

Happy New Year and Sankranti Greetings

2017

Dear Friends and Readers,

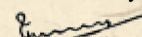
Since its inception in 1987, over the last 30 years STEM has successfully completed more than 300 prestigious assignments in many development sectors, sponsored by various State & Central govt. departments, UN organizations and other International Agencies.



This issue of reporter focuses on STEM experience in “Fluorosis Mitigation in Tamil Nadu”, sponsored by Tamil Nadu Water Supply and Drainage (TWAD) Board and funded by Japan International Cooperation Agency (JICA). We express our sincere gratitude to the TWAD Board officers and the Project Team for the successful rollout of the Fluorosis Mitigation activities in the project districts.

We from STEM family wish a Very Happy and Prosperous New Year 2017.

Your's truly



V.M. Hegde, Managing Director

INSIDE THIS ISSUE

- Fluorosis Mitigation in Tamil Nadu
- Current Projects of STEM

FLUOROSIS MITIGATION IN TAMIL NADU

A Public Health Problem

Fluorosis is a public health problem which cripples and debilitates the affected people. It affects men, women and children of all age groups. Fluorosis is caused by excess intake of fluoride through drinking water, certain food and other items and also through exposure to industrial emissions, over prolonged periods.

Prone to drought and lack of perennial water sources, has resulted in high fluoride content in ground water sources in Dharmapuri and Krishnagiri districts of Tamil Nadu. The people in these two districts are at high risk to fluorosis due to the predominant dependency on ground water for drinking.

Fluorosis manifests mainly in three forms namely
a) Dental fluorosis; b) Skeletal fluorosis and
c) Non-Skeletal fluorosis.

DENTAL FLUOROSIS



SKELETAL FLUOROSIS



Common symptoms of non-skeletal fluorosis include: anemia, excessive thirst, headache, gastro intestinal problems, polyuria etc. There is no treatment available for severe cases of skeletal fluorosis. Prevention is the best option.

HWS & FM PROJECT

Hogenakkal Water Supply and Fluorosis Mitigation (HWS&FM) Project was started to provide sustainable safe drinking water to 3 Municipalities, 17 Town Panchayaths and 6755 rural habitations in Dharmapuri and Krishnagiri districts. STEM supported the Tamil Nadu Water Supply and Drainage (TWAD) Board in implementing the Fluorosis Mitigation Component (FMC) of the HWS & FM Project over a period of five years between 2010 and 2015.

The core team of STEM comprises 2 public health specialists; one MIS Specialist; a fluoride analyst and 6 support staff including one lab technician. The team was led by a Programme Coordinator.

