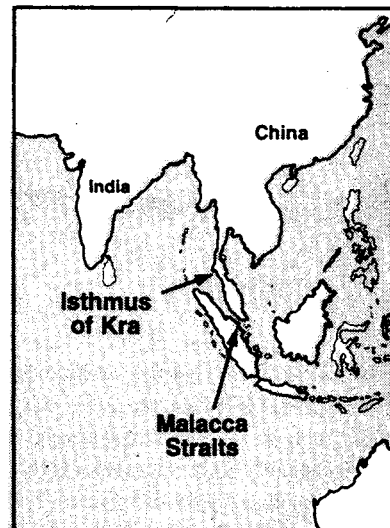# World trade requires construction of Thailand's Kra Canal

by Richard Freeman

If an 80-mile-long canal were dug through the Isthmus of Kra in Thailand, it would save about 1,200 miles in shipping transport in Asia. This absolutely vital undertaking is one of several projects which Masaki Nakajima of Mitsubishi Research proposed in 1977 as a Global Infrastructure Fund (GIF) program which, when realized, will increase the world's productivity by two to three times, in a conservative estimate, and perhaps as much as 10 times. The Kra Canal is one of the centerpiece projects for the world, and examining the need for its construction sheds light on the working of the Asian and the entire world economy for the past 20 years, and for 40 years into the future.

The Asian Pacific-Indian Basin is already the center of gravity of world trade; it does not have to become that. By building this canal and launching other projects of the GIF, such as diverting the water flows of the Ganges and Brahmaputra Rivers in the Indian subcontinent for irrigation and agriculture, the levels of trade and productivity will be increased to the point where a second Kra Canal will be needed early in the 21st century, and perhaps a third Asian canal either through the isthmus or close by.

The idea implicit in the whole GIF, and explicit in Lyndon LaRouche's development plans for the Indian and Pacific Ocean Basins (see *EIR*, Sept. 13), is that building the Kra Canal will lead to other infrastructure development. This entire economic development process will enhance trade levels, a process which in turn calls forth and makes possible other infrastructural projects. The new infrastructure will further raise trade levels in a self-developing building cycle. This is why the Kra Canal, once built, will have to be enlarged or another canal will have to be built beside it.

Asia: center of gravity of world trade

In Asia over the past 20 years, tonnage of imports rocketed from 171.6 to 912.9 million tons, and exports from 81.8 to 540 million tons. There was a compounded rate of import growth of 8.7 percent *per year*, 9.9 percent for exports, and for two-way trade, 9.1 percent a year (see **Figure 1**).

To give an idea of the tremendous advance this represents, a comparison should be made between what has been going on in imports in this area with that in the United States and West Germany. The import growth in Asia illustrates the principle that economies that import heavily what is needed will grow fastest; all ideas of import substitution, cutting imports to feed exports—the policy of the IMF and World Bank—do not work. Japan and Korea imported heavily, moved toward high technology in industry, and expanded their exports.

In this area, industrial production growth matches pretty closely with export-import growth (see **Figure 2**). Between 1960 and 1980, Japan's two-way trade increased 10.3 percent a year, and industrial production increased 9.0 percent a year; Korea's two-way trade increased 18.8 percent per year, production 17.3 percent per year—for 20 consecutive years! This while the economies of the West were going through worsening slumps.

Within Asia, the Far East has the best record; the Southeast second; the Indian Basin lags behind—only India has moved forward there.

What is interesting is to compare this record to that of the

Figure 1
Actual levels of Asian trade, 1960-80
(In millions of metric tons)

	1960	1980	Annual compounded growth rate 1960-80
Imports	171.6	912.9	8.7
Exports	81.8	540.0	9.9
Total two-way trade	253.4	1452.9	9.1

Figure 2
Compounded yearly growth rates, 1960-80
(In percent)

Nation	Imports	Export	Total two-way trade	Industrial production	GDP
Japan	10.2	10.6	10.3	9.0	—
Korea	18.2	21.0	18.8	17.3	—
Hong Kong	7.3	7.2	7.4	—	7.5
Far East	**10.5**	**11.1**	**10.6**	—	—
Indonesia	9.5	9.2	9.5	—	5.5
Malaysia	7.6	2.9	4.4	8.6	—
Singapore	8.4	9.5	8.8	—	8.4
Philippines	8.5	4.2	6.2	5.6	—
Burma	−5.8	−6.8	−6.4	—	3.2
Thailand	12.3	8.8	10.6	—	8.4
Southeast Asia	**8.6**	**7.0**	**7.6**	—	—
India	3.4	11.2	6.0	5.2	—
Pakistan	1.7	3.7	2.2	4.2	—
Bangladesh	NA	NA	NA	NA	NA
Sri Lanka	−1.1	2.7	−0.3	—	—
Indian Ocean Basin	**1.9**	**8.9**	**4.8**	—	—
Australia	1.9	15.1	10.4	3.8	—
New Zealand	3.5	8.7	5,5	NA	NA
Fiji	5.0	2.8	3.9	NA	NA
Oceania	**2.4**	**14.3**	**9.7**	—	—
West Germany	3.4	3.7	3.5	3.7	—
United States	4.3	6.0	5.0	4.1	—
World economy without Asia	**5.5**	**5.7**	**5.6**	—	—

so-called industrial powerhouses of the West, the United States and West Germany. The two-way trade of Germany had only 3.5 percent growth per year between 1960 and 1980, that is, slightly more than one-third that of Asia. Similarly, growth in industrial production in the Far East is three times higher than that of West Germany. The United States' economic growth also compares poorly with Asia's.

