



*Practical science lesson at Kikuyu High school. Inset: Science lesson at Karen 'C' Primary school. SMASE has expanded to cover primary schools.*

and impact at the secondary level, JICA-MOE expanded the project on the Strengthening of Mathematics and Science Education (SMASE) in Kenya to include in-servicing training of primary school teachers (targeting 60,000 teachers teaching mathematics and science at grade 6-8) during 2009-2013 period. The project's overall goal is to upgrade capability of Kenyan youth in mathematics and science through in-service education and training (INSET) of teachers in view of meeting manpower requirements for the realization of the Kenya Vision 2030.

There was successful sensitization and training of 1,113 zonal quality assurance and standard officers (ZQASO) and teacher advisory tutors (TAC); 283 PTTCs lecturers as trainers of trainers in 2009 for the expanded, three-level cascade SMASE Project. In April 2010, 4,641 cluster trainers were trained at the 18 PTTCs, who subsequently in-serviced a total of 44,646 mathematics and science teachers across the country in August 2010. The in-servicing of teachers at cluster centres was managed by 897 TAC/ZQASO under the supervision of DQASOs. CEMASTEAs trained monitored the in-servicing activities.

At the secondary level, Centre for Mathematics Science Technology Education in Africa (CEMASTEAs/SMASE) staff organized and held regional sensitization workshops for 731 secondary school principals and district education officers at Tambachi and Egoji Teachers Training Colleges (TTCs). During the year under review, 4381

secondary mathematics and science teachers were in-serviced at various district training centres and at CEMASTEAs. At the CEMASTEAs, 258 teachers were trained on ICT integration in Education. About 5,500 teachers are targeted for this training.

The project continued training mathematics and science educators from other Sub-Saharan Africa countries. One hundred and eighty two educators from these countries were trained on ASEI/PDSI (Activity-Student-Experiment Improvisation/Plan, Do, See and Improve) and SMASE INSET System at the CEMASTEAs under the auspices of JICA in October-November, 2010. ASEI/PDSI approach is a student-centred teaching instead of the traditionally practised teacher-centred teaching method. In December, 2010, the project organized the 10th SMASE-WECSA annual conference under the theme "A Reflection on a Decade of Promoting Mathematics and Science Education in Africa". The conference was officially opened by Hon. Prof. Sam Onger, Kenya's Minister for Education. The conference was attended by 132 participants from 29 African countries and special guests from Malaysia and Japan. The 29 countries are at different stages of adapting SMASE's ASEI/PDSI approach to teaching of mathematics and science and SMASE-type of INSET system. Overall 35 African countries participate in the SMASE-WECSA association activities under the auspices of JICA and support of Kenya's Ministry of Education.

### **The Project for Capacity Building of Child Care and Protection Officers (CCPOs) in the Juvenile Justice System.**

The Record of Discussion for the project was signed between the Government of Kenya through Ministry of Gender, Children and Social Development (MGCSO) and the Government of Japan through JICA in September 2009 in the presence of all Juvenile Justice Agencies (JJAs). There are five JJAs in Kenya collaborating with JICA in this project namely the Department of Children Services, Probation and Aftercare, Prisons, Police and the Judiciary.

The purpose of the project is to establish a Training System capable of achieving "Capability Target" for CCPO working with children in need of care and protection, and children in conflict with the law. In order to achieve its purpose the project aims to achieve the following outputs:

First and foremost, the "Capability Target" for Standard CCPO needed to be established. This refers to the minimum knowledge, skills and attitudes that are required for CCPO to perform their functions effectively and therefore necessitated the assessment of training needs as well as development of the "capability target for the CCPO. It is hoped that the Quality of CCPO Training is improved through implementing and monitoring activities. In addition, the project aims at developing the management system for CCPO Training.

In summary, CCPO training consist of at least three CCPO trainings composed of three modules to be implemented during the project period and the system of revising CCPO training curriculum,

modules and manual is based on Plan-Do-See Process.

To achieve the highlighted outputs above, the following activities are being implemented:-

1. Implementing of Group Training for CCPO Trainers
2. Developing the CCPO Training Plan
3. Development and revision of CCPO Training Curriculum and Materials
4. Developing and revision of CCPO Training Monitoring and Evaluation Methodology
5. Implementation of pilot CCPO Training by CCPO Trainers
6. Monitoring and evaluation of impact of CCPO Training
7. Implementing Supervision Workshops for CCPO Trainers and immediate supervising officers
8. Implementing Sensitization Workshops for immediate supervising officers.

As at December 2010, more than 21 Trainers had undergone the Training of Trainers (TOT) and about 154 CCPO's had been trained.

Based on summative evaluation results of the CCPO trainings conducted, the CCPO participants highly value the rationale, training content and methodology of the modular CCPO training. In this regard, participants feelings about the course can be summed up in the words of one of the CCPO from Narok District, who had just finished the second CCPO training. "Before the project, JJAs were working independently without consultations. However, since the project started, JJAs at the district levels communicate with each other more freely and meet regularly to discuss relevant issues affecting children in the district".



*Children in a rehabilitation school during a cookery lesson.*