15/4/48 + 18-5-48

P61 of

PP63, 65 & 67-68 of

I am to request that the

~~70~~ 70

the orders of the Govt. of India in the matter may be expedited.

yours ffly,

dcf
6/8/48

eco
6/8/48

9-8-48

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35 36 71

E.VPH (G3)

Lr. Reg No. 15414 G3/48-14 Edn dt- 11/9/48

110
11/9

To

The Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

dfd
13-9-48

Sir,

11/9

Sub:- Report of the Geological Education Committee, 1946

Ref:- My letter Reg No. 15414G3/47-9 Edn dt- 30-1-48 and reminders thereon dt- 16-3-48, 15-4-48, 18-5-48 and 10-8-48

PP 61 cf, 63 cf, 65 cf 67-68 cf & 69-70 cf

11/9

I am to ~~request that the~~ ask when the ~~orders~~ decision of the Govt. of India in the matter may be ~~expedited~~. expected.

yours faithfully.

dcf
9/9/48

9.9.48

10/9/48

E.4H(G3)

23/10

25/10

Letter / Ref No. 1541493/47-15 Edn dt- 22/10/48

To

The Secretary to the Govt of India,
Ministry of Education,
New Delhi.

20/10

Sir,

Sub:- Report of the Geological Education Committee, 1946

PP 61, 63 c/f, 65 c/f,
67-68 c/f, 69-70 c/f
& 71 c/f

Ref:- My letter Ref. No. 15414.93/47-9 Edn dt- 30-1-48 and reminders thereon dt- 16.3.48, 15-4-48, 18-5-48, 10.8.48 and 11.9.48

I am to ask when the decision of the Govt. of India in the matter may be expected.

yours fthly,

dt 22/10/48

22/10/48

22/10/48

37 ⑦ 75

E-4 H (93)

Lr. Ref No. 15414-93/47-16 Dated- 3/12/48

To

The Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

23/4/12

D 7/12

Ind
MB 8/12

Sir,

Sub:- Report of the Geological Education Committee, 1946.

PP 61, 63, 65, 67, 68, 69, 70, 71 and 73 cf

Ref:- My letter Ref No. 15414-93/47-9 Dated- 30/1/48 and reminders thereon dt- 16/3/48, 15/4/48, 18/5/48, 10.8.48, 11.9.48, and 22/10/48

I am to ask when the decision

76

decision of the Govt. of India in the matter may be expected.

Yours ffly,

2/12/48

2/12/48

3/12/48

G3

AIR MAIL.

77

38

No. D.4285/48.D.3.
Government of India,
Ministry of Education,

New Delhi 3, the 1st December 1948.

DEC 194

From

H.S.Verma, Esquire,
Assistant Secretary to the Government of India.

To

9052

✓The Secretary to the Government of Madras,
Education and Public Health Department,
MADRAS.

SUBJECT:- REPORT OF THE GEOLOGICAL EDUCATION COMMITTEE, 1946.

Sir,

P73 ante

P61 G

I am directed to refer to your letter No. 15414G3/47-15, Education, dated the 22nd October, 1948, and to say that the Provincial Government letter No. 15414 G3/47-9 Edn., dated the 30 January 1948 referred to therein does not appear to have been received in this Ministry. The Government of India will be glad if a copy thereof is supplied at an early date to enable this Ministry to send a reply.

2. The report of the Geological Education Committee, 1946, is under consideration of the University Grants Committee. No final decision has yet been taken in the matter.

Yours faithfully,

H.S.Verma

Assistant Secretary.

Gope) 1.12.1948.

(39) 79

~~Bxxkxgxfxpxxxtx~~
By Air Mail.

E.& P.H.(G.3)

Lr.Ref.No. 15414 G3/47-17 Edn., dated 11/12/48

39

652
8/12
10/12
4-28 PM

To

The Secretary to Govt.,Govt.of India,
Ministry of Education,
New Delhi(with enclosure - ~~copy of~~ p.p.9-14 c.f,
25-38 c.f, and 41-45 c.f.)

Sir,

Sub:- Report of the Geological Education Committee, 1946.

Ref:- ~~Yxxxx~~ Letter from the Asst.Secy,to the Govt.of India,Ministry of Education,No. D.4285/48.D.3 dated 1.12.48.

I am directed to enclose a copy of this Govt.Letter No.15414-G3/47-9 Edn., dated 30-1-1948 together with its enclosures~~, and to request you to acknowledge the receipt of the same~~.

Yours faithfully,

VRS
7/12/48

8/12/48

9.12.48.

40

E.& P.H.(G.3)

Lr.Ref.No.15414 93/47-18Edn.,dated 31/1/49

To

40

The Secretary to the Govt.of India,
Ministry of Education,New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

Ref:- My Letter Ref.No.15414-G8/48-9 Edn., dated 30-1-1948, and ~~reminder thereon~~ Letter No 15414-93-47-49 dated the 11th Decr. 48.

I am to enquire when the decision of the Govt.of India in the matter may be expected.

Yours faithfully,

28/1/49

29.1.49

31-1-49

2/2

1/02

P61g

p 79

83

G3

16572

No. D.4285/47-D.3.
GOVERNMENT OF INDIA.
MINISTRY OF EDUCATION.

41 (X)

4 MAR 1949

NEW DELHI 3, the 28th February, 1949.

From

H.S. Verma, Esqr.,
~~Assistant~~ Under Secretary to the Govt. of India.

To

The Secretary to the Government of Madras,
Education and Public Health Department, MADRAS.

SUBJECT: REPORT OF THE GEOLOGICAL EDUCATION COMMITTEE.

Sir,

P81 ante

With reference to your letter No. 15414-G.3/47-18 Education dated the 31st January, 1949 on the subject mentioned above, I am directed to say that the report of the Geological Education Committee, 1946, is still under the consideration of the University Grants Committee. No final decision has yet been reached in the matter.

Yours faithfully

H S Verma

~~Assistant~~ Under Secretary

(KARTAR, 24/2.

85

G2 — (V)

E-1 H (G2)

Lr. Ref No 15414 G2/(~~48~~ 47) - 49 Edn dt - 4/4/49

To

The Secretary to ~~the~~ Govt. of India,
Ministry of Education, New Delhi.