MANUAL IN TAMIL FOR HEALTH WORKER



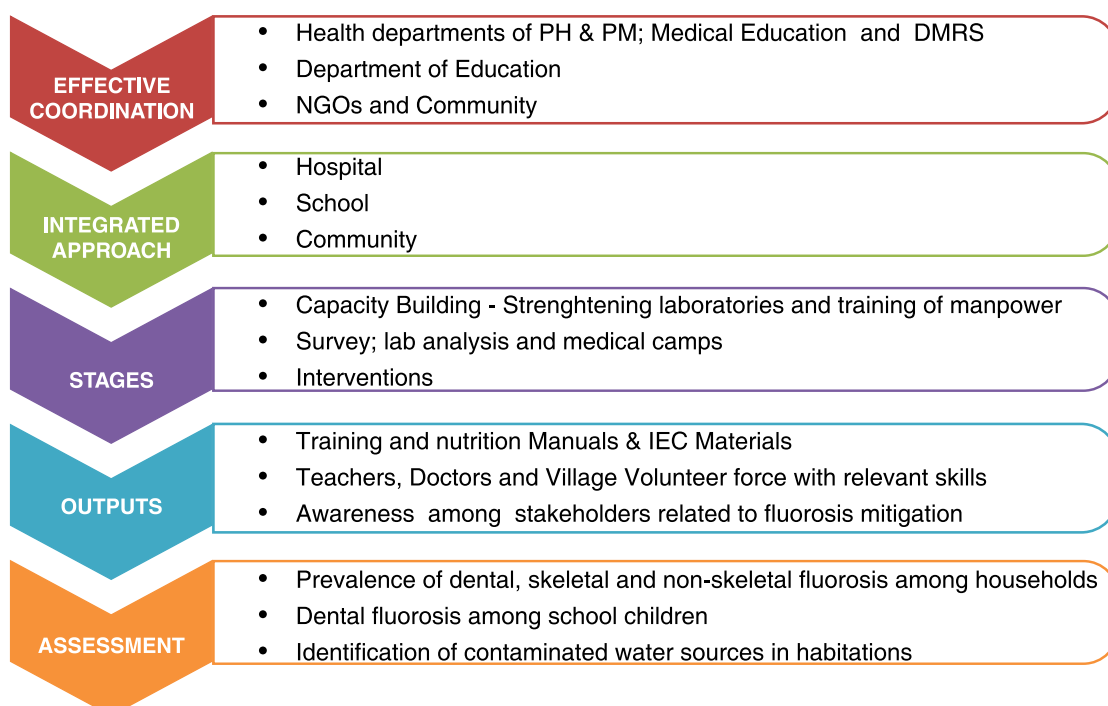
TRAINING OF DOCTORS



HOUSEHOLD SURVEY BY VILLAGE VOLUNTEER FORCE



SALIENT FEATURES OF THE PROJECT



KEY COMPONENTS

A	Human Resources Development	- Preparation of Training Manuals for Doctors, Teachers & Health Workers in English & Tamil. - Preparation of Nutrition Diet Booklet in English & Tamil. - Trained 839 doctors (Government & Private); 3785 teachers (Government & Private); 1887 Village Voluntary Force members and 418 Village Health Nurses. - Preparation of IEC (Information, Education & Communication) Materials on Fluorosis Mitigation.
B	Survey & Investigations	- School (government and private) Health Survey – 3409 Schools covering 4,24,047 students. - Household Health Survey – 3 ULBs, 17 TPs and 6755 Habitations covering 6,67,224 Households covering 26,62,285 population. - Water Quality Testing & Analysis – 1588 School Water Samples & 33,686 Community Water Samples (3 seasons). - Urine Analysis – 28,463 Samples.
C	Interventions	- Health Education & Preventive Measures - Early Diagnosis & Prompt Treatment - Disability Limitation & Rehabilitation Measures - Provision of Safe Water - Group and Individual Counselling - Fluorosis & Nutrition

USE OF FOLK MEDIA FOR CREATING AWARENESS



COLLECTING DRINKING WATER SAMPLE FROM A SCHOOL



POSTER DEVELOPED FOR HEALTH EDUCATION



Success of the Project Strategy and Approach

- EFFECTS:**
- An increase of 15% in the consumption of food items rich in calcium, vitamin D such as milk products, green leafy vegetables, fruits; usage of nutritive supplements provided and drinking water from safe sources
 - Drastic reduction in consumption of items with high fluoride content such as black tea, paan, areca nut etc.
- IMPACT:** Reduction in symptoms of non-skeletal fluorosis as evidenced by impact assessment.

CURRENT PROJECTS OF STEM

S. No.	PROJECT TITLE
1	Internal Concurrent Monitoring and Evaluation of Agriculture Technology Management Agency (ATMA) Scheme in Karnataka State during 2016-17 in the entire State (all Four Revenue Divisions).
2	Evaluation of Residential High rise Project constructed at Jakkarehonda, Belagavi district by Karnataka Housing Board.
3	Preparation of DPR for Abbanakuppe Lake Development project.
4	Preparation of DPRs for Restoration and Comprehensive Development of 4 Lakes in Bangalore (Mangamma Palya, Basapura, Sadaramangala & Bagalakunte).
5	Evaluation of Forestry Works (2009-10 to 2014-15) for Mysuru and Hassana Circles in Karnataka.
6	Needs Assessment and Preparation of Detailed Project Report (DPR) for 3 Gram Panchayats in Palakkad district in Kerala.
7	Evaluation of Ganga Kalyana Scheme from 2008-09 to 2012-13 Implemented by Karnataka Maharishi Valmiki Scheduled Tribes Development Corporation.
8	Evaluation of Ksheerbhagya Scheme of Education, Women and Child Welfare Departments and Karnataka Milk Federation.
9	Evaluation of Fodder Development Programme Implemented under SDP of Department of Animal Husbandry and Veterinary Services (2009-10 to 2012-13).
10	Third Party Evaluation of the Ganita Kalika Andolana (GKA) in Three Hyderabad Karnataka Districts – Bellary, Raichur and Koppal.

Filtering Milk Before Distributing to Children - Ksheerabhagya Scheme



Chaff Cutter Beneficiary - Fodder Development Programme



Administering Maths Test to Children- Ganitha Kalika Andolana



STEM Reporter is for private circulation only. All correspondence may be addressed to
Managing Director, STEM, #11-12, 1st Floor, BDA Complex, Koramangala, Bengaluru – 560034.

Tel: 080-25522664, 25533615 / 664 | Fax: 080-25537664

Email: stemb@vsnl.com | www.stemgroup.org

For further details and information, please contact

vmhegde@stemgroup.org / drphrao@stemgroup.org / srikumar@stemgroup.org