Japan Society of Civil Engineers
International Activities Committee
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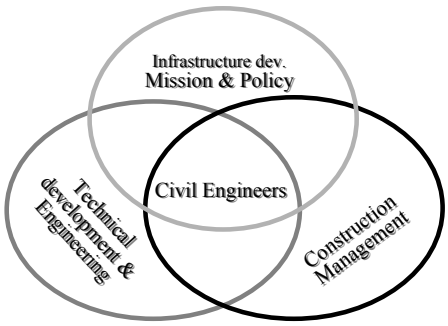
LOOKING AGAIN AT THE MISSION OF CIVIL ENGINEERS

On May 2003, JSCE issued *JSCE 2005*, which states the new plans of reforms for JSCE. Its main aim or theme is "to enrich necessary functions of JSCE in order to contribute to the society." In this reform plan, it is stated that "the targets of today's civil engineering sector is to understand the minds of citizens and the issues of the society in order to provide social infrastructure services and solutions based on these understandings."

Civil engineering activity seems to be comprised of following three functions.

① Mission and Policy: Basic policy and ideals for infrastructure development
② Technological Development & Engineering: Technological development to build necessary structures
③ Management: Integrating Mission & Policy with Technological Development.

Civil engineers are expected to handle these three functions masterfully. However, the reality of Japanese civil engineers' activities seems to be focused on "technological development and engineering." After the World War II, there was an urgent need to restore devastated social infrastructure. It is true that, then, most civil engineers had to focus all their energy to "building structures." However, their inclination toward this direction eventually caused to distort and curtail the real functions of civil engineers. It may be said that the loss of public confidence was a result of the collapse of balance among these three functions.



In order to regain public confidence in the construction industry and restore real missions of civil engineers, it is essential that we, civil engineers study the systems of society, the systems managing the society, the principles and movements of the economy and so forth.

No one would object when one says that a person is a social scientist, and therefore he/she cannot understand the technical matters of civil engineering. However, we, the civil engineers, are never allowed to say that we are civil engineers and therefore we cannot understand social matters.

Shunji KUSAYANAGI,
Chairman of the International Affairs Committee,
JSCE

The 3rd CECAR REPORT

The 3rd CECAR, organized by the Asian Civil Engineering Coordinating Council, ACECC, was held in Seoul from August 16 to 19, 2004. The conference attracted as many as 1046 participants from 17 countries, including 255 participants from Japan. The participants from industries, governments and academics exchanged the cutting-edge information on sustainable development in the Asian region.

A keynote lecture by Dr. Kim Myung Ja, Korean former minister of environment, was presented after the opening ceremony of the conference, followed by a special lecture by Prof. Yutaka Takahasi, which entitled 'Civil Engineering Picture Book Series.'

Besides a special lecture from each ACECC member, parallel sessions with 10 different technical tracks, poster sessions, two special forums, young engineers' sessions, and student essay contest, were organized. The number of papers from JSCE was 52 among the 137 papers in total, which shows JSCE's outstanding contribution to the conference. The last day of the conference was assigned to technical visits.

Between two special forums, the forum titled 'Great Mekong Sub-Region' was chaired by Prof. Kusakabe. Speakers from Laos, Cambodia, Thailand, and Vietnam reported the necessity of cooperative development of the region. Another forum, 'New Trends in Asian Industries,' chaired by Prof. Kusayanagi, gave the opportunity to present current construction trends by 4 Japanese opinion leaders.

At the presidential meeting on August 16, Prof. Morichi, President of JSCE, expressed the importance of joint international efforts in the Asian region as well as the importance of membership expansion. The summary of the

presidential meeting combined with other members' reports is under preparation and will be shown on the ACECC website.

It was also decided that the next 4th CECAR would be held in Taipei in May of 2007 hosted by CICHE (Chinese Institute of Civil and Hydraulic Engineering). The next step has just been started.