Sir,

Sub:- Report of the Geological
Education Committee

Ref:- Letter from the Under Secretary
to the Govt. of India, Ministry of
Education no. D.4285/47-D.3
dt. 28/2/49

I am to enquire when the final decision of the Govt. of India in the matter may be expected.

Yours ffly,

5/4
6/4

P83 cf

VSS 2/4/49

2/4/49

4/4/49

V
43
G2

ASST. SECRETARY TO GOVERNMENT
EDUCATION AND PUBLIC HEALTH DEPT.
29 APR 19
32823

No.4285/47/D3.,
Ministry of Education,
Government of India,
New Delhi 3, the 27th April,1949.

From

H.S.Verma,Esquire.,
Under Secretary to the Government of India.

To

✓ The Secretary to the Government of Madras,
Education & Public Health Department,
Madras.

Subject:- Report of the Geological Education Committee.

Sir,

With reference to your letter No.15414 G2/47-19 Edn dated 4th April 1949 on the subject mentioned above I am directed to say that the report of the Geological Education Committee ~~1966~~ 1946 is still under the consideration of the University Grants Committee . No final decision has yet been reached in the matter.

Yours faithfully,

Under Secretary.

(GD)27/4/49.

44 89

E.&PH (522)

Lr. Ref No. 15414 G2/47-20 Edn dt- 8/6/49

To

The under Secretary to the Govt. of India,
Ministry of Education,
New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

I am to invite a reference to your letter No. 4285/47/D3 dt- 27/4/49 and to enquire when the Govt. of India's final decision ~~of the Govt. of India~~ on the subject may be expected by this Govt.

Yours ffly.

P.87g

73/4/6

7/6/49

7.6.49

8/6/49

45 91

E.& P.H.(G.2)

Lr./Ref.No. 15414 G2/47-21 Edn.,dated 25/7/49

To

The Under Secretary to the Govt. of India,
Ministry of Education, New Delhi.

26/25

Sir,

Sub:- Report of the Geological Education Committee.

P87 cf
P89 cf

I am to invite a reference to your letter No.4285/47/D3 dated 27.4.49 and my reminder dated 8.6.49 and to enquire when the Govt.of India's final decision on the subject may be expected by this Govt.

Yrs ffly,

21/7/49
21.7.49.
21/7/49

E.& P.H.(G.2)

Lr./Ref.No.15414 G/47- Edn.,dated 2 /7/49

To

The Under Secretary to the Govt. of India,
Ministry of Education, New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

I am to invite a reference to your letter No.4285/47-D3 dated 27.4.49 and my reminder dated 8.6.49 and to enquire when the Govt. of India's final decision on the subject may be expected by this office.

Rd 21/7/49

46

E+P.H.(G.2)

Lr. Ref No. 15414 G/47 — 22   Encl — 8/9/49

84
8/9

To

The Under Secy. to the Govt. of India,
Ministry of Education, New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

I am to invite a reference to your letter No. 4285/47-D3 dt. 27.4.49 and my reminders dt. 8.6.49 and 25.7.49 and to enquire when the final decision of the G. of India in the matter may be expected.

Yrs ffly,

KS
7/9/49

7.9.49.

8/9/49

E & H (G2)

Lr. Reg No. 15414 92/49 - 22 Edn dt 8/9/49

To

The Under Secy. to the Govt. of India,

Ministry of Education, New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

I am to invite a reference to your letter No. 4285/47-D3 dt 27.4.49 and my reminders dt 8.6.49 and 25.7.49 and to enquire when the final decision of the Govt of India in the matter may be expected.

Yrs ffly.

7.9.49

95

47

E & H (G2)

Lr. Reg No. 15414 G2/49 - 23 Edn dt 11/10/49.

To

The Under Secretary to the Govt. of India,

Ministry of Education, New Delhi.

Sir,

Sub:- Report of the Geological Education Committee.

I am to invite a reference to your letter No. 4285/47-D3 dt 27.4.49 and my reminders dt 8/6/49, 25/7/49 and 8/9/49 and to enquire when the final decision of the Govt. of India in the

P 87 cf

PP 89, 91 + 93 cf

G2

49

(49)

ASST. SECRETARY TO GOVERNMENT
12 JAN 1950
EDUCATION AND PUBLIC HEALTH DEPT.

No.D.12026/49-D.3,
Government of India
Ministry of Education,

New Delhi 3, Dated the 10th January, 1950.

From

H. S. Verma Esquire.,
Under Secretary to the Government of India.

To

2854

The Secretary to the Government of Madras,
Education and Public Health Department,
Fort St. George,
MADRAS.

SUBJECT: REPORT OF GEOLOGICAL EDUCATION COMMITTEE.

Sir,

197 ante

With reference to your letter No.15414-G.2/47-24. Education, dated the 19th December, 1949 on the subject mentioned above, I am directed to say that the matter is still under the consideration. A further communication will be sent to you as soon as a decision in the matter is reached.

A

Yours faithfully,

H. S. Verma

(H.S. VERMA)
UNDER SECRETARY.

OM/10/1

E&PH (G2)

A above may be awaited till 16/2/50.

12/1/50.

12.1.50

13/1/50

(50) 101

5-0

E+PH (G2)

Letter/Ref No 134148/47-24 Edn dt-21.2.50.

To

The Secy to the G. of India,
Ministry of Education,
New Delhi

59/21

DM
23/2

21/2

Sir,

Sub:- Report of the Geological Education Committee

I am directed to invite a reference to your letter No. D. 12026/49-D.3 dt- 10/1/50, on the above subject, and to enquire whether a final decision has been arrived at in the matter.

P99g

Yrs ffly,

17/2/50

17.2.50.

20/2/50

102

F

5-1

103

(51)

103

12 MAY 1950
1101

No.D.1606/50 D.3
Government of India.
Ministry of Education.

New Delhi, the 9th May 1950.

From

H.S. Verma Esq.,
Under Secretary to the Govt. of India.

To

The Secretary to the Govt. of Madras,
Department of Education,
Fort St. George, Madras.