The per annum growth rate of Asia in trade during this period is 80 percent higher than the rest of the world's, 90 percent higher than that of the United States, and 150 percent greater than West Germany's.

In 1960, twenty-two percent of all two-way trade shipped through the Suez Canal was either an export or an import to Asia; currently the level is 58 percent. In 1960, thirty-three percent of the Panama Canal's two-way trade involved Asia; it is now 46 percent. The Suez and Panama Canals are becoming, in effect, merely funnels into the center of gravity of world trade, Asia (see **Figure 3**).

A few more statistics make the point: 42.5 percent of all iron ore shipped in the world ends up in Japan. When the rest of Asia is included, it's 49.9 percent of the world's iron ore, 44.5 percent of all coal, 33.9 percent of all grain—the three big dry-bulk items. This means that 39.9 percent of all dry-bulk goods in the world are going into Asia, and that two out of every five metric tons moving in the world are going into or out of Asia (see **Figure 4**).

An analysis of Asia's trade flow shows very heavy volume of trade with the United States, totaling 126 million metric tons. Trade with South America totals 60 million tons. This adds up to 709 million metric tons into Asia.

The most remarkable fact is that the Indian Basin, which includes Sri Lanka, Pakistan, India, and Bangladesh, has very little trade with the Pacific Basin nations, except with Japan. Surveys of Indian Basin trade flows show that India exports very little to Asia. The Kra Canal would be, not just a symbolic, but a very real linking of these two important regions.

It is a problem that India is not trading with its closest neighbors, which are also developing-sector nations, but almost exclusively with the East bloc or advanced sector nations. It is essential to link up India's skilled scientific manpower and capital-goods production with the fastest growing

Figure 3
Asian-originated or -bound trade as percent of total

	1960	1980
Suez Canal	22.5%	58.2%
Panama Canal	33.4%	46.2%

Figure 4
Imports by type
(In thousands of metric tons)

Area	Amount	Percent of world import trade
Iron ore		
World	314,370	100.0
Japan	133,370	42.5
Other Asia	23,212	7.4
Coal		
World	188,445	100.0
Japan	69,108	36.7
Other Asia	14,747	7.8
Grain		
World	198,147	100.0
Japan	28,435	14.3
Far East	30,653	15.4
Indian Ocean	8,381	4.2
Total: majority of dry bulk goods		
World	797,138	100.0
Japan	238,349	29.9
Other Asia and India Basin	79,899	10.0
Crude oil		
World	1,361,900	100.0
Japan	211,500	15.5
Other Asia	164,500	12.1

region in the world. This is what the Kra Canal will accomplish.

As an estimate, about a quarter of all Asian trade has to go through the Malaccan Straits. A quarter of all Asian trade is more than the combined trade moving through the Suez and Panama Canals each year.

The next step is to determine how much Asian trade, and therefore shipping through the Malaccan Straits, will grow. I propose looking at three possible scenarios.

First, what would happen if Asia does not continue the trade growth levels of the last 20 years? The growth levels for this period are 8.7 percent in imports and 9.9 percent in exports per year. This is Case 1. We are assuming a 5 percent growth in exports and a 5 percent growth in imports per year. By the year 2003, in 20 years, two-way trade will increase 2.7 times based on the most minimal assumptions of economic growth. The Straits of Malacca cannot handle that volume of shipping (see **Figure 5**).

If a second scenario is considered, Case 2, based on the assumption that the levels of the past 20 years will hold, which is not unrealistic if these infrastructure projects are built, then, by the year 2003 there will be 5.8 times today's volume of trade.

If for Case 3 it is assumed that, as a result of these Great Projects and a rational reorganization of the world economy, there is a 1.5 percent increase of yearly Asian trade levels above those of the past 20 years, then there will be 7.6 times the current volume of trade by the year 2003.

The next step is to look at what happens to trade volume by the year 2023, forty years from now, under the assumed scenarios. Assuming the levels of Asian trade stay at those of the last 20 years (Case 2), there will be 34 times the level of current trade by the year 2023. Under the increased trade scenario, by the year 2023 there will be an increase of 59 times over current levels of trade!

