## The Mid-day Meal Scheme

The Mid Day Meal (MDM) scheme is an initiative that directly aimed to decrease the nutrition gaps of children especially in the pre-primary and primary age groups. It was started 'with a view to positively impact enrolment, retention and attendance and simultaneously improving nutritional levels among children' (MHRD website). In 2001, the MDM scheme became a cooked mid-day meal program 'under which every child in every government and government-aided primary school was to be served a prepared mid-day meal with a minimum of 300 calories of energy and 8-12 grams protein' (MHRD website). This was raised to 450 calories and 12 grams protein in July 2006.

In a conversation with Learning Curve, Mr. L Ramanath of Azim Premji Foundation gave us a brief account of some of the steps the Karnataka government has taken in order to make MDM program accident-proof. The Government of Karnataka (GoK) is partnering with Azim Premji Foundation (APF) in this task.

The food grains, like rice and wheat, are provided by the Food Corporation of India (FCI) at a subsidized rate to the state Governments. The food grains given are supplemented by prescribed quantity of dal, vegetables, oil, and salt. The whole idea is to provide a well-balanced meal. Occasionally, apart from the government, local panchayats and farmers contribute produce to the mid-day meal.

The modalities are well-structured. Every school has a head cook aided by an assistant, if the enrolled numbers warrant it. The Head Teacher gives the indent to the government official in charge who then organises to deliver the supplies, including micronutrients in the form of iron and Vitamin on the basis of student strength. MDM project is run by a Joint Director MDM with a team of Assistant Director of Public Instruction (ADPI). All educational functionaries support this initiative.

The MDM has three aspects – safety, nutrition and taste. The nutrition angle is taken care of by the government by prescribing norms. It is in the safety aspect of the mid-day meal that the government is focusing. Accidents are not unheard of, while contamination resulting from poor hygiene standards can result in emergencies.

This is really a huge task considering that there are 48,000 school kitchens in Karnataka alone. Reducing the number of incidents has to have a multi-pronged approach. So, a diagnostic study was conducted with twenty schools participating for us to know the As-is situation on the ground. The gap areas included presence of expired items, cooking and non-cooking items being stored together, absence of kitchen hygiene, direct serving from a large vessel and so on. The joint team of GoK and APF then went on to emphasise the importance of standardised safety and scrupulous hygiene rules. Special importance has been placed on safety in the two areas where accidents are most likely to occur - the cooking process and the serving. To counteract these, some standard operating procedures (SOP) were prepared with clearly defined roles and responsibilities. Checklists were defined for monitoring of SOP's by specific roles. Posters (more pictures, less words) were created to cater to Cooks and other functionaries. In addition, a 13-minute film on safety procedures has been made as a training resource.

The second common problem - lack of hygienic standards - has also received attention. All aspects of cooking, cleaning, storage were checked.

Processes were defined for First In First Out (FIFO) or First Expiry First Out (FEFO) in the storage aspect, a protocol was established, for example, boiling some water in an utensil before it is used. Then the milk powder which is supplied in large packets has to be stored in airtight containers after being opened in order to avoid fungal deposit. Deep cleaning of the kitchen is carried out once a month, with the shelves being emptied, cleaned and the contents replaced in order of age. Sample collection of cooked food for quality control, wearing gloves and caps, collecting the same in a sterilized container and sending the same to a testing laboratory are some more steps in the MDM process.

In all these procedures, the Head Teacher of the school, assisted by a Nodal teacher, is given the responsibility to make sure that the processes are being followed. The functionaries from the MDM team will assist to ensure we move towards 100 % compliance – Zero % accidents in all the MDM kitchen in Karnataka.

Roll out is being studied in the first two trial districts of Mandya and Kolar before GoK decides to roll it out to rest of the State.