Subject:- Report of the Geological Education Committee - 1946.

Sir,

P 101 of Go 1065-Edn / 1/4/50

(A) I am directed to refer to your letter No.15414/G2/47-24/Edn. dated the 21st February 1950, on the subject mentioned above and to inform you that the University Grants Committee, are at present collecting certain information from various Universities in India, on the basis of which, the report under reference will be reviewed by a sub-committee appointed by the University Grants Committee. The decision reached in the matter will be communicated to you in due course.

A/

Yours faithfully,

H S Verma
Under Secretary.

Krishan.9

Edn (F)

A above may be awaited till 15/6/50.

17.5.50

13/5/50.

13/5/50

A above has not yet been received. May continue to lie over till 15/7/50.

16.6.50

15/6/50

13/6/50

2

promised communication from the Govt of India.

Filed with Ev No. 1065 Edn Dated 1.4.50

Dy 29/6/x

1-7-50

E.& P.H.(G.3)

53

(53)

Report of the Geological Education Committee, 1946.

C.No.15414/46. From the Govt.of India,Deptt.of Edn.,No.F.12.101(19)/46-E-III (P) dated 21-2-1947.
P1 cf From the Registrar,University of Madras,A.2173 dated 15.5.47
PP 9-14 cf -do- -do- Andhra University,No.C.1.2057/47 dated 4.8.47.
PP 25-35 cf
PP 41-46 cf From the D.P.I.R.C.No.2181-E2/47 dated 14-10-47.

Please see the report of the Geological Committee,1946 at (G) and the letter from the Govt.of India on p.1 c.f. The Govt. of India have called for the views of this Govt.on the report and also the remarks of the University of Madras in the matter. The report of the Madras University is on p.p.9-14 c.f. and that of the Andhra University is on p.p.25-35 c.f. The Madras University states that it will be possible to provide for post-M.Sc. work and specialisation in Geology,only if sufficient financial assistance as required in the statement on pages 13-14 c.f. are forthcoming from the Provincial and Central Governments. The Andhra University also wants grants from the Central and Provincial Governments for the purpose. The views of the D.P.I. are on p.p.41--46 c.f. He does not favour the idea of the Universities starting the courses for development of the study of Geology. He states that the founding of a new institute in Geology at the Madras University may await the expansion of the Geology Department in the Presidency College. As regards the proposals of Andhra University, he states that it would be better to concentrate on a few good departments of Geology rather than to dissipate ~~our~~ Govts slender resources over a large number of less effective departments. He is therefore ~~holds the views~~ of this view that it would be highly desirable to expand the Department of Geology in the Presidency College to train graduates with a more practical knowledge of Geology and at the same time provide facilities for post-graduate studies and research in the Presidency College. The approximate cost of the scheme is about Rs.2,87,000/- as set out in col.2 of the statement on p.45 c.f. He desires that the Govt.of India may be approached for a fifty per cent grant of the amount. The

P 9 cf

P 25 cf

PP 41-42 cf

P 42 cf

P 43 cf

~~The Director's recommendation seems practicable and it is for orders whether hisx the same may be accepted and the Govt.of India addressed accordingly for a grant of 50% of the expenditure on the scheme set forth by him, whixxforwarding The remarks of the University of Madras may also be forwarded at the same time andxthex to the Govt. of India and the Govt. of India may also be informed that the Govt.do not approve the idea of the foundinĝ of a new Geological Institute at the Madras University at a very heavy cost. May be sent to Xxbxxxx(Rx Devt.(P.& D.IV) u.o. before circulation.~~

4/11/47

It does not seem necessary to consider the proposal of the D.P.I. now in detail. ~~If~~ the G. of I. decide in principle to make a 50 p.c. grant towards any scheme relating to the expansion of the Geological Depts, the details of the scheme may be sent to them ~~after~~ for approval after examination. ~~here~~.

~~The views~~ note of the Madras University ~~containing~~ together with its covering letter ~~at~~ pp 9-14 c.f. may be forwarded to India. India may also be told that the views of the Andhra University were also invited by this Govt and that they are also sent ~~to~~. As regards the views of this Govt, India may be informed ~~that after forwarding of the views of the two Universities~~ that the facilities offered by G of I ~~them~~ and the improvements suggested ~~which~~ would go towards expansion of the Geology Dept of the Presidency College Madras, that ~~this Govt~~ the D.P.I. has subd a scheme for post graduate research in Geology in the Presidency College,

PP41-46 c.f.

10·11·47

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and that the scheme will be taken up for consideration as soon as the decision of the Govt of India regarding the financial assistance to be given to Provincial Govts etc for such schemes is known.

They may also be told as stated by the D.P.I. that the scheme put forward by the University of Madras ~~which~~ is mainly for post-graduate research work and that in view of the ~~two~~ University Depts of Geology, the ~~[illegible]~~ establishment of a new Institute costing several lakhs of rupees may wait until after the expansion of the Geology Dept of the Presidency College takes effect.

PP41-42 c.f.

With reference to the views of the Andhra University ~~that G of I may~~ the views of the D.P.I. ~~may be~~ at 'A' on p 42 c.f. may be concurred in and India told that the development of the centre of Geology of the Andhra University may wait as it is much better to concentrate on a few good depts of Geology like that in the Presidency College, Madras. [illegible]

Devt (P+D) and Finance may see before circulation.

av
7.11.47

~~The views~~ reports of the The communications received from the two universities and the D.P.I. may be forwarded to the Govt of India and they may be told that this Govt agree generally with the views of the D.P.I.

B.M.
12/11/47

A

Est H (G31)
U.O. No. 15414 9310-8 Edn
18/11/47

10.11.47

AS II

S
18/11/47

Dev. (P&D)
In.

9287
20 NOV 1947
DEVELOPMENT DEPARTMENT

AW Dept

This Dept may agree with the suggestion of Expert at 'A' on the previous page. The file may be passed on to Finance.

21/11/47

28/11

Fin.

(A copy of letter to be sent to the Govt of India may be endorsed to Dept (P & A IV) also.

