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No. CRF/IRC/18

Dated the 26th February, 1981

To

All State Governments and Administrations of Union Territories, (Departments dealing with Roads)

Subject:- Setting up of a Research-Development and quality Promotion Cell at the beadquarters Office of the Chief Engineer in each State out of the Central Road Fund (Alloeations) Account

In pursuance of the recommendations of the Council of the Indian Roads Congress made by them in their 91st Meeting held in Calcutta on the 18th December, 1977 and Chief Engineers' Meeting held at Jaipur on 7th February, 1980 it has since been decided to agree to the entire Expenditure on in establishment of Research, Development and Quality Promotion Cells in the States being met out of the State's Central Road Fund (Allocations) Account for a period of 5 years to begin with. According to this Ministry's assessment a sum to the extent of Rs 10.00 lakhs/Rs 5.00 lakhs, will be required for meeting the initial and recurring expenditure for five years as per details enclosed.

2. The objective of this cell is to create necessary organisational infra structure at the State level for (i) **administration, Planning and programming Research and development activities**, (ii) **promotion of domestic technology** (iii) **dissemination of results of the Research and Development activities by updating specifications and standards and preparation of manuals/guidelines for the use of construction staff**, and (iv) **effecting qualitative improvements in project preparation and execution including quality control and interaction with the teaching institutions and other research organisation for mutual benefit**.

3. A note indicating objectives, function and organisational set-up of the cell and rough estimate etc. of the cost involved is attached. I am to request that the question of setting up of a Research Development and Quality Promotion Cells may kindly be examined in the light of above details and a suitable proposal for setting up these cells against State's Central Road Fund (Allocations) Account forwarded to this Ministry.

ESTABLISHMENT OF RESEARCH DEVELOPMENT AND QUALITY PROMOTION CELLS IN THE STATE

1. OBJECTIVE :

The objective is to create necessary organisational structure at the State level for administering **Planning and programming Research and Development activities**, **promotion of domestic technology**, dissemination of results of the Research and Development activities by up-dating specifications and standards, and preparation of manuals/guidelines for the use of construction staff; effecting qualitative improvements in project preparation and execution including quality control and interaction with the teaching institutions and other research organisations for mutual benefit.

2. IMPORTANCE OF THE CELLS :

Bulk of highway construction is done by the State Public Works Departments. At the moment because of the communication gap between research, operational and teaching sides, it has become rather difficult to introduce in a systematic way new ideas in design and construction and make use of the best available talents. Even where the ideas are implemented through persistent efforts, subsequently there is very little feedback of information for the refinement of technology. Even where there is some feedback of information, there is no system or mechanism for adaptation in actual works or dissemination among the field engineers.

The proposed Cell, besides administering Research and Development activities at the State level will go a long way in building up the needed awareness for improved quality and making the operational staff more responsive to new techniques. Direct benefit accruing from the scheme would be of better quality in respect of both project preparation and execution of highway works.

3. FUNCTIONS :

The Research and Development Cell will have the following functions :-

- (i) Administering Research and Development budget pertaining to the State Sector plan provisions;
- (ii) Organising Research and Development work at the State level including coordination and monitoring of Central sector Research and Development schemes assigned to the State;
- (iii) Tending advice to the State Chief Engineer on the actual application of latest techniques and research findings, and matter concerning in — service training of engineers;
- (iv) Introducing of new ideas towards achieving well prepared projects, and their execution to higher standards of quality;
- (v) Compiling and up-dating requisite technical manuals, technical literature, guidelines etc. for the use of field engineers;
- (vi) Participating in the cooperative research programme and demonstration projects;
- (vii) Inter-action with the teaching institutions for better cooperation and coordination between such institutions and the State Public Works Department for mutual benefit in the matters of research, research application and training of engineers;
- (viii) Keeping liaison with the H.R.B. the R & D Cell at the centre and other research laboratories in the country;
- (ix) Dissemination research findings among field staff and arranging for workshops, seminars etc. on important technical matters.

4. ORGANISATIONAL SET - UP OF THE CELL :

4.1 The day-to-day work of the Cell in each State will be looked by a Staff Cell having the following composition depending on the size of the State :

- (i) For Major States :
Headed by an officer of Superintending Engineer grade **assisted** by three Executive Engineers and other supporting staff.

(ii) For Smaller States and Union Territories :

Headed by an officer of Executive Engineer grade and assisted by two Assistant Executive Engineers and other supporting staff.

Rough cost estimate of these set-ups are given in para 5.

4.2. Guidance to the staff Cell in each State will be provided by an Advisory Panel Constituted for the purpose and having the following composition :

(i) Chief Engineer (dealing with Roads)	Chairman
(ii) Director State Highway Research Laboratory	Member
(iii) Director Designs, State Public Works Deptt.	Member
(iv) A Member nominated by H.R.B.	Member
(v) A Member nominated by Roads Wing	Member
(vi) A Member from teaching Institution	Member
(vii) Head of the Staff Cell	Member Secretary

5. Rough cost estimate for setting up Research and Development Cells in States :

5.1. For larger States :

Item	Nos.	Annual cost (Rupees)
A. Technical Staff :		
(i) Superintending Engineer	1	30,000/
(ii) Executive Engineer	3	66,000/
(iii) Assistant Executive Engineer.	3	48,000/
Total :		1,44,000/
B. Sub - head		
C. Secretarial and other supporting staff:		L.S. 32,000/
TA/DA, Office equipment, Stationery and contingencies		L.S. 25,000/
Total :		2,01,000/

Say Rs 2.00 lakhs per year
or Rs. 10.00 lakhs for 5 years

5.2. For smaller States and Union Territories :

Item	Nos.	Annual cost (Rupees)
A. Technical Staff :		
(i) Executive Engineer	1	22,000/
(ii) Asstt. Executive Engineer	2	32,000/
Total :		54,000/
B. Secretarial and other Supporting Staff :		L.S. 25,000/
C. TA/DA, office equipment stationery and contingencies		L.S. 20,000/
Total :		99,000/

Say Rs 1.00 lakhs per year
or Rs 5.00 lakhs for 5 years