'an international conference to work out a political solution to the conflict. During their talks, Dr. MacGuigan reaffirmed Canadian support for the conference and for the ASEAN countries in their attempt to find a peaceful solution to the Kampuchean question.

Canada has contributed more than $20 million to UN programs which have provided humanitarian assistance to Kampucheans in both Kampuchea and Thailand as well as to persons displaced by the refugee influx into Thailand. The Thai foreign minister expressed his gratitude for Canadian efforts in accepting and assisting Southeast Asian refugees and said he hoped Canada would continue to offer such assistance.

In addition to the Kampuchean question, the two ministers discussed the question of increased Canadian bilateral economic assistance for Thailand. While in Ottawa Mr. Siddhi also held talks with the Department of Employment and Immigration and the Canadian International Development Agency (CIDA).

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The Canadian Embassy announced recently that it has given financial assistance to the Thai Department of Education for two projects under the the embassy's Mission Administered Fund (MAF) program.

The first grant is to be provided to Fakkwan Wittayakhom School, Phayao province, for the purchase of four sows, their feed and housing to commence a swine production project. The school will purchase the sows to be raised and bred at the school with the assistance of the Fakkwan Agricultural Extension Station. The male piglets and those females unsuitable for breeding will be sold to finance the breeding operation, the cultivation of hog feed and to expand the school's agricultural program.

Under the Department of Education's Community Secondary Schools Project about 20 families will received training in the care and production of swine and female pigs with which to commence their own herd. Each family will eventually return two piglets to the school, one to go to another family and one to market in order to make the project financially self-sustaining.

Meanwhile, at Huey Pheung Community Secondary School near Khon Kaen students and adults have developed a fish-raising project. The Canadian Embassy will provide funds for the purchase of fish stock, nets, pipes and culverts. With these materials the villagers, with the assistance of the local fisheries officer, will develop their own holding ponds. It is expected that sufficient fish can be raised to improve the villagers' diet and earn enough income to restock the ponds on a continuing basis.

Both projects are under the supervision of the Community Schools Project of the General Education Directorate. Director-General of the Department of General Education, Mr. Suradej Visessurakarn, and the Deputy Director of the Office of Special Projects, Mr. Sawat Udompoch, recently accepted cheques from Canadian Ambassador Fred Bild to establish the two projects. Accompanying the senior Thai officials was Dr. Leslie Gue, an expert of community school development at the University of Alberta, Canada, who is currently working with the Thai Department of Education.

The Canadian Computer Scene

UTLAS – the Atlas of Cataloguers

WHEN MARUZEN, Japan's largest importer of foreign publications, set out to find the best computerized library system in the United States, the search ended in Canada. And when the New York Public Library decided to catalogue its immense collection by computer, it also turned to Canada.

The drawing card was the University of Toronto Library Automation Systems (UTLAS) which, after spending 17 years automating 70 per cent of Canada's libraries coast to coast, now ranks as the second-largest such system in the world.

The contracts from Japan and New York represent sales of $1 million to $2 million and may only be the beginning for UTLAS in the export market. Requests have arrived from nine other large U.S. research libraries, along with serious inquiries from Europe, South America and even Peking.

As well as offering bread-and-butter products such as cards and microfilm catalogues, UTLAS had the foresight to develop diverse services, many of which will come into play through the Japanese contract. Data transmission via telephone cables will fully automate Maruzen's overseas book-ordering department, which serves most of Japan's 3,700 libraries. Ten of those libraries, in turn, will be connected by computer terminal to the Toronto data base (which contained 5.6 million unique entries at last count), enabling them to use UTLAS cataloguing services.

Eventually, services will be offered in Japanese, a challenge to any North American computer, but one that UTLAS –long bilingual in French and English, and soon to handle Hebrew and Cyrillic scripts in the New York project – is prepared to meet.

Maruzen director Yoshimasa Shimooka says the company chose UTLAS because it is a total, comprehensive system. Its services and products are much more than it ever expected to find.

Mastering Arabic for the Arabs

THE ARABIC-SPEAKING countries of the world are well on the way towards an Arabic computer, thanks to Syed Hyder, a computer science professor at the University of Montreal in Canada.

Through 10 years of effort to preserve Arabic's usage in a technologically changing world, Prof. Hyder discovered that there were groups of Arabic letter shapes whose linkages with other letters could be compressed by a computer algorithm (numerical formula).

While usually associated only with Arabic-speaking peoples, Arabic script is used in writing 51 non-Arab languages and dialects spoken by an estimated 550 million people in Iran and in parts of India, Pakistan, and China.

The previous solution to the problem 'of either' typewriter- or computer-generated Arabic was to truncate the language. The result was an abbreviated and unpleasing Arabic. While it was legible to the Arabs, its unnatural form created cultural antogonisms of which many non-Arabs would not even be aware.

The Hyder algorithm is written onto a computer chip and inserted into a typewriter, the disc typing unit of which contains all the forms of the Arabic letters. The computerized linguistic memory takes over at the touch of the typewriter and decides in milliseconds what letter forms are needed. Prof Hyder, in conjunction with the Quebec manufacturer Comterm, has already sold