

# Mapping Primary Schools

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**T**HERE is no strictly adhered rule to determine the locations of primary schools in the rural areas of Bangladesh. Historically, most of the primary schools in the rural areas were established on land donated by the well-to-do persons of the locality. As such these schools are located one side the same village and/or other adjacent village (s). A common problem today is that primary schools are neither centrally located nor well connected by all-weather roads with the homesteads of the primary school-going children. Further, there is no readily available map showing the locations of the primary schools, homesteads of the primary school-going children, roads, linking the schools with homesteads, tubewells, high schools, etc as well as the barriers which the primary school going children have to cross such as highways, bridges, market places, bus stops, rivers, canals, beels, etc.

In order to achieve the objective of the Government's policy of Compulsory Primary Education (CPE), it would be important to obtain information on the distance between the primary school and the homesteads of the primary school-going children; and catchment areas of the primary school, etc. Information on planning variables is necessary for overall plan formulation and monitoring in respect of enrolment, attendance and completion of education cycle of the primary school-going children.

It is proposed here that the above mentioned information will be collected locally by the respective teachers of the primary schools concerned under the leadership of the head teachers with the help of the Cadastral Survey (CS)/Mouza Map(s) which are readily available at the village level. This paper illustrates how the relevant information on the distance between a school and the homesteads of the primary school-going children; and the catchment area of a primary school will be collected and presented on the respective CS/Mouza Map(s). Basically, this paper discusses the method which will be adopted to prepare the location and the catchment area/map of a primary school.

## Objectives

The primary objectives of prepar-

ing of school map are :

- to present information on the distance between a primary school and the homesteads of the school-going children on a map;
- to depict the catchment area of a primary school on a map;
- to provide relevant spatial information for effective planning and monitoring of activities relating to primary school-going children's enrolment, attendance and completion of primary education cycle;
- to indicate the zone/command areas of action of the individual teachers on map wherein they are supposed to monitor the activities relating to enrolment, attendance and completion of primary education cycle of the children;
- to find out the unserved areas of the rural areas by the existing primary schools; and,
- to familiarize the teachers of government primary schools with the tools of plan making process.

These maps will be prepared by primary school teachers who have very limited knowledge on the techniques of preparing any maps. Secondly, the materials and tools to be used for preparing the map should be easily available and easy to handle/operate those materials. The materials to be used should have authenticity, official recognition and validity. Thirdly, the method to be used must be very simple and not much technically complicated. Fourthly, the task of preparing the map should not be time-consuming and laborious.

**Collection Basic Information :** At the outset, the head teacher of the primary school concerned will collect the following basic information from records of the school and through discussion with the local knowledgeable persons :

- name of the Mouza (along with corresponding J.L number) where the primary school is located;
- plot number(s) of the land where the primary school is located; and,
- if required, name of the surrounding Mouza(s) where from the primary school-going children attend the primary school.

**Collection of Relevant Maps :** The CS/Mouza Map(s) mentioned above will be collected either from the

office of the local Sub-Registrar or well-to-do persons of the village. The scale of the CS/Mouza Map is 1 inch equal to 330 feet.

**Other Relevant Materials :** The following materials are required : (i) coloured pencils (having 12 colours), (ii) one scale of 12", (iii) one eraser, (iv) one compass, (v) one clip board, (vi) few white sheets, (vii) one blade, (viii) one small pot of glue, and (ix) one wooden pencil.

**Map Mosaic, Cuttings and Pasting :** If a primary school serves the children of more than one Mouza, the collected Mouza maps will be photocopied in two copies and pasted with one another through side cuttings of the respective Mouza maps. And ultimately, it will be a mosaic map which will be used for field work.

If a primary school serves the primary school-going children of one Mouza then the process of map mosaic is not required. The mosaic map should be prepared in two copies. One copy of the same will be used in the field for locating different land uses on the map as described below. The other one will be used for final presentation of relevant information.

**Field work :** The head teacher along with one mosaic map and other teachers of the concerned school will go to the field. At first, they will locate the plot number of the primary school on the respective mosaic Mouza map. And then start locating the uses of lands on the Map(s) using different colours for different land uses. The colour scheme for different lands use may be — red for primary school, grey for homesteads, orange for high schools, pink for madrasahs, yellow for markets, black for highways/roads, purple for railway line, blue for all types of water bodies, star mark for bridges and so on.

During the survey of locating land uses especially that of homesteads on the map, the teachers are also required to collect the following information from the respective households who have primary school-going children on separate sheets marking individual house number of the map :

- age and gender wise number of children eligible for going to primary

schools

— class and gender wise number of children enrolled in the school

— class and gender wise number of children not going to school for the last three months.

**Distance between school and homesteads :** Teachers are required to use the wooden scale to measure the distances of the homesteads of the primary school-going children from the school. This is done simply by measuring the distance between a primary school and the homesteads of the primary school-going children with the scale and converting it according to the given scale of the Mouza map.

**Catchment area of a Primary School :** The catchment area of a primary school will be demarcated on the land use the CS/mouza Map(s) by drawing a thick continuous line with red coloured pencil.

**Command Area of the Individual Teachers :** The command area of an individual teacher will be demarcated on the land use the CS/mouza Map(s) by drawing a dotted continuous line with a red coloured pencil.

**Unserved Areas by the Existing Primary Schools :** The summations of the individual catchment areas of schools will clearly show the unserved areas of the rural areas by the existing primary schools. The primary school going children of the unserved areas cannot go to schools mainly due to the distant locations of the primary schools.

This method of preparing maps, showing the locations of primary schools, homesteads of the primary school-going children; the catchment area and the command area of the individual teachers of the primary school is much simpler and easier to prepare (by the primary school teachers) compared to other method i.e., through adopting Geographical Information System (GIS) technique. The GIS technique will be complicated for the teachers to follow who have no knowledge about the computer. The GIS technique is computer-based and therefore not appropriate for our primary school teachers.

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