By Kenichi HORIKOSHI, Taisei Corporation

FINDING A JOB ABROAD

Looking for a job abroad? If you are, here are some tips on how to find a job abroad. First, for foreigners who are about to graduate from colleges or just looking for a job in Japan, it would be best to ask either the administrative department of your college or the "Tokyo Employment Service for Foreigners"(http://www.tfemploy.go.jp/index.html), which is one of the Public Employment Security Offices under the jurisdiction of the Ministry of Health, Labor and Welfare.

Now, for Japanese who are seeking jobs abroad, there are several ways to find a job abroad. First and easiest would be to visit either Yahoo Japan or Yahoo USA. In Yahoo Japan, there is "Jobs" under "Business." You may find what you want by Key Word Search or by Categories of Jobs in the area of "Overseas." Similar site is offered by Yahoo USA which may be better for those who are looking for a job in the USA or internationally. It should be noted that, for civil engineers, most construction companies or consultants either prefer or require a licensed engineer that is Professional Engineer (PE). You may check out what are required to be licensed as PE in the USA at "Japan Technology Transfer Association" (JTTAS, http://www.jttas.or.jp/). PE is also useful for finding a job at International organizations. International organizations often have vacancies for civil engineers. For example, the United Nations Development Program (UNDP, http://www.undp.org/) lists job openings at "Jobs." The Organization for Economic Co-operation and Development (OECD, http://www.oecd.org/home/) also offers similar sites.

If you rather want to teach at universities, say in the USA, you may try the websites of the universities you are interested. They certainly offer "Employment" sections in which they list current vacancies. For example, as of July 20, 2004, the Department of Civil and Environmental Engineering at Stanford University (http://cee.stanford.edu/faopps/) invites applications for a tenure line faculty position at the Assistant Professor or untenured Associate Professor level focusing on Sustainable Development of Buildings and Infrastructure. Do you want to try?

By Hiroshi SUDA, Obayashi Corporation

The 6th Int'l Summer Symposium

The Sixth International Summer Symposium organized by the International Activities Committee of JSCE (Chair: Prof. Shunji Kusayanagi) was held at Saitama University on 31 July 2004. The Summer Symposium is held annually so as to provide an opportunity to exchange information and ideas on various aspects of civil engineering among international and Japanese students and engineers. Its objective is also to promote international exchange and mutual understanding between international communities and Japanese students and engineers. The Summer Symposium started in 1999 and has had a high reputation as a valuable opportunity for exchanges among students and engineers in English. The Sixth Summer Symposium was partially funded by the International Scientific Exchange Fund, JSCE.

144 people attended the event (84 international students / engineers & 60 Japanese). Keynote lectures were given by Dr. Chi-Tso Chang from Sinotech Engineering Consultants, Ltd. (Taiwan) entitled "Tunneling in loosely cemented sand layer/stiff clay – Lantan Tunnel" and by Prof. Kusayanagi, entitled "Looking again at the mission of civil engineering and civil engineers in Japan." There were a total of 90 technical presentations from 7 areas in civil engineering. The symposium was brought to a close with the Get-Acquainted Reception where there were lively and friendly exchanges between the participants.

The "Certificate of Excellence" was awarded during this reception to 14 speakers for their outstanding papers and presentations. The award winners are: Ryosuke Tanino (Saitama University), Dionysius M. Siringoringo (University of Tokyo), Rabin Tuladhar (Saitama University), Muhammad Waheed Sarwar (University of Tokyo), Phung Dang Hieu (Saitama University), Mahadevan Pathmathevan (University of Tokyo), Manuel Builes (University of Tokyo), Katsuyuki Ichiba (Saitama University), Kali Prasad Nepal (Tokyo Institute of Technology), Tuenjai Fukuda (Chuo University), Kamal Babu Adhikary (Saitama University), Ha Minh (Saitama University), Bilal Bakht (Saitama University), Sunethra Kanthi Gunathilake (University of Peradeniya). The Symposium closed with a promise to meet again at the Seventh International Summer Symposium to be held next year.

