

## Building the Kra Canal and Southeast Asian Development

by Meghan Rouillard and Asuka Saito

*This is the script of a video posted on Sept. 23 at <http://larouchepac.com/node/28237>. A selection of the graphics and transcribed video clips shown is included.*

Today, under the name of “Asia Pivot,” the Obama Administration continues to adhere to the imperial doctrine of no-development in the Asia Pacific region. Major nations of Asia are pitted against each other over the Trans-Pacific Partnership treaty negotiation, the Senkaku Island dispute, the North Korean conflict, and other issues. The heightened military tension adds to the turmoil: by 2020, 60% of U.S. naval ships will be moved to the Pacific. With new ABM systems, military bases, and deployment of nuclear submarines, a “ring around China” is now a virtual reality. This increased military and political tension in the region, if not resolved, can quickly lead to its intended consequence: thermonuclear warfare.

It is exactly this murderous intention of the British Empire which has to be eliminated. As U.S. President John F. Kennedy looked toward the NAWAPA [North American Water and Power Alliance] project and a manned mission to the Moon, in facing a threat of a nuclear warfare in his time, the real challenge of war avoidance remains today: Can the greatest defense of civilization be established in the process of development itself? If so, what projects can the United States and other nations jointly embark on today, as a common aim of mankind? What is a real Asia Pivot that can end

an imperial doctrine of war and instead bring about a much-needed physical economic transformation of the whole Asia Pacific region?

Thailand’s Kra Canal typifies one such project (**Figure 1**).

As we have introduced you to the great projects of the world such as NAWAPA, transportation infrastructure for the Darién Gap, the Transaqua project for Africa, among others, here we treat the case of Southeast Asia and the Kra Canal—its history and strategic significance for U.S. policy today.

### **Video Clip, Lyndon LaRouche:**

We have to think, with China right now, and with Japan, the whole Southeast Asia system, looking at that whole circle, that water system, and if we cut the Kra Canal through, into the Indian Ocean, we will have a revolution in South Asia from just doing that. By just cutting through that Kra Canal isthmus, and opening that whole area to a different kind of maritime culture, which will build up that area, to bulwark other parts of the area.

### **History**

The Kra Canal gets its name from the Isthmus of Kra in Thailand, the narrowest part of the Malay Peninsula. The Isthmus of Kra has long been known as the most suitable site to cut a canal connecting the Gulf of

FIGURE 1

## The Real Asia Pivot



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Thailand and the Indian Ocean.

The idea of excavating the Kra Canal goes back to the mid 17th Century, when Thailand, then known as Kingdom of Siam, opened up its country for European traders, thus becoming one of the biggest trading centers of Southeast Asia. The first proposal for a Kra Canal was made in 1677, by a French engineer, M. De La Mar, as a part of the survey to find a new sea-trading route between the Gulf of Thailand and the Andaman Sea. Though his study demonstrated the possibility of the canal across the Isthmus of Kra, the project suddenly came to a halt, when Siam cut its relationship with France in 1688, expelling all French from its capital, Ayutthaya.

In 1882, the proposal for the Kra Canal reemerged when Ferdinand De Lesseps, the French engineer of the Suez Canal (completed in 1869), was sent to make a proposal for excavation once again. King Rama V, however, rejected the proposal, since France and other colonial powers were considered to be a threat to the sovereignty of Siam, rather than potential allies. The King's apprehension unfortunately was proven to be justified when, in 1893, the Franco-Siamese War broke out. At the close of the war, the Siamese were forced to cede Laos to France, and gradually, most of its territory was seized by the two contending colonial powers at that time, France and Britain. "The disgorging is a noble operation," Lord Rosebery, then the British Prime Minister, commented at that time.

The colonial partition of the land was quickly followed by a suppression of economic development. In April 1897, the British made a secret agreement with Siam, which deprived the latter of its rights to develop a canal through the Isthmus of Kra without British consent. The agreement also brought exclusive commercial concessions in the area under British control.

This British imperial policy of "no development" continued throughout the 20th Century. At the end of World War II, the Siamese government, which has allowed the Japanese to occupy the country rather than waging a pointless and bloody defense,

was forced to impose even stricter limits on its economic development, not to mention the heavy war reparations imposed upon them.

The 1946 Anglo-Thai Treaty Article 7 states: "The Siamese Government undertake[s] that no canal linking the Indian Ocean and Gulf of Siam shall be cut across Siamese territory without the prior concurrence of the Government of the United Kingdom."

