

AGRICULTURE — A RENEWABLE RESOURCE INDUSTRY

by Dan Kupiszewski

Lately, increasing attention has been directed towards the development of agriculture in Alaska. Factors leading to the increased attention include; pending world food shortages, higher prices for agricultural output, state government emphasis on developing industries based on renewable resources, citizen proposals for development of major agricultural projects, a loosening of economic constraints, a need for alternative job opportunities not associated with boom and bust developments, an increased money supply in Alaska, and a search for security through local food production.

It appears that a massive potential exists for agricultural development in the state. Alaska has 20 million acres of land suitable for agricultural development according to the U.S. Soil Conservation Service, making Alaska one of the few places in the world with such vast undeveloped agricultural land. Some of the land is already in close proximity to developed areas. For instance, 264,000 acres of Class 2, 3 & 4 lands have been identified in the Delta—Clearwater area around Delta Junction. In the Totchahet area near the city of Nenana, which lies on the Parks Highway, the Alaska Railroad and the navigable Tanana River, 200,000 acres have been surveyed so far, of which one half have agricultural potential. More of the land in the Totchahet area is to be surveyed in the future.

The development of Alaska's land could fill some of the needs of Alaskan consumers, in addition to supplying markets in the Northwestern U.S. and countries along the Pacific Rim. As native health and populations increase, village economies may outgrow their traditional way of life based on subsistence hunting and fishing, and agriculture could fill the gap and also provide jobs near the village and thus lower the very high unemployment rates these areas have had.

One source (Burton 1975) has estimated that agriculture in Alaska appears to have definite possibilities of expanding to more than 55,000 jobs and a farm product in excess of \$4.0 billion a year.

The private and public sectors have become

increasingly active in investigating the feasibility of agriculture. Land availability, state financing and support of large scale farming is being carefully evaluated by the Division of Natural Resources. For example, the Delta Plan would involve 64,000 acres of land south of Delta for barley production with the state financing the clearing and breaking of the land. State costs under the plan would be recouped by leasing the land to farmers for a 5 year lease period and then offering a purchase option. The North Pole refinery will be producing diesel fuel in it's first stage of operation and probably gasoline in 1979. This new facility will assure lower prices and a steady supply of fuel and will exhaust steam at a rate of 200,000 to 350,000 pounds an hour at an average temperature of 600 degrees F. The waste heat from the North Pole refinery and from the Pump Stations on the trans-Alaska Pipeline will provide a source of heat to dry grain and serve as an energy source in slaughter plants, feed lots, dairy operations, poultry operations, greenhouses and soil warming. The waste heat from one pump station is enormous. At start-up, it is estimated that pump station 9 will produce 480 million BTU per hour (475 degrees F.) of waste heat. This amount of heat can dry 2,000 bushels of grain per hour.

Other factors favorable to agriculture include the surplus heavy equipment that will soon be released from Alyeska which could be used locally and by native villages for agricultural pursuits. On the labor front, the high unemployment in Alaska, 16.2 percent in Fairbanks last month, has created a willingness among workers to accept lower wages than during the height of the pipeline according to the Job Service offices of the Employment Security Division.

Looking ahead, two major projects whose fate is presently undecided could also significantly ease economic constraints. Either the El Paso or Alcan gas line proposals would run near agricultural areas where gas could be used to produce fertilizer and serve as a source of energy. The second project is a proposal by the Fairbanks Industrial Development Corporation for an extension of the Alaska Railroad from Fairbanks to Delta Junction. The railroad, in

addition to providing 1,600 new jobs would enable large movements of farm equipment and supplies into the Delta—Clearwater area and provide a backhaul for grain, pork, beef, fertilizer and other foodstuffs to other parts of Alaska.

If one fifth of the Delta, Nenana and Salcha area of the Tanana Valley (approximately 100,000 acres) were developed, the employment impact would be 2,000 full-time employed persons according to Ray Morgan, Community Development Specialist at the Cooperative Extension Service University of Alaska. The 2,000 jobs assume that barley or hay would be produced and then used as a feeder grain to produce pork or beef in Alaska. If 600 pounds of retail pork per acre per annum were produced, 100,000 acres could produce 60 million pounds of pork per year. With 5,832,000 pounds of pork shipped into the state in 1972, Alaskan output could capture a share of this local market and be an exporter of over 50 million pounds of pork. If beef were produced instead, the same acreage would yield 16,200,000 pounds a year. This compares to 35,101,000 pounds of beef imported to Alaska in 1975. Morgan estimates a beef program would keep more than \$16,000,000 a year in Alaska while a pork program would yield \$10,000,000.

Although agriculture in Alaska has tremendous potential and many factors affecting its destiny have improved, a close scrutiny of the environmental, social, cultural, and economic considerations by interested parties will no doubt determine the commitments for developing this renewable resource.

ALASKA'S LABOR MARKET IN FEBRUARY

Employment and Unemployment: The number of unemployed workers in Alaska continued to increase during the month of February. Notwithstanding the current number of unemployed in Alaska, a positive trend is now beginning to develop as the rate of decline in Alaska's civilian labor force is now beginning to slow down. This may have been caused by the expectations of workers who are now more hopeful of finding new employment and are staying in Alaska rather than leaving for the lower 48. Unfortunately, as many unemployed workers have decided to remain in the state, unemployment is currently reaching record levels.

Mining: As is typical for this time of the year, employment in the oil industry continued to expand during the month of February. Mining activity other

than oil, however, remained inactive due to frozen winter conditions.

Construction: The tremendous drop in employment over the past few months began to subside during the month of February. Most major layoffs have now occurred, and in some cases rehiring is beginning to take place.

Manufacturing: The abnormally warm winter this year again was the primary cause for unseasonably high employment in the manufacturing industry. During the month of February several logging companies were already beginning to mobilize their operations. The lack of significant snow accumulations has enabled several logging firms to commence operations much earlier than normal.

Employment gains also were experienced in the food processing industry. A larger than expected shellfish catch made it necessary for several canneries to hire additional workers.

Transportation, Communication & Utilities: Employment in this industry remained unchanged from the previous month. Warmer than normal weather and a relatively stable level of economic activity have helped maintain employment in this industry.

Trade: Employment in the trade industry continued to decline during the month of February. It should be pointed out that the trade industry historically has experienced a decline in employment during the months of January and February. If employment in the trade industry follows normal trends, employment should begin to increase during the month of March.

Finance, Insurance, and Real Estate: The finance industry experienced no significant change in employment from January to February.

Services & Miscellaneous: Employment in the service industry rose moderately during the month of February. Employment gains were generally in the hotel, health and personal services sectors, however, employment in business services continued to decline.

Government: Government employment increased slightly during the month of February, due in large part to growth in local government.

Private IUR: Alaska's insured unemployment rate