By Yasunao MATSUMOTO, Saitama

University

Afghan Reconstruction
- Reporting from Hazy Kandahar -

In keeping with the resolution made at the International Conference on Reconstruction Assistance to Afghanistan (Tokyo, Jan. 2002), the first full-scale development assistance from Japan began in Kabul in April 2002, followed by Kandahar in September 2002.

Kandahar City is a trading crossroad between Afghan's capital city of Kabul, Iran and Pakistan and it is located in the southeastern region of the country. Dust from the desert and unpaved roads makes the city look hazy all day long.

A part of the assistance consisted of improving the 8.4km unpaved main road that runs east-west of the city. This "main road" had widths of 16m to 26m with partial gutters. The road had been important for the industry and for people's lives. With no alternative route, the construction was carried out while securing passages for all-large trucks, cars, bicycles and people.

We hired interpreters during the construction activities. Their skill was at the high-school level at best. And for most of them, it was the first livelihood they have acquired. In the beginning, both sides were full of suspicions; the interpreters were worried whether they will get paid, we were concerned whether they could do their job. Their lack of experience presented some challenges initially in that they would express their own opinions instead of explaining what was actually said, and would even persist that they were right. However, after a few months, they seemed more relaxed. In the beginning, they could not even comprehend the simplest of jokes. I realized then they had been too desperate to survive that they had forgotten to relax and have a few laughs, and I felt as though I witnessed another scar of the war that lasted over two decades.

Kandahar is an extremely conservative region where a complex love-hate relationship exists even among the local Pashtuns. Since the local contractors were willing to hire laborers only through relatives and their local community, even though there were many unemployed in town and a great number of returnees in the outskirts, we experienced a shortage of hands. I wondered if this strong distrust of outsiders was the result of the long history of turmoil.

There was no construction work to be had anywhere in Kandahar for a long time. Contractors that approached us were mainly returnees from Pakistan with few experiences during the last decades. The construction started with a total lack of equipment and most of the raw materials were not available locally. And so there was no choice but for the local workers to begin the work solely by hand. At that time in Kandahar, the U.N. and other international NGOs had not yet provided full-scale assistance except for small-scale humanitarian efforts. Therefore, our construction activities generated high hopes that, finally, something good is going to happen. Although there was some grumbling over the slow pace of the work, which was entirely carried out by manual labor, and the difficulties and inconvenience experienced by the residents or shoppers, the expectation that this is just the beginning of more good things to come saved us from more harsh complaints.

There was no testing equipment for construction in Kandahar; therefore, we had only our experiences in similar work overseas to rely on over the quality control. Later, we brought a manual compression test machine from Pakistan, which did more than what it was intended for. The testing and the machine were something entirely new to local engineers; it served as a stimulus to make them more interested and motivated to improve the work quality.

When we started the construction, there were no commercial banks in Afghanistan. We had to bring cash worth several hundred thousands of US dollars from Japan until money transfer to the Afghan Central Bank in Kabul became possible in Nov. 2002. Thus, we gathered the contractors without bank accounts to Kabul every month to hand them the pay, which sometimes amounted to 500 thousand dollars. To make things worse, the central bank could not prepare the entire amount in $100 bills and so had heaps of money in $5's, $10's and even $1's piled up on the desk to rival scenes from gangster movies.

Soon after the construction began in early December 2002, Ramadan began. And after almost 2 months of holiday, in April we faced another difficulty: the sand storm. In worst cases, visibility was lost few meters ahead. Once the storm has passed, the construction seemed to make progress. But soon after, in July, the temperature during the day neared 50º Celsius and our work was limited to the morning hours.

Despite all the difficulties, the construction was completed in September 2003. It took 9 months to complete what would have taken 5 months in a regional city in Japan. However, we do feel proud of our achievement, considering that we embarked on this project one year ago with no prior information whatsoever.

