

Concept note on Access and School Mapping

Rashtriya Madhyamik Shiksha Abhiyan is a unique educational programme which has been designed in such a way to respond effectively to the emerging demands of our society and rapid developments that are taking place due to liberalization Privatization and Globalization. This is clearly the next step after universalizing elementary education. Universalisation of **Access**, **Quality** improvements, **Equity**, **Institutional reforms** and **strengthening of resource institutions** are key strategies to achieve the target of Universalizing secondary education.

Universalisation of secondary education denotes two processes. **Firstly Access**, This means universal provision of secondary schools and universal enrolment of children in the age group of 14 to 18 group . All children in the age group of 14 to 18 should have access to secondary schools. There should not be any discrimination on grounds of sex, religion, caste, place, or socio economic status. **Secondly Success:-** By simply providing access to secondary schools we cannot claim that we have universalized secondary education . Along with access to schools we should make adequate provisions in the schools so that children can experience success in secondary education. Adequate number of trained teachers, qualitative learning and teaching materials, aids and equipment, classrooms, etc. should be provided in each and every school to facilitate successful completion of secondary education. Success is to be determined in terms of attainment of Minimum Levels of Learning which means most of the students would acquire most of the competencies.

2) Access to Education: - Access to education can be of three kinds. **Firstly, physical access**, which emphasizes that geographical distance between schools and households, is to be minimized. **Secondly, economic access**, which implies the financial capacity of households to send children to schools even when facilities are easily accessible in a geographical sense. **Thirdly, social access** which means that social stratification based on caste, class and religion has implications for access available public provisions. In countries like India various social factors come in the way of sending children to school. While the potential demand for education depends on physical access, the realized/effective household demand depends on economic and social access. In other words, existence of schooling facilities in any particular geographical area does not necessarily lead to an increase in household demand for schooling. The relative economic and social status to a large extent determines the realized household demand for education.

2.1 Issues / problems to achieve universal access in respect of secondary education:- To achieve physical , Social and economic access to secondary education we have been facing following problems/issues .

- a) Social problem :-
 - 1 conservative attitude of parents towards secondary education
 - 2. Conservative attitude towards girls education
- b) Economic problems:-
 - 1. Poverty of parents
 - 2. Less financial provision in the budget

- c) Political problems:-
 - 1. Low priority to secondary education
 - 2. Local politics in respect of opening of new school
- d) Educational problem:-
 - 1. Uninspiring methods of teaching
 - 2. Defective curriculum
- e) Geographical Problems:-
 - 1. Inaccessible areas
 - 2. Small and scattered habitations particularly in tribble and hilly areas
- f) Administrative problems:-
 - 1. Lack of suitable admission policy
 - 2. Inequality of educational opportunity

3) School Mapping Exercise for achieving goal of Universal Access: - One of the greatest challenges for educational planners and administrators has been to equalize educational opportunities for all, to provide easy access to educational facilities to all children. If all habitation / villages are to be provided with a school than the question of equality does not arise. But in real life situations we locate schools in such villages so that other habitations and villages also benefit. How do we decide on the village/ habitations where schools are to be opened so as to ensure equality of educational opportunities? The answer of this question /issue is found at the center of any discussion of SM, GIS and/or PPGIS that attempts an honest inclusion of decentralized participants at any scale.

3.1 School mapping as a planning tool: - The term school mapping seemingly implies that the exercise is confined to location of schools. This is not true. School mapping is an exercise useful to rationally allocate educational facilities of any type related to any level of education. According to available accounts, school mapping originated in France in 1963 (Caillods, 1983; Da Graça, 1998; Galabawa, Agu, & Miyazawa, 2002; Govinda, 1999). School mapping (SM) is a normative approach to the micro-planning of school locations. It is an essential planning tool to overcome possibilities of regional inequalities in the provision of educational facilities. It means that 1. SM incorporates spatial and demographic dimensions into the educational planning process. 2. Location of educational facilities depends on the norms and standards prescribed by the authorities.