Dept u.o. No 9287 P&D IV/47-1 29-11-47

ASST. SECRETARY TO GOVERNMENT
29 NOV 1947
72127
FINANCE DEPARTMENT

Finance (Exp.A) Deptt.

The Govt. of India have forwarded a copy of the Report of the Geological Education Committee, 1946 and have asked for the views of this Government on the Report. The report of the Madras University is on pp.9-14 C.F. and that of the Andhra University is on pp.25-35 C.F. The Director of Public Instruction considers it desirable to expand the Department of Geology in the Presidency College, Madras, with a view to training graduates with a more practical knowledge of Geology and at the same time providing facilities for post-graduate studies and research in the Presidency College. The Director of Public Instruction recommends the taking up of the scheme taking advantage of the financial assistance (50% of the cost) offered by the Central Govt. E & P.H. propose to inform the Govt. of India that this Govt. agree generally with the views of the Director of Public Instruction.

p1 CF

A on p 43 CF

M on p 45 CF

A on p 3 above

2. The D.P.I's proposal to expand the Department of Geology in the Presidency College involves a non-recurring expenditure of Rs.2,75,000/- and recurring expenditure of about Rs. ~~28,520~~ 30,000/- as shown below:

	Total Cost.	Govt. of India's contribution.
Buildings	1,75,000/-	87,500/-
Equipment and furniture	1,00,000/-	50,000/-.

P on p 44 CF and X on p 45 CF

Q 25,520 (?) roundly 30,000

P on p 44 CF

X on p 45 CF

SS

3. It is submitted that in view of the prevailing high cost of building materials and of the present unsatisfactory state of the finances of this Province, all building schemes are being deferred unless they are so very essential as not to bear postponement.

P on page 1 of (Y)

In connection with the Development programme for 1948-9 the Govt. of India have stated that new schemes not yet initiated should be confined, as far as possible, to those which are likely to increase the production of the material wealth of the country. It is doubtful whether the present scheme can be considered as essential to increase the material wealth of the country.

45 CF

The scheme cannot also be taken up on the ground that the Govt. of India may offer assistance to the extent of 50% of the cost, as this Govt. will even then have to find funds for meeting the remaining expenditure to the extent of Rs.1,37,500/- non-recurring and Rs.15,000/- recurring p.a.

87000
50000
137000

4. In view of the above considerations, it does not seem that this Government can undertake the scheme involving such a large commitment to the Govt. Finance may suggest that the Govt. of India be informed that the scheme may wait for some time to come till the finances of the Province improve or that this Govt. will be prepared to take up the scheme if the Govt. of India gave a full grant towards the cost.

See below.

5. If the above scheme is to be taken up, the proposal will have to be treated as a "New Service", as the expenditure involved is large. As, however, the Govt. of India want only the views of this Govt. in the matter for the present (and as no commitment is involved at present), it does not seem necessary to follow the "New Service" procedure now. If E & P.H. do not agree with this Department, it would seem enough if orders are obtained in circulation including H.M. (Finance) and the Hon'ble the Premier.

para 1 on p 1 CF

para 4 above

5/12/47

There is an item as follows in the list of Federal subjects in the 7th Schedule to the

AS1

ADS

the Government of India Act, 1935:-

> "Regulation of mines and oil fields and mineral development to the extent to which such regulation and development under Federal Control is declared by Federal law to be expedient in the public interest!"

Item 36 on page 301 of the Govt. of India Act, 1935

There is also a similar item as follows in the Provincial Legislative List in the 7th Schedule to the Government of India Act, 1935:-

> "Regulation of mines and oil fields and mineral development subject to the provisions in List I with respect to regulation and development under Federal control!"

Item 23 on page 305 ibid

The above items have been repeated in the Federal and Provincial Legislative Lists appended to the Report of the Union Powers Committee of the Constituent Assembly of India.

It would appear from the description of the items mentioned above that mineral development will be primarily a subject to be administered by the Dominion Government. Mr. Gadgil, the Minister of the Government of India in charge of Works, Power and Mines, stated in a recent speech (according to newspaper reports) that industries relating to mineral development would be nationalised and would be in charge of the Dominion Government. This would mean that all the benefits arising from mineral development will go to the Dominion Government exclusively and neither Provincial Governments nor private enterprise will have any share in them.

X

The recommendations of the Geological Education Committee relate to intensive and specialised study of geology in certain centres and not to study for cultural purposes. The course should include specialised subjects like Geophysics and Radioactive investigation of rocks and minerals. The Committee have also laid emphasis on the need for field excursions which (according to the Committee) are not given sufficient attention at present in educational institutions where Geology is taught. A course on the lines recommended by the Committee will involve purchase of special equipment and also expenditure on ~~[illegible]~~ excursions etc. arranged for the students. The Director of

'A' on P3 of the report

B on P4 ibid

'C' on P2 ibid

(56)

Public Instruction has included expenditure on special equipment in his statement of extra cost but not expenditure on field excursions. 56

The benefits of the proposed study of geology which may involve also research to some extent will all go to the Dominion Government in view of 'X' above. It seems therefore reasonable that all expenditure on account of the proposed course in excess of that now incurred in the Presidency College on study of Geology should be borne by the Dominion Government. If this is agreed to by the Dominion Govt. Finance need not object to the proposed scheme being taken up. The G of I may be informed accordingly in communicating our views thereon on the report. The scheme can, if at all, be given effect to only from the next academic year commencing from July 1948. It is now too late to consider this as a Part II Scheme for 1948-9. If it is considered necessary to introduce it in the course of 1948-9, it will have to be treated as a 'New Service'. Otherwise, it may be brought forward as a Part II Scheme for 1949-50.

DEC 1947
DEVELOPMENT DEPARTMENT

ASST. SECRETARY TO GOVERNMENT
13 DEC 1947
EDUCATION AND PUBLIC HEALTH DEPT.

98394

11/12/47

I agree with ADS
DevD
10-12-47
Devt.

~~12284~~
9844
12.12.47

Fin U.O. No. 72127-EA.1
18/12/47

Devt. U.O. No.
9844 PJ-DIV/47-1

AS
12/12/47

Missent. E.P.H. to.