To further extort from Thailand, the treaty demanded the surrender of Thailand's sovereign rights over production and export of rice, tin, rubber, and teak, in addition to a maximum of 1.5 million tons of rice to be made available to the British for free.

### Why the Sabotage?

On the surface, the concept of building a canal to bridge the Kra Isthmus hardly seems like an idea that would elicit such a reaction. But this should not be a surprise to the honest student of history, such as President Franklin Roosevelt or John F. Kennedy—being fully aware that the British Empire was a powerful entity which only changed its tactics, but never its motive: to suppress the economic and creative development of the vast majority of the human population.

For example, in the words of one of Britain's elite, Bertrand Russell, this outlook is clear. In *The Impact of Science on Society* [1952] he wrote:

"Industry, except insofar as it ministers directly to the needs of agriculture, is a luxury...."

Russell was clearly no fan of industry, but neither did he support modern agriculture. In the same book, Russell says:

“The danger of a world food shortage may be averted for a time by improvements in the technique of agriculture. But, if a population continues to increase at the present rate, such improvements cannot long suffice. There will then be two groups, one poor with an increasing population, the other rich with a stationary population. Such a situation can hardly fail to lead to world war... War may be so destructive that, at any rate for a time, there is no danger of overpopulation...”

And it was no secret which part of the human population someone like Russell, a mouthpiece for the British Empire, preferred:

“I find the coloured people [in the United States] friendly and nice. They seem to have a dog’s liking for the white man—the same kind of trust and ungrudging sense of inferiority. I don’t feel any recoil from them.”

Another voice of the Empire, Sir Halford John Mackinder, former head of the London School of Economics, once wrote:

“Were the Chinese, for instance, organized by the Japanese, to overthrow the Russian empire and conquer its territory, they might constitute the yellow peril to the world’s freedom...” [“The Geographical Pivot of History,” 1904].

The view of the colonial powers, including Great Britain, towards the people who inhabited their colonies, is no different.

The building of the Kra Canal project would strike a blow to the remnants of the British maritime empire, of which Singapore remains an outpost, and hence, the Strait of Malacca. The Kra Canal would significantly shorten this trade route.

But the building of the canal would also signal an intention to develop Southeast Asia more broadly, with associated rail, power, and water projects, which we will

review, unleashing the productive potential of the region in a way which could not be controlled, to the chagrin of the colonial powers that have dominated this area.



*The British Empire personified: Queen Victoria (1887). The British forced Siam (now Thailand) to sign a treaty forbidding it to build a canal across the country without “prior concurrence of the Government of the United Kingdom.”*

## The Real American Tradition

Historically, the United States has played a crucial role as a defender of this great project. Against the backdrop of the 1946 Anglo-Thai Treaty, and only a few months later, an American diplomat, Charles Woodruff Yost, succeeded in arranging a new treaty between the U.S., United Kingdom, and the Kingdom of Siam. It was a total reversal of the imperial policy outlook.

Yost’s new treaty was established “to take all possible measures for promoting and maintaining the maximum economic production in Siam of rice and certain other export commodities now in short world supply, and for facilitating the exportation of the surpluses of such commodities upon an equitable basis.”

To this end, the treaty mandated the U.S. and U.K. to supply “items required in connexion with rice production and exportation, including milling, transportation,

and repair of port facilities.”

This tradition was carried forward further, when in 1973, the American consulting firm Tippet-Abbot-McCarthy-Stratton (TAMS), in collaboration with Lawrence Livermore Laboratory, carried out an engineering and economic feasibility pre-study for a canal. Before getting into the details of this, let’s review some of the project’s dimensions.

