Because of rising food prices, pollock, a bottom fish found in abundance off Alaska's coast, appears destined to grow in importance as a substitute for meat in the American diet. The fish presently are caught and processed by the Japanese and South Koreans and then exported to the United States. Although domestic consumption is still small, it has risen rapidly during the last three years. According to Japanese sources (Hokkai Suisan, January 8, 1973) 1972 production of Alaska pollock fillets from the Japanese Island of Hokkaido came to 12,000 metric tons, a twelve fold increase from 1969's figure. Roughly 90 percent of this production went to the U. S. In addition to this land based production, Japanese factory ships operating off Alaska's coast in the eastern Bering Sea have processed substantial quantities of the fish. For example during 1972, the Nihon Suisan mothership Mineshima Maru alone processed and exported to the U.S. in frozen form some 5.000 metric tons of the bottom fish.

While the Japanese complain of some problems such as difficulties in planning production due to lack of information on market demand in the U. S. for pollock fillets, processing of the bottom fish has proven sufficiently lucrative to encourage them to increase their utilization of the species through a joint venture agreement with South Korea. To this end, two Japanese companies are building processing facilities and a cold storage to process pollock from Alaska waters at a site near the Korean coastal city of Pusan. The fish to be processed will be provided by the Koreans, presumably catches from their growing distant water fishing fleet. The plant's production will be exported to the United States.

As noted above, the level of pollock exports to the United States though as yet small has grown, and given the upward price trend of other food stuffs, should continue to grow. With it will come an increase in the harvest of ground fish stocks off Alaska's coast by both the Japanese and Koreans. South Korea is planning to send its largest factory trawler to the Bering Sea to process Alaska pollock. Korea has also recently announced plans to expand her distant water fishing fleet by 69 large modern vessels at a capital outlay of around \$51 million. While not all of these additional fishing vessels will be utilized in Alaskan waters, it is reasonable to assume that those which are will make a significant addition to Japan's already formidable presence off Alaska's Coasts.

All of this leaves the United States and Alaska faced with three basic problems. First, for the country as whole, increased imports of pollock fillets from Japan and Korea will compound the problems stemming from the U. S. trade deficit. Secondly, harvest and processing of Eastern Bering Sea ground fish stocks by foreign interests deprives the State of jobs that would otherwise be created if Alaskans were to be engaged in these activities. Admittedly, given the fact that this type of processing must be highly automated, the loss of employment may not be that significant. Nonetheless, with unemployment as high as it is in some areas of rural Alaska, the additional employment that could be provided by such activities would be extremely welcome.

Thirdly, there exists a problem of controlling the harvest of pollock at a sustained yield level. Currently the fishery is not regulated, and while pollock is known to exist in extreme abundance in the Eastern Bering Sea, experience has shown time after time that when regulation of a fishery is neglected, stocks ultimately are fished to near extinction.

An obvious solution to the first two problems would be the development of an Alaska based bottomfish processing industry. Such an industry could utilize fish purchased from Alaskan fishermen, or for that matter from the Japanese or Koreans. The three operations involved in bottomfish processing are eviscerating, filleting and freezing. Therefore, a portion of the economic base for such an industry already exists in western Alaska in the form of cold storages and other freezing facilities owned and operated by village cooperatives. These in many cases were constructed with grants from the Economic Development administration for the purpose of processing salmon. In order for them to engage in bottom fish processing the purchase of automated equipment to gut and fillet the fish prior to freezing would be required. This process must be automated because experience has shown that it is economically unfeasable to utilize hand labor for these tasks.

With respect to regulating the harvest of pollock from the Eastern Bering Sea, a detailed discussion falls outside the scope of this article. Suffice it to say however, for such regulation to work, formation of an international commission composed of representatives from the nations participating in the fishery would probably be required. An organization of this type could establish catch quotas and thereby insure that the resource would not be overfished.

Regulatory considerations aside, if a bottomfish processing industry of the type noted above could be brought into existence, it would have considerable positive impact upon rural villages of western Alaska which lie on the Bering Sea coast. Because pollock and other bottom fish can be taken any time during the year that ice and sea conditions permit, their processing would partially alleviate the seasonality that now results from the short duration of local salmon runs. In addition, given the fact that Western Alaska is one of the most depressed areas in the Nation, the relatively small number of jobs created would have a maximum impact. For the United States as a whole, establishment of domestic sources to satisfy an expanding market for fish fillets would help to prevent a worsening of the country's balance of payments position.