SM is also used to investigate and ensure the efficient and equitable distribution of resources within and between school systems when large-scale reform or significant expansion of an educational system takes place (**Caillods,1983**). SM (particularly in developing countries) is most often used to facilitate one or more of **six functions**: 1- Create the necessary conditions for achieving universal primary and secondary education (UPE and USE), 2- Increase access for females and members of other traditionally under-represented socio-economic groups, 3- Promote the equitable distribution of educational benefits within and between different regions and populations, 4- Improve the quality of educational efforts, 5- Optimise the efficient use of existing capital, human and financial resources, and 6- Organise, coordinate and rationalise efforts at technical, vocational, and post-secondary education (Caillods, 1983; Varghese, 1997).

3.2 Major Objectives of school mapping : - SM techniques help us to identify the most appropriate locations of schools or their alternatives so that maximum no of children can be benefited from the same level of investment and to reduce regional inequalities in the educational facilities. following are the major objectives of the school mapping .

- To identify most appropriate location (Habitation or Village) for opening of new/ upgraded Secondary School.
- To identified most appropriate location (Habitation or village) to open alternatives of new school.
- To identify the location for opening of alternatives to formal school.
- To level out existing disparities in the distribution of educational facilities.
- To create equality of educational opportunities.

3.3 Micro Planning and school mapping exercise: - School mapping and micro planning are complimentary exercise but they are not the same. Objective of Micro Planning is (i)To mobilize the local community to prepare village level plan.(ii)To provide support system to the school become functional.(iii)To ensure that all eligible children from the locality attached the schools and thereby to ensure better and efficient utilization of resources already provided to a particular locality area or school. There are following differences in between micro planning exercise an school mapping exercise.

3.4 Methodology of school mapping: - School mapping involves following steps:-

- Specification of norms standards & catchment area.
 - Norms for opening of new schools-
 - Distance/Population/Difficult area
 - Norms for teacher.
- Diagnosis of exiting educational facilities.
 - Assessment of existing educational facilities in selected area or region schools.
 - Required information is useful to prepare school specific plan.
 - (i) Literacy Rate/ Enrolment Rate /Retention Rate/ Dropout Rate etc.
 - (ii) No of Teachers.
 - (iii) Teacher pupil ratio
 - (iv) Building and infrastructure facilities
 - (v) Blackboard, water, Toilet, electricity playground etc.
- Projection of future child population.
 - Assessment the number of children which is to be enrolled.
 - It is based on projection of child population in the catchment area.
 - Benefits

- (i) To know No of New Schools to be opened or other alternatives to formal education.
 - (ii) To know No of Schools to be upgraded.
 - (iii) No of teachers required.
- Deciding the location of schools.
 - Based on Norms specified by the authority.
 - SM exercise does not decide the site to construct schools. It only indicates the most appropriate habitations/ village where school are to be opened.
 - Finding appropriate sites is to be done in consultation with villagers, engineers and education authorities.
- Assessing the requirements or facilities in schools :- This implies:-
 - Assessment of requirement of facilities in new school and in existing schools.
 - This includes requirement of infrastructure facilities and teaching learning materials.
- Estimating financial resources requirement.
 - Based on the requirement of facilities cost estimates can be made and proposal can be made for funding.
- Prioritization of assessed requirement & facilities in the schools according to financial resources.
 - Based on the available budget for every year proposal can be made.

3.5 **Suggestive Steps of School Mapping:** - Following step exercises may be done for mapping of all the habitations.

Step 1

- Each and every habitation may be listed for mapping exercise
- Habitation wise population with availability of schooling facility with distance data may be collected through GIS or Manual Mapping

Step 2

- Listing of all habitations/ villages to identify served area through GIS or Manual Mapping
- The available High schools and details of school from SEMIS
- High schools and their catchment area

Step 3

- Listing of all habitations/ villages to identify un-served area through GIS or Manual Mapping
- Details of Upper primary schools located in the catchment area from DISE
- Distance with other High schools
- Distance Matrix exercise should be done.
- A list of UPS may be prepared which are eligible for upgrading into secondary level as per the state norm.

Step 4

- Actual physical verification should be done by a team block and district level officers for confirming details of Secondary schools.
- Actual physical verification should be done by a team block and district level officers for confirming details of Upper Primary Schools eligible for upgrading into secondary level.

Step 5

- Based on the final verification, prioritization may be done.
- Propose year wise existing gap in the existing secondary schools
- Propose new schools selected for opening.