12.12.47 E.P.H.

E.& P.H.(G3).

X

The case relates to the Report of the Geological Education Committee, 1946. The Govt. of India desire to be informed of the views of this Govt. as well as those of the Madras University on this report. It is proposed to communicate to the G. of I. the views of the Madras and Andhra Universities and of the D.P.I. on the report and to inform the G. of India that this Govt. agree generally with the views of the D.P.I. Devt. agree with this Dept. Fin. Dept. state that it seems reasonable that all expenditure on the proposed course in excess of that now spent on Geology course at the Presy. Coll

pp 9-14 ⁹

pp 25-35 ⁹

p14

pp 44-45

borne by the Dominion Govt; that if this is agreed to by the Dominion Govt., the scheme may be taken up and that Govt. of India may be informed so. The views of Fin. may be agreed to.

The file may be circulated to H.M.(Edn.), H.M.(Ind.) and H.M.(Fin.).

15/16/12/47

16.12.47

As II OSD 17/12/47

S

Dev:

'B'

1 yes – Hon. Dev: also may see again on this point.

Dev (P&D IV) E & P.H. (G3)

A. This Dept. last saw the file during the last half of Nov 47 – Pl. see Our note at p 6 ante. The note of E & P.H. from XX on the previous page may be perused & the file returned to E & P.H.

21.12.47

E&PH

23/12/47

E & P.H. (G3) U.O. No 15414 G3/47-9 Edn 22/12/47

SEVENTH ASSISTANT SECRETARY TO GOVERNMENT 10223 23 DEC 1947 DEVELOPMENT DEPARTMENT

Dev U.O. No. 10223 P&D IV/47-1 6-1-48

E.& P.H.(G3).

Please see the note ~~of Dev.(P.&.D.) above and the~~ of this Dept from x x on p 7 ante and the note of Dev (P+D) above. ~~letter at p.53 c.f. since received from the Govt. of India.~~ The case may now be circulated to H.M.(Edn.), H.M.(Ind.) and H.M.(Fin.) for orders on 'A' at p.7 ANTE and 'B' above.

8.1.48

9.1.48

S 5/1/48

H.M. (Edn.) ✓

H.M. (Ind.) ✓

H.M. (Fin.) ✓

ASST. SECRETARY TO GOVERNMENT 1416 7 JAN 1948 EDUCATION AND PUBLIC HEALTH DEPT.

TSA 11-1-48

OSD 9/1

12/1/48

Geology Dept of the Andhra Varsity working very well under an able professor. G of I can create greater facilities here also.

17.1.48

SECRETARY, EDN. AND P. H. DEPT. 19 JAN 1948 GOVERNMENT OF MADRAS

-9-

57 (67) E&PH (G3)

Please see the minutes of HM (Fin) on p 8 ante. May be circulated to HM (Edn).

19/1/48

19.1.48

20.1.48

S

Hon.

TSA 25-1-48

SECRETARY, EDN. AND P. H. DEPT. 23 JAN 1948 GOVERNMENT OF MADRAS

OSD 28/1

E&PH (G3)

Please see the orders in circulation on pp 8 and above. A draft letter to the Govt. of India is subd. for approval.

27.1.48

29.1.48

29.1.48

S

[Issued as Letter | Ry No. 15414 G3/47-11 Edn. dt. 30/1/48]

P 61 cf

C No. 16572/49 From the Under Secretary to the Govt. of India, Ministry of Education No. D.4285/47-D3, dt. 28/2/49.

P 23 cf

Please see the letter from the Govt. of India Ministry of Education on p. 88 cf. The [illegible] of the Govt. of India in the matter may be awaited till 1/4/49.

4/3/49

4.3.49

The Govt. of India have not yet communicated their final decision in the matter. A draft ~~[illegible]~~ reminder is subd. for approval

4.49

10

[Issued as D.O. Ref. No. 15414 G2/47-19 Edn. dt-4/4/49] p85 cf

No. 32823/49. From the Under Secretary to the Govt. of India, Ministry of Education No. 4285/47/U3 dt-27/4/49. p187 cf

—

The Govt. of India state that the report of the Geological Education Committee, 1945, is still under the consideration of the University Grants Committee and that no final decision has yet been reached in the matter. The further report from the G. of India may be awaited till 31/5/49. p187 c

29/4/49

29.4.49

4/5/49

The final report from the Govt. of India has not yet been received. The draft reminder below is for approval.

8/6/49

7.6.49

8/6/49

[Issued as D.O. Ref. No. 15414 G2/47-20 Edn. dt-8/6/49] p89 c

—

The final report from the Govt. of India has not yet been received. The draft reminder below is for approval.

21/7/49

21.7.49

Extract of Sectional note in G.O. 7541/46

E. & P. H. Dept. (G3) 11

58

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(58)

PP4-4(c) of Sectional note in G.O. 7504 Edn.

5/8/49

(L)

Opening of a course in Geology

Proposals of the University

The University requests for a grant of Rs.3,25,500/- (non-recurring) and Rs.88,700/- (recurring) for the opening of a course in Geology.

Recommendations of the University Grants Committee

"The Committee is informed that the details of the proposals with regard to Geology are under examination by the Public Department who are awaiting a report from the Govt. of India. The consideration of this proposal may await the report from the Govt. of India."

Minutes of H.M.(Edn.)- With regard to Geology, the report from the Govt. of India may be expedited.

Please see in this connection the D.O. from the Secretary, Deptt. of Education, (University Grants Committee) New Delhi on pp.63 c.f. and the reply of H.M.(Edn.) on p.65 c.f. The result of the discussion referred to therein by the middle of August may be awaited. In the meantime, Public (P. & D.) may perhaps be requested to take action to expedite the report from the Govt. of India.

M.V.S.
27-8-47

Publ. (P. &D. IV)

The report from the Govt. of India referred to at A above is still awaited from them. The Central Govt. intimated in March 1947 that they had circulated the report of the Geological Education Committee to the Universities and Provl. Governments including Madras during Feb. 1947 and that they had not come to any decision on the recommendations. E. & P. H. Dept. who received the report were referring the matter to the University and they agreed to send their file to this Dept. in due course. The file has not been received so far. Perhaps the report is still under consideration in that dept. and the Govt. of India would come to a decision only after they receive the remarks of this Govt. The question of reminding India w.r.t. the minutes extracted at B on the previous page is dealt with in the linked file below.

