## Stories from the field 07

## Dissemination of High-quality Education through TV Lessons

- Assistance for Distance Education in Papua New Guinea



Mr. Ito visits a school to confirm the status of TV utilization and management. (Photo: Chiko Yamaoka)

Papua New Guinea in the South Pacific has a diverse landscape with mountain ranges with elevations of around 3,000 m and more than 1,500 remote islands. Located far from urban areas, these isolated regions suffer from a deficit of educational facilities and teachers, as the number of deployed teachers is far from enough. In some regions, in the upper grades of primary school, one teacher must teach all subjects, including English, mathematics, science, and social studies. There are some schools in which teachers who lack proficiency in certain subjects make errors when teaching, and other schools in which science and mathematics classes are not conducted.

As a consequence, many children gave up attending school before completing the nine-year long compulsory education course. In Papua New Guinea, though accurate statistics are not available, a 2007 survey indicates that less than 50% of all students complete their compulsory education. This has become one of the crucial issues faced by this South Pacific country.

In order to solve these educational issues, the Government of Papua New Guinea requested assistance from the Government of Japan. In response, in 1999 Japan commenced the construction of the National Education Media Centre (NEMC) in Papua New Guinea with the objective of disseminating visual-based distance education, and in 2001 it dispatched Mr. Akinori Ito, an expert from the Japan International Cooperation Agency (JICA), to provide technical assistance for the management of NEMC and for the creation of educational programs. Mr. Ito is an expert in visual-based distance education, who has experience serving as a member of the Japan Overseas Cooperation Volunteers in Papua New Guinea.

In order to improve the quality of education, Mr. Ito proposed to the Department of Education (DoE) of Papua New Guinea to create "model lesson programs," in which lessons given by teachers who are able to provide proper instruction are recorded and broadcast nationally on TV. After the model lessons are broadcast, local teachers check whether students have understood the content, and provide supplementary explanations to the broadcast.

In 2002, as part of the JICA Partnership Program (JPP),¹ Sony Corporation, a manufacturer of broadcasting equipment, developed an enabling environment for program production and provided guidance on its utilization. "Model lessons" were videotaped and broadcasted on an experimental basis, and the efficiency of the TV lesson format-based education was confirmed in 40 schools.

Teachers at schools that participated in the TV lessons gave high marks to the initiative, saying that children truly immersed



In math classes, the teacher plays and stops the DVD, adding explanations, thus proceeding with the lesson in a manner that matches the students' learning speed. (Photo: Chiko Yamaoka)

themselves in the TV lessons, or that students born and raised in the mountain areas of Papua New Guinea, who had never seen the sea, saw it for the first time on the TV screen, and that as a result of the

video broadcasts, teaching science and social studies became easier and students' understanding improved.

The DoE of Papua New Guinea highly appreciated the results of the TV lessons, and, in order to further enhance their educational effect, requested further assistance from Japan for development of teaching materials to improve the quality of TV lessons. Consequently, the Project for Enhancing Quality in Teaching through TV Program (also known as EQUITV) was commenced by JICA in 2005.

Broadcast-receiving equipment was installed in 78 schools in two provinces, and Mr. Ito and his colleagues conducted training for the operation and maintenance of the equipment, and trained local teachers on the correct way to utilize TV lessons. This is the result of his work, which Mr. Ito explains as follows.

"School timetables have been arranged to match the time of broadcast, so the most important outcome is that teachers in all areas have begun conducting their lessons strictly on time. Thanks to the TV lessons, teachers themselves have deepened their understanding of the teaching subject content and many of them are now able to conduct classes with confidence."

As a result, many students returned to school and engaged themselves in their lessons in a focused manner. Consequently, students at schools that participated in the EQUITV improved their performance, and the transition rate from primary to secondary education went up. In order to further disseminate the EQUITV nationwide, the Government of Papua New Guinea increased the number of DoE officials and its budget.

In order to expand EQUITV-based education nationwide in an effective and efficient manner, however, Papua New Guinea needs experts capable of developing a detailed plan and managing its implementation, taking into consideration the specifics of a broad range of different teachers and diversified regions. Furthermore, it needs technical experts to produce programs targeting a broader scope of school grades and subjects. To respond to these needs, in 2012 Japan launched EQUITV Phase 2.

In Phase 2 of the project, its scope was expanded to target 2,220 schools in 12 provinces, which is more than half of all the provinces in Papua New Guinea. In the case of remote islands and mountainous regions, most areas lack electricity supply. The target provinces and schools engaged themselves in proactive efforts to deal with this issue by installing power generators and solar power sources in the schools. The necessary equipment was installed in approximately 50% of all schools in the 12 target provinces, enabling children to receive TV lessons.

In the remaining 50% of the schools, preparations for installation of equipment are under way. Also, the Papua New Guinean DoE has begun formulating plans to enable schools in the ten provinces that were not targeted by Phase 2 of the project to receive model lessons via TV broadcasts.

Japan's long-standing assistance for visual-based distance education is gradually spreading throughout all regions of Papua New Guinea.

\*1 JICA Partnership Program (JPP) is one of the ODA programs in which JICA supports and jointly implements international cooperation activities for local residents in developing countries with Japanese NGOs, universities, local governments, and organizations such as public interest corporations.