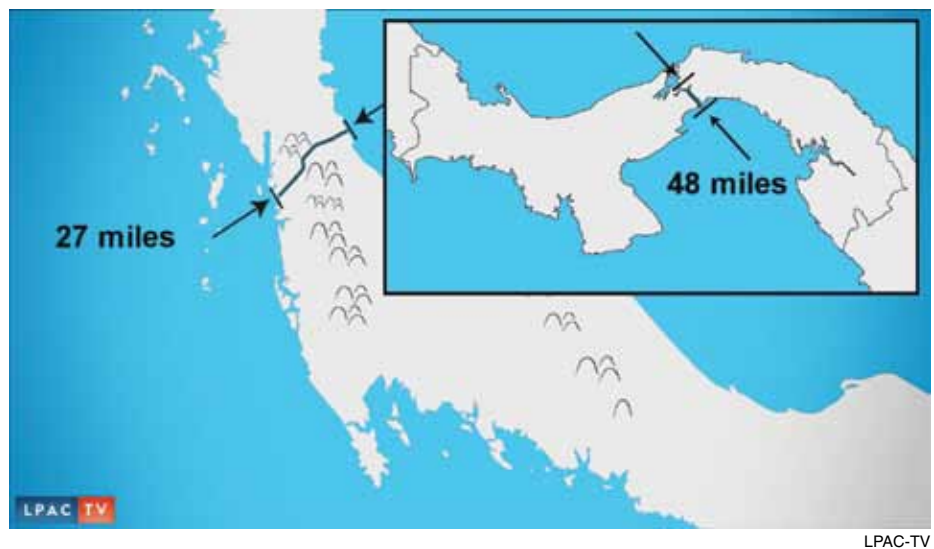
## Project Dimensions

In the 20th Century, the concept of the preferred location for the canal route generally shifted towards southern Thailand, as compared to the earliest proposed routes.

We can compare the dimensions of a proposed Kra Canal with other well-known canals (**Figure 2**):

FIGURE 2

**Proposed Kra Canal Compared to the Panama Canal (inset)**



The width of the Kra Isthmus at its narrowest point is around 27 miles; compare this to the length of the Panama Canal—48 miles. The length of the various Kra Canal proposals ranges between 30 and 60 miles. The Suez Canal, for comparison, has a length of 119 miles.

The height of the interior mountain chain where the Kra Canal would be constructed is about 246 feet. Compare this to the height at the Galliard cut of the Panama Canal, which is slightly lower, at 210 feet.

The Strait of Malacca is not sufficiently deep for many large ships to pass through. The Strait is 620 miles long but very narrow—less than 1.6 miles at the narrowest, and only 82 feet deep at the shallowest point. Currently, large ships are required to travel much further south, to the Lombok Strait, near Java, which has a depth of 820 feet. Clearly, a Kra Canal poses a more reasonable option than travelling so much further south for larger ships or for any ship taking the 620 mile detour through the congested and pirate-infested Strait of Malacca.

The 600-plus-mile Malacca Strait is by far more heavily traveled than any of the world's

canals, with more than twice the traffic of the Suez and Panama canals combined. By a recent estimate, one fifth of world trade goes through Malacca Strait. Congestion or obstruction of the Strait would dramatically increase the cost of trade. The most conservative projection—trade growth of only one-third at 1960-80 costs—shows saturation of the Strait by the year 2025 and unsafe congestion beyond that date, with the maximum capacity of the Singapore and Malacca straits being 200,000 ships annually. A more recent estimate is that the traffic of the straits has been increasing at an annual rate of 20%.

**Role of the LaRouche Movement**

In 1973, TAMS engineering had conducted a study of possible Kra Canal routes and suggested that Route 5a, pictured here among others (Figure 3), was the most suitable. At either end of the canal would be located industrial zones estimated to span around 100,000 acres.

A decade later, in 1983 and 1984, the Fusion Energy Foundation and *Executive Intelligence Review*, to-

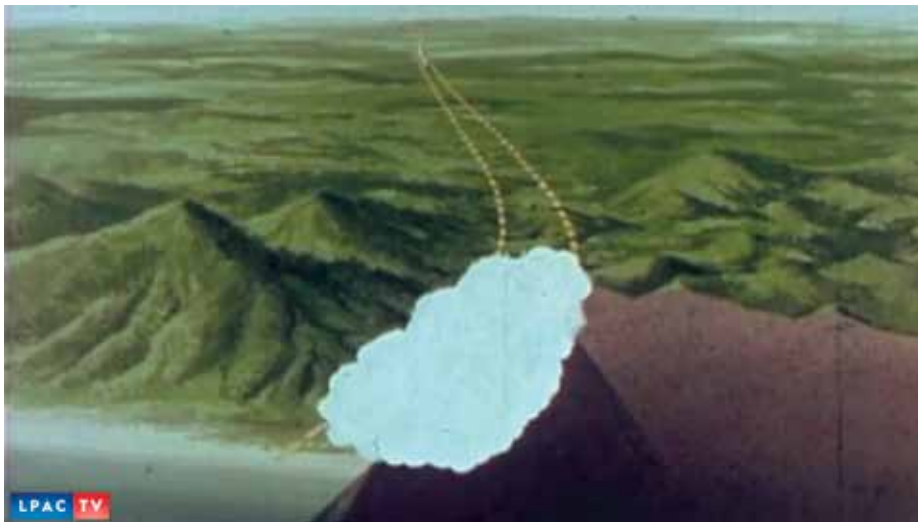
FIGURE 3  
**TAMS Proposal for Kra Canal Route (1973)**



