

Assistance to Ethiopia

Canada is providing \$250 000 to the League of Red Cross Societies to assist victims of the current drought-related disaster in Ethiopia. The funds will be made available through the Canadian International Development Agency (CIDA).

The situation in Ethiopia has worsened over the past year and there are currently an estimated 5.2 million people affected by the drought with a further 2.2 million people displaced. Canada's aid will help to provide food for vulnerable target groups — children, pregnant and lactating mothers and the aged — and will expand health services for the general population.

The plan of action drawn up by the Ethiopian Red Cross Society will mainly benefit victims in the Korem, Kobo and Alamata areas of northern Wollo, but funds will also be used for short-term actions in other provinces.

Mitel-China phone contract

Mitel corporation of Kanata, Ontario, recently signed a \$1.8-million (US) contract to produce telephone systems in the People's Republic of China. This is Mitel's first contract in the Chinese market, and it is expected to lead to future business.

"The potential market in China for telecommunications equipment is extremely large," said vice-president and general manager of Mitel Asia Pacific Region, Bernie Watts. "There are only three telephones per 1 000 Chinese. In North America, there are over 700 telephones per 1 000 people. Mitel sees this venture as the beginning of a long and successful relationship for both parties," he said.

Under the agreement with the Ministry of Chinese Electronics Industry that runs until March 1985, Mitel will provide technical and marketing support and supply subassemblies for the production of its SX-200 private branch exchange telephone system. The ministry's computer industry branch will produce the switch at the Ai Hua Electronics Company in Shenzhen and Peking Wire Communication Company in Beijing (formerly Peking).

Mitel is training some of the Chinese workers in the company's Hong Kong office and will send staff to the Chinese plants. The subassemblies will be exported to China and other components manufactured there. The SX-200 switches produced will be for the Chinese domestic market.

Volcanic vents teem with life off British Columbia coast

A team of Canadian ocean researchers returned in triumph recently after discovering teeming life around volcanic openings as deep as two kilometres under the surface of the Pacific Ocean.

Water gushing from vents under the ocean floor, only 200 kilometres west of Vancouver Island, is hot enough to explode a fish that blunders too close.

The vents in an undersea mountain range called Explorer Ridge act like percolators, bringing up large quantities of minerals and supporting a fantastic variety of sea creatures, the crew of the Department of Fisheries and Oceans research ship *Pandora* reported.

"We found extensive areas of hydrothermal vents. There was a whole area we called Magic Mountain, with spires and chimneys almost four metres high," said chief scientist Verena Tunnicliffe, a biologist from the University of Victoria.

There were very hot volcanic openings whose water poured out at 306 degrees Celsius and cooler vents blowing out billows of grey smoke. Several new species of worms, snails, and spider-like creatures were plucked from the chimneys being formed by the vents.

A mechanical claw on the front of the three-man, mini-submarine *Pisces IV* brought samples of worms, crabs and spiders to the surface, many of them still alive. They will be studied by biologists at the University of Victoria.

Forests of tube worms that look like white soda straws with pinkish red fans on top grow over a metre long on the vents. They

are packed with bacteria that eat sulphur in the water and nourish the worms. A sea crab whose legs measure a metre and a half wide was also captured.

New species discovered in the dives included some arachnids, thumb-size spiders related to the spiders found on land, as well as snails and a variety of slithery red and brown worms.

The vent zones are the equivalent of a series of undersea islands "in the middle of nowhere", Dr. Tunnicliffe said. Sunlight never reaches the bottom at these depths, and the water is thick with sulphur and other minerals that would be toxic to ordinary marine life. But the animals at thermal vents have learned to adapt to the hostile conditions.

"The animal communities are larger than we ever anticipated. It will be interesting to find out how these animals adapt. We will get a better idea of how animals can adapt to stressed environments and pollution," Dr. Tunnicliffe said.

The 306-degree water was the hottest ever found in northern waters. "A fish that swam in front of us just exploded," said Tim Juniper, an ocean ecologist with the Institute for Ocean Sciences in Victoria. "The fish hit 300-degree water, expanded and just burst like a balloon."

In addition to sea life, the scientists broke off large chunks of the volcanic chimneys for mineral analysis. The vents are nature's way of concentrating metals such as cobalt, nickel, iron, silver and zinc. Many of the rich ore deposits in Northern Ontario may have formed originally in vents at the bottom of an ancient sea.



Canadian ocean researchers aboard the mini-submarine *Pisces IV*.