At present, the road is used extensively to the point where traffic is congested. To the visitors, Kandahar might still seem a hazy town. But the fact is that the amount of dust dramatically decreased after the road paving (even we were surprised), and we are certain that the residents have noticed the difference.

The reconstruction work continues to this day. Our team is still in Kandahar building schools and working on new projects, in certitude that the city will one day become an oasis once more.

By Shozo KAWASAKI,
Pacific Consultants International

A Professional Walk through Uncharted Waters of Japan

V. ANBUMOZHI
School of Frontier Sciences
University of Tokyo

I am from India and got my first degree there. Prior to joining the PhD program in Agricultural-Civil Engineering at the University of Tokyo in October 1992, I had lived in Thailand for three years working for my Masters degree at the Asian Institute of Technology. Since my advisors there were from Japan, the process of Japanese knowledge transfer had impacts on me even before coming to Japan.

I worked hard for my doctoral studies. The professors and students of the laboratory were kind, generous and resourceful and helped me a lot both professionally and personally. Research and education in Japan are some sorts of self-study. The process undertaken with team spirit and the knowledge transfer takes place through intensive interactions with laboratory members. During those days, I also acquired the cultural awareness and sensitivity needed to interact successfully both inside and outside the university.

In Asia and around the world, Japan is known for creating a high productive system of modern technologies with traditional cultural values ingrained in its management. I benefited from it when I joined Pacific Consultants International in 1996 to work as an Engineer. All of my senior colleagues were so generous in imparting their vast knowledge, sharing resources and international experience to sharpen my professional expertise. My three years stint there had also improved my Japanese language skills greatly. In addition to ones' professional knowledge and talents, in Japan, language skills help any foreigner to live and work more comfortably as well as to qualify himself for suitably undertaking additional responsibilities when demands arise.

In 1999, I rejoined the University of Tokyo as a faculty member where all of my colleagues are passionate about internationalization and its global benefits. How ever, I came to academia from development business where I observed – in Japan, both communities and the policy makers are devoted to the power of knowledge and learning from one another, which are critical to achieve successful knowledge/technology transfer. During these years, I became a strong believer of working philosophy that we can best build human capacity by creating enabling environment in which local knowledge is allowed to flourish and is fused with international knowledge and where people learn from one another as they also innovate themselves. Are Japanese academia, professional societies and business communities ready for it? How are the contributions by international students or expatriate professionals valued?

One hundred years ago, USA had interesting parallels to Japan. America on that day and today's Japan are in dire socio-economic straits of globalization. Increased flow of overseas students and professionals to support integrated economic activities become unavoidable. In those days of uncertainty, the world, from the American perspective was a place of promise, but at the same time a place of risky adventures. In my observation, today's Japan faces similar flexibility. Japan frets over the consequences of integration and the value of the contributions of foreigners. There may be some early doubts about the impact and power of integration and internationalization process but those doubts can be erased by the proof of profitability that American Society of Civil Engineers (ASCE) now enjoys. American academia and business now accept international personalities as integral parts of their system. Openness and international character of current knowledge transfer challenges the national boundaries. With ready access to information, individuals, professional societies and business community are empowered to make choices unencumbered by the current powers. Never before had national identities meant so little. Academia or businesses are no longer Japanese, American, British, Chinese, German, or Indian. They are international societies/companies with trans-national researchers/employees and global students/clients. So, what JSCE should do in this regard and how Japanese and foreign knowledge is to be integrated to inform actions and influence global changes is an open question.

Publications

ARTICLES (From June 2004 to August 2004)

Recommendations for Design and Construction of Concrete Structures Using Electric Arc Furnace Oxidizing Slag Aggregate, JSCE, July 2004, Pages 53, Price: JPY2, 100-, ISBN4-8106-0478-0 C3051

Concrete Library International No. 43, 2004.06, JSCE, June 2004, CD-ROM, Price: JPY3,150-, ISSN1347-2119

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