K.R.M.
6-9-47.

Fin. (Exp.A)

No remarks in Finance.

2-10-47.

E. & P.H. (G3)

Please see Public (P. &D.) and Finance note on pp.4-4(a) ante. The report from the D.P.I. is awaited. The University may be informed that the matter is under consideration. This has been included in the draft to the University.

M.V.S.
15-10-47.

I see from 'A' above that the report of the Geological Commission has been received and is under consideration and the Govt. of India would come to a decision only after they receive the remarks of this Govt. I do not know whether opinions have already been sent to the Govt. of India. If not itmust be expedited.

The matter of providing a course in Geology is very important especially in view of the large mineral wealth existing in the Ceded districts as well as in other parts of the Province. I understand our Geological Dept. in the Presidency College is a fairly good one and if improved would serve a very useful purpose. The D.P.I. may be asked to send back the report as soon as possible. It seems as if we take a very long time to get these opinions. On receiving the report we must get in touch with the University and do the needful. That may be intimated to the University.

T.S.A.
13-11-47.

E. & P. H. (G3)

Please see the minutes of H.M.(Edn.) above. The opinions

Universities and the D.P.I. have been received . The file has been sent to Dev. (P. & D.) and Finance. The D.P.I. is not in favour of the Universities being given grants for the insitution of a course in Geology. He has *recommended* the strengthening of the Geology Dept. in the Presidency College, Madras. The decision in that file may be awaited.

M.V.S.
28-11-47.

The file referred to on page 4(b) ante has since been circulated to H.M.(Edn.), H.M.(Industries) and H.M.(Fin.) on 8-1-48. Its return from circulation may be awaited.

M.V.S.
17-1-48.

It has since been decided in circulation that the Geology Dept. in the Presidency College should be strengthened and that the Govt. of India should be addressed for affording facilities to the Andhra University also. The file on the subject has been submitted separately. This may await the final decision of the Govt. of India in that file.

M.V.S.
3-2-48.

Education Deptt.

F.

P1cf

The file relates to the Report of the Geological Education Committee, 1946. The Govt.of India wanted ~~to be informed o~~f the views of this Govt.and the Universities in the State on the report. A reply has been sent to the Govt.of India.

Letter on P61cf

The opinion expressed is that all expenditure on this proposed course in Geology in excess of what was spent on it at the Presidency College, Madras,should be borne by the Government of India, and that greater facilities might be created for the study of that subject at the Andhra University.

-do-

P99cf

The report seems to be still under consideration with the Govt.of India and their decision will probably

14

be communicated to this Govt. only after sometime. When this communication is received, the matter may be considered further. It seems to be unnecessary to keep this file open. The papers may now be recorded.

RS 30/3/50

30-3-50

31-3-50

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31.3.50

1065

Order/M/o Edu dt 1-4-50

Recorded.

Educati
Report of
Geologic
Educatio
Committee
India - P
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CONFIDENTIAL

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REPORT

OF THE

GEOLOGICAL EDUCATION COMMITTEE

1946

NEW DELHI: PRINTED BY THE MANAGER
GOVERNMENT OF INDIA PRESS: 1947

1. **Appointment of Committee.**—This Committee was appointed by the Government of India in the old Labour Department as the result of a decision taken at an inter-departmental meeting held on the 9th April 1945, at which the following minute was recorded—

> "*Geological Education.*
>
> This fell under two heads—
>
> (1) the re-organisation of the School of Mines which concerns not only geological education but also mining and mining engineering education ;
>
> (2) revision, if necessary, of courses at Universities.
>
> It was recognised that certain proposals had already been put forward by Dr. West, that Dr. Wadia was shortly going to put forward his proposals and that Dr. Dunn differed in some respects from the proposals put forward by Dr. West. It was recognised also that it was most important that any proposals put forward should receive the full concurrence of Universities. It was felt advisable in these circumstances that a small Committee should be appointed with a Vice-Chancellor as Chairman to examine the various proposals put forward and to arrive, if possible, at an agreed solution. After this agreed solution had been reached Government should consider the matter and take a tentative decision. Thereafter the Committee should again sit with a view to persuading the Universities to accept the arrangements proposed. It was for this purpose that it would be particularly advantageous to have a Vice-Chancellor as Chairman of the Committee.
>
> This proposal was generally accepted by representatives of P. & D. and Labour Departments, but the E. H. & L. Department representative considered that it would need further examination in his Department."

2. **Terms of reference.**—The terms of reference are formulated as follows :—

(*i*) to suggest steps for the improvement of geological training in India ;

(*ii*) to suggest what financial assistance should be given by the Government of India to Universities to effect the improvements ; and

(*iii*) to make specific recommendations as to the more important centres of geological education.

3. **Members and meettings.**—The three original members were :—

1. Dr. P. Parija, Vice-Chancellor, Utkal University.
2. Dr. J. A. Dunn, Director, Geological Survey of India.
3. Mr. D. N. Wadia, Mineral Adviser, Planning and Development Department.

The Committee held three meetings at the Secretariat, New Delhi, on 28th August 1945 and 29th August 1945 and drew up an interim report (*vide* Appendix I) on the basis of the report prepared by Dr. W. D. West after he had visited several centres of geological education. This interim report was circulated to the Universities for comment and criticism. In the meanwhile Dr. Dunn went away on leave and Dr. W. D. West took his place on the Committee.

The Committee met again on 25th February 1946. After considering the views of certain Universities, the Committee decided to circulate Dr. West's specific recommendations to the Universities concerned for the improvement of geological training at those centres.

When all the replies were received from the Universities, the Committee met at New Delhi on the 17th and 19th October 1946 and drew up its final report.

The Committee had the advantage of having before it 2 reports namely (1) by Dr. W. D. West (*vide* appendix II) and (2) by Mr. D. N. Wadia (*vide* appendix III). Having considered these documents the Committee is submitting the following report.

