

Report : APT J3 Malaysia E-Education Team Trip to Tanah Datar, Sumatera, Indonesia

13-15 June 2012

The Telecommunication Technology Committee (TTC) Japan invited Universiti Malaysia Sarawak (UNIMAS) who are working with them on the Asia Pacific Telecommunity J3 Project. The UNIMAS team was led by Dr Fitri Suraya Mohamad, and the main purpose of the visit was to attend a meeting with community leaders of Tanah Datar, Sumatra, from 13th to 15th June 2012. The key agenda of the meeting was to present and demonstrate an e-Education application (MyKLiKs) which was developed by the APT J3 Malaysia team of researchers who are from the Institute of Social Informatics and Technological Innovations, Centre of Excellence for Rural Informatics (ISITI-CoERI), UNIMAS. The E-Education application has been installed and implemented at two remote schools in Bario, the research location for the APT J3 project. Bario is located in the centre of the Kelabit Highlands in the north east of Sarawak Malaysia, very close to the international border with Indonesian Kalimantan, and 3280 feet above sea level and Kuching, the capital of the East Malaysian state of Sarawak. The distance between Bario and Kuching is approximately 690km (379 miles).

In addition, the UNIMAS team also presented an E-Health System which was developed by a research team at JAIST, Japan. The E-Health system is being used in Ulung Palang, a village located in Bario.

During the trip, the Indonesian Tanah Datar governance indicated great interest to use both applications for their own local community. The E-Education application, for instance, are useful to develop children's education in their countries. This is a good opportunity for Universiti Malaysia Sarawak (UNIMAS) to contribute towards the educational development among children of Tanah Datar, by integrating Information Communication and Technology (ICT) into the learning process. It is also an important development phase for the research team, because if the E-education application is received positively by the children of Tanah Datar, chances

of widening the scope of usage for the application to other Asian region would be substantial.

On the first day of arrival at Tanah Datar, the UNIMAS team was invited to a dinner with Mr. Daryanto Sabir, Head of the Information and Communication Relations for Kabupaten Tanah Datar, who is also the *Ketua Kaum* for the community. Also present at the dinner were Mr. Sugesti Permana and Mr. M. Isnaini Qomal from their ICT division at the same organisation. The agenda of the dinner was to discuss the agenda and expectations of the meeting the next day, and the presentation of applications during the meeting. During the dinner, Mr. Daryanto indicated that the estimated number of audience is fifty people from various local government sectors and schools.

On the 14th of June, the UNIMAS team arrived early at the meeting venue to set up equipment for the presentation. The meeting venue was set at the office of Kabupaten Tanah Datar, the central administrative office for the local government of Tanah Datar. After setting up, the UNIMAS team was brought to the residence of Mr. M. Shadiq Pasadigoe, the *Bupati* for Tanah Datar. They were later joined by Dr Hideyuki Iwata and Ms. Michelle Suganda from TTC, who arrived from Jakarta earlier in the morning. A light breakfast was served before everyone proceeded with the official meeting with Bapak Bupati.

In the meeting, which was led by TTC's Dr Hideyuki Iwata, TTC proposed an extended collaboration between them and the Tanah Datar regency, to build an ICT centre (T3) at Tanah Datar. TTC proposed a packaged solution, in that all separate research products created by various APT research teams in the Asian region, would be put together and implemented at Tanah Datar. A common solution which will house all separate applications will then become a commercial service at the T3 Management Centre in Tanah Datar. The main function of the proposed T3 is to provide vocational training for local students and also prospective employees for the T3 centre. The centre will become an ICT telecentre and a data centre where it will provide operation of share service. TTC envisioned that by building such centre will bring great benefit to the local government and its community at Tanah Datar, particularly for ICT development and training. Bapak Bupati, Mr. M. Shadiq

Pasadigoe, in turn, expressed his fullest support towards the proposed plan and hoped that TTC will proceed to initiate the project as soon as possible.

