

NATIONAL DEVELOPMENT GROUP FOR EDUCATIONAL
BUILDINGS IN INDIA

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There is an urgent demand for a larger number of school buildings in India due to the rapid growth and expansion of education. Huge planning and building efforts are being made to provide proper educational facilities, yet fifty per cent of the schools at primary and middle stages do not have buildings of their own and are housed in totally unsuitable accommodation. The Indian school system is short of nearly fifty crore* square feet of space and about Rs. 600 crores is required to clear this backlog, even at a very modest rate of construction cost. In addition, buildings have to be provided for the fast growing additional enrolments. Economy in the cost of construction is, therefore, of cardinal importance to the success of the educational programme. There is another aspect also and that is to ensure the quality of buildings to cope with the changing educational technology.

It is now largely accepted that the efficient utilisation of money for educational facilities requires a proper study of educational, functional, physical, constructional, economical and environmental requirements, and this calls for an inter-disciplinary approach.

Education in India is primarily the State Government's responsibility. The Union Government co-ordinates it and formulates aims and objectives, assesses the prevailing position and draws up future plans in the national context.

The Education Commission in its report on schools buildings recommended the need for the reduction in building costs to the minimum level possible and also for the formation of educational building development groups in the States and at the Centre for implementing the building programme expeditiously and economically. The Central Building Research Institute, Roorkee, which is engaged in school building research and is also interested in the above objective, followed up the recommendations. It urged the State Governments to give high priority to the formation of development groups.

Development Group-Composition and Functions

The first development group in the country was formed in December 1967 by the Government of Maharashtra. The Union Territory of Goa Daman and Diu and the States of Uttar Pradesh and Kerala followed suit. In 1968, the Union Ministry of Education, with the active collaboration of CBRI, formed the National Development Group at the Centre. The composition of the National Group includes the Chairman of the State Development Groups in addition to educationists, engineers and educational administrators. The group was formed under the chairmanship of the Educational Adviser, Union Ministry of Education. The research architect of CBRI works as member-secretary. The CBRI supports the

* 1 crore = 10 million.

National Group in its technical and research activities.

With the purpose of achieving the maximum advantage in the functioning of the National Development Group the following functions were determined:

- (a) to remain in touch with the development groups established in other countries with a view to exchanging information and technical know-how and adapting them to Indian conditions;
- (b) to promote the establishment of development groups for school buildings in the States and Union Territories of the country;
- (c) to co-ordinate, assist and help the works of State development groups;
- (d) to act as a clearing house for information regarding programmes for reduction of costs in school buildings which are being developed in different States;
- (e) to promote and co-ordinate research on school buildings in the country.

Activities of the National Development Group

In India, the planning, design and construction of school buildings is the responsibility of State Governments. They execute the school construction work through their own agencies at State, district or village level. State Governments have their own school building regulations, codes, standards and type plans. In a majority of cases, they were formulated fifty years ago or even more. Although the States have a large school building construction programme, they are not all aware that the development group idea would be of great value in improving amenities and producing better schools with the latest building techniques available in the country. On the other hand, the Central Building Research Institute, Roorkee, is working on school building problems in India and has already produced much useful information in the field of design, anthropometric data and information on intensive utilisation of space and on the more economic use of materials, and elements of construction in schools. The National Development Group took up the task and made efforts to convey to the State Governments and Union Territories all the information regarding the research work done in the CBRI, with a view to reducing the cost of school buildings and making them more functional. Seminars and exhibitions are arranged and the advisory services of CBRI are made available to State Development Groups. State Governments are requested to produce the research literature of CBRI in their regional languages for the use of official and local agencies.

The National Development Group has prepared a work plan, defined the functions, and suggested a procedure of work for the State Development Groups, after a careful study of the pattern and structure of administration in the States. The two-tier working system of the development group has worked successfully in the States which have formed such groups. The National Development Group has helped eight State and Union Territory Governments to set up development groups in their States. These States are Maharashtra, Goa, U.P., Punjab, Tamil Nadu, Delhi and NEFA.