6

I—Improvement of Geological training in India

4. **Report.**—The Committee consider that there is room for improvement in geological training given in the country. India cannot go on depending on other countries for the training of her geologists. The training should be so improved that it may not be necessary for the average geologist to go abroad.

Geologists are of opinion that geological training in India suffers from two defects namely (1) the syllabus is too heavy for the time allotted and (2) the field training given is inadequate. These have resulted from inadequacy of teaching staff and inadequacy of funds. The Committee note with satisfaction that there is general agreement among the Universities on these points and the Universities express their willingness to effect improvement.

We recommend that certain steps be taken to improve the courses in geology in India. These fall under the following heads :—

(*i*) Length of B. Sc. Course ;
(*ii*) Length of M. Sc. Course ;
(*iii*) Post M. Sc. work ;
(*iv*) Staff ;
(*v*) Equipment ;
(*vi*) Restriction of teaching geology for a career to certain selected centres.
(*vii*) Instruction in specialised courses.

C

(*i*) *Length of the B. Sc. Course.*—We recognise at the outset the defects of the present Geological training in the Universities, in particular that the syllabus is too heavy for the time devoted to it and that insufficient attention is paid to field work. The Committee considers that the ideal solution would be to have a three years honours course in all the Universities devoting the Intermediate course to basic Sciences only, but as all the Universities do not have this system of three years honours course, the Committee is of opinion that in those Universities in which the B.Sc. Course extends over 2 years, Geology may be taught at the Intermediate Science stage. This preliminary training combined with a 2 year honours course can be regarded as equivalent to a three-year honours course.

It is preferable that students taking up Geology in the Universities should have studies Physical Geography for the Matriculation Examination.

The Universities which teach only the Pass course in Geology should be better advised to teach the Honours Course as well.

(*ii*) *Length of the M.Sc. Course.*—The Committee is of opinion that for an Honours Graduate, M.Sc. Course should partly be by examination and partly be by thesis based mainly on field work done either under the direction of the Geological Survey of India, or of a State Geological Survey or under the University Professor. The course should extend over at least one year for Honours Graduate and two years for the Pass Graduate. A Pass Graduate should not ordinarily be permitted to submit a thesis for the M.Sc.

There should be full facilities for transfer of Post Graduate students from Colleges or Universities, having Geology only as a cultural subject, to institutions specialising in geology. The Committee suggests the grant of suitable bursaries or scholarships or other financial help to promising students desiring to have such transfers for specialised courses in geology at the latter institutions.

Wherever possible provision should be made for a course of lectures in Mining and Surveying for the post-graduate students.

The Committee understands that the Geological Survey of India will maintain its training scheme permanently. As soon as the full cadre of the Department is recruited and trained, the Geological Survey of India will be able to accept a limited number of post-graduate students from Universities for field training.

(62) 62 91

(*iii*) *Post M.Sc. Work.*—This can be done at the Universities or in the Laboratory of the Geological Survey of India which should be recognised by the Universities as a "Post-Graduate Institution" in due course.

(*iv*) *Staff.*—(*a*) The Committee discussed this question in detail. They agreed that those centres which specialise in geology should have the following minimum staff :—

1 Professor on	Rs. 500—1,000.
3 Readers or Associate Professors	Rs. 300—600 each.
5 Lecturer Demonstrators	Rs. 200—400 each.
2 Laboratory Assistants	Rs. 75—150 each.

(*b*) *Strength of classes.*—The strength of classes should be limited by the adequacy of the staff, equipment, laboratory space and efficient supervision in the field.

It is suggested that with the staff proposed in (*a*) above, the Intermediate science classes should not exceed in number 150 students.

B.Sc. classes in the third and fourth year each should not exceed in number 32,

For practical classes the number should not exceed 15 in one batch.

M.Sc. classes should not exceed in number 8.

(*c*) *Co-operation with the Geological Survey of India.*—In their interim report the Committee had suggested the deputation of G. S. I. officers to Universities as Heads of Departments in exchange of their Professors, but in view of the adverse opinion received from the Universities the Committee do not favour such deputation now. They, however, desire that there should be closer co-operation between the G. S. I. and the Universities in the matter of field training under G. S. I. officers and also in the matter of special courses of lectures by senior G. S. I. officers.

(*v*) *Equipment.*—The Committee is of the opinion that almost all the centres which teach Geology are not sufficiently equipped even for the numbers of students admitted at present. The Committee has recommended in sub-paragraph II below the manner in which the Government of India may give financial assistance to the institutions. They, however, strongly recommend that, to help the Universities in acquiring the much needed scientific equipment, apparatus, etc., Government should give every help through the Disposals Board in acquiring such goods as tents, transport trucks or lorries, and scientific apparatus such as microscopes, compasses, levels, clinometers, binoculars, chemical apparatus, etc. This will be of great assistance to the Universities at the time when such supplies are not available from overseas.

(*vi*) *Restriction of teaching geology for a career to certain selected centres.*—The Committee then discussed the question whether the Universities and Colleges should not be free to develop geological study. After discussion it was agreed that for cultural purposes any University may teach geology, but the Committee suggest that the following centres should specialise in the intensive study of geology, for those taking Geology as a life career, *viz.*, Calcutta University, Benares Hindu University, Madras University, Mysore University and Indian School of Mines, Dhanbad.

A

We are guided in our selection of these five centres for reasons of certain natural advantages possessed by them *viz.*,—

(*a*) Geographical position.
(*b* Advantage of situation either in areas of geological interest or of mining activity.
(*c*) These centres have, during the last 20 or 25 years expended much money and effort in maintaining a geological department. It is these institutions which have supplied the few working geologists in India.

The Universities are, however, against such restriction on the grounds that—

(*a*) separation of geology for a career from geology as a cultural subject is educationally unsound ;
(*b*) restriction to certain selected centres is against the very spirit of freedom in education ; and

(c) the best talent cannot be guaranteed to be found in the chosen centres o

The Committee understands that since the writing of the interim report, several new centres have opened Geology classes either of their own accord or because they received endowments.