## ALASKA'S ECONOMY IN JULY

Employment - Unemployment: Total employment rose seasonally from June to July. As was the case during the previous month, the lion's share of the gain of 3,800 was divided between construction and manufacturing, with most other industries making smaller contributions. Compared with a year ago, employment during July of 1973 registered an increase of 500 with strong advances in retail trade and services barely offsetting sharp declines in government and food processing. While employment was rising over both the month and year, unemployment was mixed, falling by 1,400 over the month, but registering an over-the-year increase of 1,800. The over-the-month decline in unemployment reflected the movement into employment during July of seasonal workers who entered the workforce in June. The year-to-year increase in the number of unemployed reflects an apparent slowdown of Alaska's rate of economic growth during 1973 relative to that noted for last year.

Mining: Employment in mining rose by 100 over the month due to slight increases in both the metal and

petroleum sectors. Over the year, employment was off by 300 due to continuing declines in petroleum related activity. However, things should improve somewhat in the near future. Once the pipeline legislation clears Congress and is signed into law by the President, drilling and exploration should pick up in the vicinity of Prudhoe Bay as companies holding leases there move to define known oil deposits and locate new ones. In addition, the level of oil exploration along the Chukchi seacoast should pick up this winter. It is reported that Standard Oil Company of California is close to an agreement with the Arctic Slope Native Association for exploration and possible production rights to lands withdrawn by that corporation under the land claims settlement. Further to the South in the vicinity of Kotzebue, exploration will continue under a similar agreement signed last year between SOCAL and the Northwest Alaska Native Association.

ESTIMATED CIVILIAN WORKPORCE IN ALASKA July, $1973$				
			Changes From	
	(Thousands	0		
INDUSTRY 7-73	6-73	7-72	6-73	7-72
CIVILIAN WORKFORCE	143,400	143,600	2,400	2,200
INVOLVED IN WORK STOPPAGES	0	100	0	-100
TOTAL UNEMPLOYMENT	15,500	12,300	-1,400	1,800
Percent of Workforce	10.8	8.6	-	-
TOTAL EMPLOYMENT 2/131,700	127,900	131,200	3,800	500
Nonagricultural Wage & Selary 3/116,400	113,300	114,000	3,100	2,400
Mining 2,300	2,200	2,600	100	-300
Construction 10,500	9,700	9,900	800	600
Manufacturing	11,000	13,500	2,100	-400
Durable Goods	3,600	3,300	100	400
Lumber, Wood Products 2,800	2,800	2,600	0	200
Other Durable Goods	800	700	100	200
Non Durable Goods	7,400	10,200	2,000	-800
Food Processing	5,300	8,200	2,000	-900
Other Non Durable Goods 2,100	2,100	2,000	0	100
TranspComm. & Utilities 11,200	10,800	11,300	400	-100
Trucking & Warehousing 2,000	1,900	1,900		100
Water Transportation 1,000	900	1,200	100	-100
Air Transportation	3,200	3,200	0	0
Other TranspComm. & Utilities 5,000	4,800	5,000	200	0
Trade 18,600	18,400	17,400	200	1,200
Wholesale Trade	3,400	3,500	100	0
Retail Trade	15,000	13,900	100	1,200
General Merchandise & Appar 3,900	3,800	3,400	100	500
Food Stores 2,400	2,400	2,400	0	0
Eating & Drinking Places 3,400	3,300	3,200	100	200
Other Retail Trade 5,400	5,500	4,900	-100	500
Finance-Insurance & Resl Estate 4,100	4,000	3,500	100	600
Service & Miscellaneous 16,100	15,900	14,300	200	1,800
Government 4/ 40,500	41,300	41,500	-800	-1,000
Federal 17,900	17,900	18,000	0	-100
State 12,700	13,600	14,100	-900	-1,400
Local	9,800	9,400	100	500

1/ Estimated in accordance with techniques recommended by U. S. Bureau of Labor Statistics.

2/ Includes domestics, nonagricultural self employed and unpaid family workers, and agricultural workers.

3/ Prepared in cooperation with the U. S. Bureau of Labor Statistics.

 $\underline{4}/$  Includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Construction: Employment in construction rose by 800 over the month as contractors moved to take