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FIGURE 4

## Peaceful Nuclear Explosions



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*Dr. Edward Teller suggested that PNEs could be used to build the Kra Canal, and volunteered to move his family there so as to convince people that these explosions are perfectly safe.*

gether with the Thai Ministry of Communication, held two successful conferences on the Kra Canal Project. The FEF updated the earlier feasibility study done by TAMS, and developed further the project's economic and industrial benefits.

A Fall 1984 conference entitled "Industrialization of Thailand and the Kra Canal" took place in Bangkok, Thailand, bringing together businessmen, engineers, and government officials from all of the ASEAN countries, to hash out the feasibility of building the canal. This Bangkok conference issued a mandate for the Thai government to reach a decision on the Kra Canal project. The four panels during the conference covered all aspects, including a presentation by EIR/FEF researchers on the use of PNEs, or peaceful nuclear explosions, as the fastest, most efficient and cost-effective method of construction (**Figure 4**). It was during this same period that Lyndon LaRouche and FEF were involved in another program calling for the peaceful use of nuclear technology: the Strategic Defense Initiative.

Samak Sundaravej, Minister of Communications of Thailand and later Prime Minister, set the tone in his keynote address of Oct 31: "The question is can we do it, how, and which way? ... If we use TNT, it will take ten years, but if we use atomic energy for peace, it will shorten the excavation time by five years."

Minister Samak also stressed the importance of the project for the world: "The final impact will not only be beneficial for Thailand, but also for the region, as well as any other country that uses it. We should, therefore, dedicate it to the world."

Milo Nordyke of Lawrence Livermore National Laboratory in the U.S. and Harry Ekizian of TAMS engineering firm—both of which groups had been involved in the 1973 feasibility study for the canal—presented the physical parameters for building the canal, using both nuclear and conventional methods.

There were also Japanese representatives at the conference from ten top corporations, among them Mitsubishi Corpo-

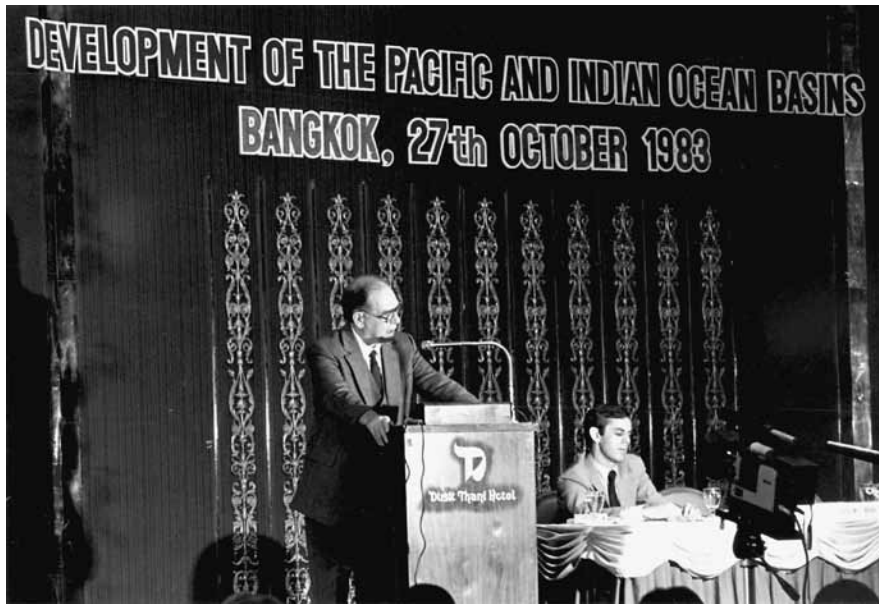
ration, which had sparked the initial renewed interest in the canal during the 1970s, promoting the project as part of their Global Infrastructure Fund concept. A later Japanese plan also advocated the use of nuclear technology in the construction of the canal in a 1985 report. This plan would have used over 20 nuclear devices, each with roughly twice the explosive energy of the bomb dropped on Hiroshima.