The Committee is still of the opinion that the intensive study of Geology for preparing Geologists for a professional career should be confined to centres which are either well situated for geological training or which have already a well developed geological department. Nevertheless, it recommends that to the centres already given above may be added any other centre which satisfies Government that it is, by virtue of its work and equipment, or for any other special reason, fit to specialise in the intensive study of geology. In this connection we recommend that the cases of Andhra, Lucknow and Aligarh Universities be considered.

B

(vii) *Instruction in specialised courses.*—These Universities which are suitably equipped for imparting a course of post-graduate instruction in specialised subjects like Geophysics and Radioactive investigation of rocks and minerals should receive a subvention for initiating these special branches. In these the co-operation between Physics and Geology Departments will be necessary.

II—FINANCIAL ASSISTANCE TO UNIVERSITIES

The centres specialising in Geology should receive suitable financial aid from the Government of India under the following heads, to bring their departments to the level of efficiency contemplated in the above paragraphs :—

(a) Contribution towards the salary of one Professor if specially recruited for his ability to re-organise the Geology Department.

(b) The cost of advanced apparatus and equipment subject to a maximum of 50 per cent. of the total cost.

(c) Cost of sending overseas for further study one member of the teaching staff of each University.

(d) Annual grant for field training of post-graduates and under-graduates subject to a maximum of 50 per cent. of the total cost.

(e) A subvention for initiating a special branch of geological research.

(f) Assistance towards the construction of Laboratories or extensions to the existing buildings.

The above financial assistance from the Government of India should be given contingent upon the University or the Provincial Governments concerned bearing a proportionate share of the total expenditure as suggested above.

It is not the intention of the Committee to exclude other centres teaching Geology from receiving financial aid from the Government of India for any specific purpose designed to improve their geological training.

The Committee recommends that each case be considered on its own merit by the University Grants Committee and financial aid be given, wherever necessary.

III—SPECIFIC RECOMMENDATIONS REGARDING IMPORTANT CENTRES

(a) *Calcutta.*—The Geological Faculty needs re-organisation very urgently. The existing division of under-graduate teaching at the Presidency College and post-graduate teaching by the University is most unsatisfactory and steps must be taken to amalgamate the two divisions either at the University or at the Presidency College and bring them under one head. If this is agreed to and if the University or the Presidency College provides necessary extension of buildings, Government help may be given in providing the scale of equipment that is now urgently in demand and also in deputing if possible a senior experienced officer of the G. S. I. as Professor for a term of years for higher study and research.

(b) *Madras.*—This University has a well conducted geology department with nearly 150 B.Sc. Pass and Hons. students. In proportion to its commitments, however, the staff and equipment are insufficient. It is also impossible to arrange for field training of such large numbers with the small staff and poor grant allocated for the purpose. Government assistance should be provided, therefore, in giving an additional member of the staff, in acquiring more advanced and research microscopes and other accessories and in a substantial grant for field excursions and studies under proper supervision. This latter grant is not likely to exceed 6 thousand rupees per annum, according to the number of students and the programme of visits to geological study centres.

(c) *Dhanbad.*—The Committee understands that the Government of India have appointed a separate Committee to examine the re-organisation of the Indian School of Mines, Dhanbad.

(d) *Mysore University* (*Bangalore*).—The Committee is not quite sure if it is competent to make recommendations for this University in an Indian State. They, however, would like to state that the same remarks shown against Madras in (b) above apply more or less to this centre also.

(e) *Benares Hindu University.*—The Geological Faculty of this University has done good work since 1921 ; it has a fairly well-equipped meuseum and laboratory, but the recent large increase in the number of students have sorely taxed these resources and much of the equipment stands in need of replenishment as well as replacement. The staff, though able and enthusiastic, is small in proportion to the teaching demands made on it and their scale of remuneration needs considerable improvement. When provided with sufficient staff and equipment, the University should undertake instruction in geo-physics and start a research laboratory for radio-active work. These branches, should be wholly financed by the Government of India. Benares with its well-equipped physical and chemical laboratories and its scope for building expansion, etc., will provide a good centre for these branches of geology nowhere else taught in India.

Since the Geological Department of the University runs a well-conducted department of Mining and Metallurgy which has trained 172 Graduates in Metallurgy and 75 Graduates in Mining during the last 23 years, a case for aditional subvention is further strengthened in the matter of building extensions, equipment in furnaces, testing machines, matallurgical microscopes , and x-ray apparatus.

(f) *Muslim University, Aligarh.*—This University has recently started a geological department, and has a well-organised Geography department. A few geography graduates recruited to G. S. I. in 1941 as an experimental measure have, after the field instruction they have acquired, proved satisfactory. The main difficulty is in obtaining a suitale Professor to organise the geological department on the right lines, and Government assistance may be accorded to this institution to start teaching of geology by deputing if possible a senior officer of the G. S. I. for a term of two years. We recommend that in view of the fact that this University is drawing students from all over the country a large subvention towards starting a well-equipped Geological Department may be made to this University.

(g) *Fergusson College, Poona.*—The Committee considers that this institution deserves special mention. This college (affiliated to Bombay University) teaches geology up to M. Sc. standard and possesses a teaching staff and equipment which does credit to a private institution enlisting workers who are serving on a meagre honorarium. This college fills an urgent need as it is the only institution in Western India, teaching geology up to the M.Sc. standard, and therefore deserves assistance and encouragement. Government help should be accorded for purchasing more equipment and a sum of about Rs. 3,000 annually, earmarked for conducting field parties of B.Sc. and M.Sc. students to places of geological study and to the principal coal and metal mines.

5. **Conclusion.**—The Committee hopes that these recommendations when carried out will put Geological training in India on a sound footing and would supply men with requisite qualifications to meet all the requirements of the country in trained geologists.

6. **Acknowledgement.**—The Committee takes this opportunity to place on record its appreciation of the valuable help which it has received from Rai Bahadur A. C. Das, Deputy Secretary, and Rao Sahib R. K. Lakshmanan, Assistant Secretary, of the Works, Mines and Power Department, but for which the Committee's task would have been more difficult.

P. PARIJA,—19-10-46.

D. N. WADIA,—19-10-46.

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