The Malaccan Straits are already the most-traveled straits in the world. No government in the world or international

Figure 5
Three projected levels of Indian-Pacific Ocean Basins trade growth (compounded annually)

Case 1: Export growth per year: 5.0 percent; import growth per year: 5.0 percent

Year	Imports	Exports	Two-way trade	Comparison to 1983
1983	912.9	540.0	1,452.9	—
2003	2,422.2	1,432.7	3,854.9	2.7 times greater
2023	6,426.8	3,801.6	10,228.4	7.0 times greater

Case 2: Historical growth levels of 1960-80; export growth per year: 9.9 percent; import growth per year: 8.9 percent

Year	Imports	Exports	Two-way trade	Comparison to 1983
1983	912.9	540.0	1,452.9	—
2003	4,841.9	3,567.4	8,409.3	5.8 times greater
2023	25,680.7	23,566.8	49,247.5	33.9 times greater

Case 3: Export growth per year: 11.4 percent; import growth per year: 10.2 percent

Year	Imports	Exports	Two-way trade	Comparison to 1983
1983	912.9	540.0	1,452.9	—
2003	6,368.8	4,678.4	11,047.2	7.6 times greater
2023	44,431.1	40,532.3	84,963.4	58.5 times greater

body, including Indonesia and Singapore, has an accurate measure of the number of ships going through the Malaccan Straits. *EIR* has estimated the number to be 33,300; the only other estimate was slightly higher.

EIR has estimated that the average ship traveling through the Malaccan Straits is an 18,000 dead-weight tanker or cargo ship. This is the average weight of the ships going through the Suez Canal. Half the tonnage, 9,000 deadweight tons, is cargo.

Under Case 1, shipping will be up to 89,837 tankers a year. It would be impossible for this number of ships to travel through the Straits (see **Figure 6**). Far worse would be the situation by the year 2023 in Case 2. The continuation of historical Asian growth rates from 1960-80 will increase the number of tankers to 1,127,955 per year. In Case 3, if growth rates increase only slightly, 1,946,471 ships will go through the Malaccan Straits each year.

Currently, 91 ships pass through the Straits each day. Under Case 3, this would increase to 5,330 ships going through the Straits *each day* by the year 2023.

This makes it clear that soon after the year 2000, if the growth rates continue, a second canal will be essential.

The countries of this region have accomplished incredible growth—particularly by Japan and Korea, both of which have used American System methods of economic dirigism since World War II. However, many countries of this region still have a serious lack of electricity and other infrastructure (see **Figure 7**). Infrastructure growth has not kept up with the level of overall industrial growth.

Figure 6
Freight-laden ships passing through the Malaccan Straits by the years 2003 and 2023, under cases 1-3

Present: 33,273 ships per year		
Case	2003	2023
1	89,837	232,911
2	192,834	1,127,955
3	252,857	1,946,471

Energy supply is the basis of economic growth. Korea, Indonesia, Taiwan, India, and Thailand have made great progress in building energy production per capita. But, when compared to the energy and electricity standards of West Germany and the United States, the nations of Asia, except Japan, are sorely lacking. Nations such as Burma are totally underdeveloped in terms of energy per capita.

The growth program centered on the Kra Canal will build the needed electricity and infrastructure. If this is done, by 2023, Asia will not only be the center of gravity of world trade and population, but the center of gravity of the world economy overall.

This article is based on a presentation by EIR *economics analyst Richard Freeman at the* EIR's *conference on "The Development of the Indian and Pacific Ocean Basins," in Washington, D.C., Sept. 15.*

Figure 7
Per capita energy production and consumption

Country	Energy consumed (coal equivalent)				Electrical energy production (In billion kilowatt hours)	
	Total (In million metric tons)		Per capita (In kilograms)			
	1980	1970	1980	1970	1980	1970
Australia	88.2	64.1	6,032	5,123	95.9	53.9
Burma	2.2	1.6	63	59	1.3	0.6
Kampuchea	—	—	—	—	—	—
China	565.5	347.7	602	429	300.6	107.0
Taiwan	37.7	15.3	2,202	1,055	40.7	14.0
Hong Kong	7.3	3.8	1,433	952	12.6	5.1
India	126.4	76.4	191	142	116.3	61.2
Indonesia	33.3	13.8	220	116	7.1	2.3
Japan	408.0	317.4	3,494	3,098	612.0	395.5
Laos	—	—	—	—	—	—
Korea	54.3	20.9	1,422	648	40.0	9.6
Malaysia	11.3	6.1	838	582	9.0	3.5
Pakistan	18.0	10.7	218	82	16.1	8.7
Philippines	15.3	9.7	316	263	18.0	8.7
Thailand	17.2	6.7	371	183	15.0	4.5
Vietnam	7.8	12.6	148	300	3.9	2.1
West Germany	352.5	311.1	5,727	5,124	368.8	242.6
United States	2,369,7	2,227.1	10,410	10,870	2,356	1,640