After the meeting at the official residence, Bapak Bupati proposed a site visit to one of the potential venues for the T3 centre, and a quick visit to a local school and health centre. The first destination was a local primary school. The name of the school is "*Sekolah Dasar Negeri No. 5 Batusangkar*" and local children between six to twelve years old attend school there. The team was given an opportunity to meet with the school headmistress, Madam Yelnimar and discussed issues regarding ICT facilities available at the school. Madam Yelnimar described that her school has nine teachers, teaching a total of 242 students. The school has seven classrooms and each classroom has approximately 32 students. At the time of the visit, there was no ICT facility, computer class or lab for the students to use. However, when the children were met during a classroom visit, a majority of them indicated that they already have experience in using computers, email and the Internet.

After the school visit, the team visited a local community health centre, "*Puskemas Lima Kaum I*". The clinic has also its own E-Health system which was provided by TTC Japan (from a previous research project). The system connects three other local clinics in the vicinity. The system keeps patient records, and the connectivity between the clinics enables doctors and medical health practitioners to share patients' details. Upon inspection, the existing E-Health system at the clinic is similar to the E-Health system which was developed by the JAIST Japan team. The only difference was that it did not have a feature to calculate Body Mass Index.

After the clinic visit, the team went to a training centre, which was named "*Pusat Pendidikan dan Pelatihan Pengiriman Magang ke Jepang*". The facility is a training centre for Sumatrans who wish to work in Japan, specifically in the Agricultural domain. Students of the training centre are high school graduates, and they learn the Japanese language and culture while at the facility. They also learn skills for agricultural purposes, specifically in the unique ways practiced by Japanese. While in the facility, Bapak Bupati explained in detail the spaces, training contents and skills that are provided on site. Bapak Bupati mentioned during the visit

that the facility could be considered as one of the potential sites for the proposed T3 centre.

After lunch break, the team was brought to the office of Kabupaten Tanah Datar for the official meeting with the community leaders. The session began with introductory remarks by Mr Daryanti, a welcome speech by Bapak Bupati, and an opening message by Dr Iwata, who went on to introduce the team from Japan and Malaysia. A demonstration of the fiber optic link at Tanah Datar was presented in a Skype video conferencing between Gary Loh Chee Wyai from UNIMAS and Dr Iwata. Soon after, Dr Fitri Suraya presented the E-Education that developed by the UNIMAS team. Her presentation began with a brief introduction to UNIMAS and the state of Sarawak. Next she described the features of the MyKLiKs system, the E-Education application built by the UNIMAS team for the APT J3 project. Feedback from the audience was immediately positive; there were many questions raised about the plausibility to implement the application in Tanah Datar.

Ms Farina Osman from UNIMAS continued the presentation on the E-Health application which was developed by the JAIST team in Japan. Dr Iwata assisted in the question-answer session after her presentation.

The final presentation was by Dr Iwata, which was focused on the E-Agriculture project that was developed by Ateneo University in the Philippines. The application was developed to assist fish farmers in a rural area in the country to monitor water conditions by collecting data electronically, so they can optimize their catch.

At the end of the session, a hands-on demonstration for all applications presented was opened for everyone in the audience. The hands-on demonstration session was coordinated by Ms Ng Koh Ping from UNIMAS. Feedback from the audience was mixed; some were eager to use some of the applications, others were skeptical about the value of implementing them at their location. Overall, all the parties involved expressed positive feedback to collaborate with each other, and to continue building the bond between TTC Japan, UNIMAS and the Tanah Datar regency.

News about the visit was reported in their local website:

http://www.tanahdatar.go.id/index.php?option=com_content&view=article&id=2013:ttc-dan-tanah-datar-melanjutkan-kerjasama-pengembangan-it&catid=52:berita&Itemid=77

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Figure 1: Discussion regarding ICT centre



Figure 2 : Site Visit to *Sekolah Dasar Negeri No. 5 Batusangkar*



Figure 3: One of the staff demonstrating how their existing E-Health system works at *Dinas Kesehatan Kabupaten Tanah Datar*



Figure 4: Site visit to *Pusat Pendidikan dan Pelatihan Pengiriman Magang ke Jepang*



Figure 5 : At the start of the official event at Kabupaten Bupati Tanah Datar



Figure 6: Dr Fitri Suraya received a token of appreciation from M. Shadiq Pasadigoe, Bapak Bupati of Tanah Datar regency



Figure 7: Presentation by Dr Fitri Suraya Mohamad on the E-Education System (MyKLiKs) which was developed for the APT J3 Project



Figure 8: An attentive audience which listened to all the presentations