In view of the lack of resources for technical personnel and finances at State level for the functioning of development groups, and also due to lack of appreciation of the utility of such groups, the State Groups now established are working on a part-time basis and have personnel drawn from State Public Works Departments and Departments of Education. The National Group and CBRI thus play a major role at the initial stages in the activities of such groups. A few of the State Groups, having realised the advantages, have now made moves to set up full-time development groups in their States. The National Group is paying special attention to setting up development groups in the backward States and also in States which have huge programmes of school building construction. Due to the continuous efforts of the National Group, the CBRI, and the interest taken by the Planning Commission, and also due to the encouraging performance of the existing groups in the States, the development group concept has attracted the attention of a number of States and they have shown interest in the work of development groups. The Group at the Centre has approached the Union Government to provide financial assistance to State Governments for setting up their groups.

Through the advisory services of CBRI, the National Development Group helps the State Development Groups in their development work, e.g. in selecting a project, the solution to the problems of which will be of wide application; in clarifying the educational, architectural and cost objectives for the type of school selected for development; in developing the prototype design of school; in the construction of prototype buildings; and in evaluating the prototype both from educational and architectural viewpoints.

As a result of developmental activities the State Development Groups have identified priority projects and have developed and constructed prototypes. These have produced encouraging results as advantage has been taken of research and new ideas in planning and construction technology to make school buildings more functional and more economical.

Research study in Marathwada

The National Group and CBRI in collaboration with Maharashtra State Development Group took up an interesting study on the development of school buildings for Marathwada region, a comparatively educationally backward area of the State of Maharashtra. A survey of 2200 schools, covering the whole region, was undertaken with a view to studying the existing situation and provisions and to identifying the types of schools required. The study also aimed:

- (a) to investigate and identify the educational requirements for various school types;
- (b) to establish a minimum schedule of accommodation in order to increase the use factor of schools;
- (c) to establish basic design criteria, taking into account the educational, constructional, economic and climatic requirements;
- (d) to evolve functional and technical prototypes of school buildings;

- (e) to formulate a consolidated building programme for planned development and expansion.

The study included a careful probe into educational, administrative and architectural requirements. It worked out standards of accommodation and design criteria, evolved functional prototypes and constructional details, and made suggestions on the mode of financial assistance to individual schools and the policy for construction programmes for the entire region. Since the construction of schools on a large scale is envisaged, a consortium approach for the prefabricated roofing units has been suggested. A seminar to discuss the recommendations of the study was arranged. Educationists, educational administrators, engineers and officials of the region who are responsible for the execution of the programme in the region took part. The programme of action was finalised. The prototype construction of different school types has subsequently been completed and reached evaluation stage. The study for the development of school buildings for Marathwada has led to the formulation of a scheme to afford employment to unemployed engineers and technicians through a programme of construction of school buildings throughout the country. The Ministry of Education has shown interest in the scheme. It may lead to a major programme of action for the National Group if finance is made available. This will serve a dual purpose in providing employment and constructing schools on a large scale.

Liaison with other bodies

The National Group maintains liaison with the Asian Regional Institute for School Building Research in Colombo. Information on research and development work from the ARISBR is disseminated to State Development Groups. In collaboration with CBRI, it undertook the evaluation of prototypes of schools in Goa and the development of furniture for schools in the Punjab. Members of the National and State Development Groups, at the invitation of the Asian Institute, have visited the Institute at Colombo to discuss and exchange views on problems of mutual interest. Several collaborative studies with ARISBR are proposed for the future. The National Development Group will welcome similar exchanges of views and experience with other Commonwealth countries also.

The Indian National Group is planning a quarterly news-letter with a view to disseminating the development activities of various groups at home and abroad to those interested in the subject. It has plans to organise seminars, get-togethers and exhibitions for the better and more effective dissemination of experiences.

An assessment of the impact of development group work in this country will be made in due course. It is already apparent that the establishment of development groups is an important step in the direction of facilitating the planning and implementation of school building programmes which combine quality, efficiency and economy.