Power study for Ethiopia

Ethiopia's Minister of Mines and Energy Tekezeshewa Aytenfisu (right) *receives a copy of the preliminary study prepared by Acres International Limited of Canada from Canada's Ambassador to Socialist Ethiopia Marc C. Lemieux. The study is on damming the Aleltu River, a tributary of the Blue Nile, for the production of electricity. Mr. Tekezeshewa said that when the Aleltu power plant is completed, the power potential of Ethiopia will be tripled.*

Canada's oldest village

A Parks Canada dig near Banff, Alberta, which was led by archaeologist Daryl Fedje during the summer of 1984, has unearthed remains of a circular dwelling, dated by radiocarbon to 11 000 years old.

The dwelling was constructed soon after the last Ice Age, when Alberta had an estimated population of 2 000 to 5 000 and when such creatures as woolly mammoths, giant bison and two-metre long beavers roamed the area.

The 3.2-metre-wide dwelling with a hearth in the centre, is thought to be the oldest structure ever found in Canada, and among the oldest in the Americas. Scientists are hopeful the discovery will lead to the uncovering of the oldest village in Canada.

Jack Brink, senior archaeologist with the Archaeological Survey of Alberta, said he knew of nothing to compare with the site in Canada. He added that "he was not sure he knew of anything of that age in the United States either".

Inside the structure were stone tools and chips of stone indicating that tools were fashioned there. "My feeling is if there's one structure, it's highly likely there are several more," said Jack Brink. He added that the prehistoric peoples who inhabited the dwelling probably travelled in groups of 30 to 50.

Guelph-Indonesia rural development link

The University of Guelph in Guelph, Ontario, and the Canadian International Development Agency (CIDA) have signed an $11.1-million contract as part of a $42.2-million rural development project on the Indonesian island of Sulawesi.

The five-year project, jointly sponsored by Indonesia and Canada, will involve a six-member University of Guelph team and many short-term advisers working closely with Indonesian officials at district, provincial and national levels. It is the university's largest ever overseas project and one of the biggest CIDA contracts that a Canadian university has held.

The main object of the undertaking is to strengthen Indonesian government planning and development agencies at all levels. This will include not only design of projects and programs but monitoring and evaluation.

In addition to planning in such areas as irrigation, agricultural extension, health, nutrition and fisheries, the project will provide funding for a number of these activities. The six Canadian advisers and a number of short-term people will also prepare and carry out a five-year training program for planning and development staff.

The island of Sulawesi is a mountainous region roughly twice the size of Newfoundland, characterized by isolated settlements and weak local economies. CIDA became involved in the island in a preliminary regional development study in 1976. The current project involves the southern two provinces where the seven million population live on incomes only 70 per cent of the national average.

Project director is Harry Cummings, a professor in the university's schools of rural planning and development and agricultural economics and extension education.

Unique ocean-freighter model to test stress

A model ship that is segmented into 12 parts to allow for stress analysis throughout the entire structure, will be used in a study of the effects of Arctic ice on ocean-going freighters.

Arctec Canada Limited of Kanata, Ontario, designers of the model, will conduct the tests for Transport Canada in their Ottawa facilities, which include a 30- by 50-metre water tank where scale models of ships are tested on the effects of various build-ups of ice.

Arctec's president Ian Glen said the project using a test vessel segmented into 12 parts is the first of its kind. "Most scale-model test ships are rigid allowing only propulsion and impact of the ship on the ice to be examined," he said. The segmented design will allow for the examination of the elasticity of the vessel, which is how most ships absorb the impact of ice.

The 12 segments are held together by load-measuring devices which detail the forces generated with the model's impact with the ice. Variables such as hull thickness, structural support and the design of the model can be altered during the study.

Mr. Glen said scale testing is preferred as the ship's impact on the ice can be measured while operating in the controlled environment and allows control over all variables.

Arctec's 12-segment model test vessel used to study effects of ice on ocean-going freighters.