This proposal harkened back to a U.S. program called Operation Plowshare, which was in place from 1961-77, which focused on the development of techniques to use nuclear explosions for peaceful purposes.

The name of the project was coined with the reference to the Book of Isaiah: "And he shall judge among the nations, and shall rebuke many people: and they shall beat their swords into plowshares, and their spears into pruning hooks: nation shall not lift up sword against nation, neither shall they learn war any more."

Project Plowshare had completed 27 nuclear explosions, and proposed using the technique to widen the Panama Canal, among other projects, such as creating an artificial harbor at Cape Thompson, Alaska. The environmentalist movement campaigned enthusiastically to shut down Operation Plowshare, a program which represented the "Atoms for Peace" outlook first outlined by the Eisenhower Administration.

While other options for canal construction do exist



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Lyndon LaRouche addresses a conference in Bangkok on the Kra Canal project.

and could be developed, it would be immoral to avoid discussion of the “nuclear option” in the name of appeasing the seemingly all-powerful environmentalist movement, many of whose advocates would just as soon see the population of Southeast Asia continue to live in abject poverty, if not to drastically decrease their numbers altogether.

Lyndon LaRouche, at the 1983 Kra conference, remarked:

“The prospect of establishing a sea-level waterway through the Isthmus of Thailand ought to be seen not only as an important development of basic economic infrastructure, both for Thailand and the cooperating nations of the region; this proposed canal should also be seen as a keystone, around which might be constructed a healthy and balanced development of needed basic infrastructure in a more general way.”

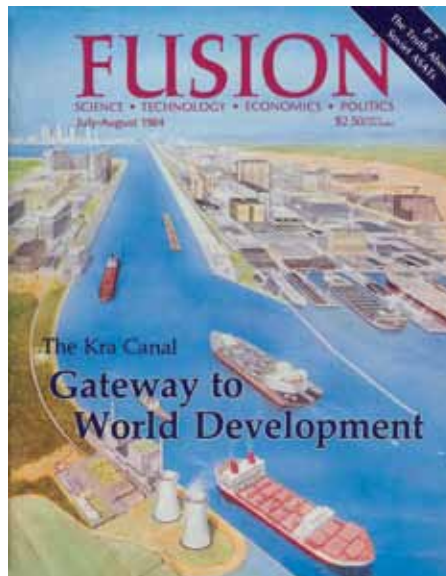
The discussion at the 1984 Bangkok conference showed a revival of a pro-development commitment from some in the U.S., Thailand, and Japan.

The principal justification for this project is not the canal per se,

Examples of supplementary projects that can feed into the productive effects of the canal include developing more broadly the nuclear platform in Southeast Asia.

### A Nuclear Platform

One of the first nuclear developments in Southeast Asia took place, ironically, during the Vietnam War, with the help of the United States. The Kennedy Administration helped to open up Vietnam’s first nuclear research reactor in the town of Datal, as a part of Eisenhower’s Atoms for Peace program. Its official inauguration on Oct. 29, 1963, was participated by [South Vietnam’s President] Ngo Dinh Diem, American Ambassador Henry Cabot Lodge, and a representative of the U.S. Atomic Energy Commission. Kennedy also signed onto National Security Memorandum N.263, which stipulated the necessary U.S. support for increasing the productivity of the Mekong Delta region, along with a withdrawal of 1,000 U.S. military personnel from Vietnam by the end of the year.



The magazine of the Fusion Energy Foundation promotes the Canal project in its July-August 1984 issue.



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*Members of the Philippines LaRouche Society visit the mothballed Bataan nuclear power plant, 2008. Butch Valdes (third from the right) heads the Save the Nation movement, and is a strong advocate for reviving nuclear power.*

Merely one month after the inauguration of Vietnam's nuclear reactor, this glimpse of hope for Asia suddenly disappeared, with the assassinations of both Diem and Kennedy. Ever since, the United States has been going down the road of a long war in Asia. However, the prospect of peace through development still exists, and is quietly waiting for its realization.

Today, in terms of large-scale power generation, Southeast Asia does not have any nuclear power plants of significance. Thailand, Vietnam, Malaysia, and the Philippines each has one or two TRIGA reactors apiece, but these are small reactors mainly used for research purposes in universities.

The story of the Philippines underlines the fact that the lack of nuclear power in this region is no accident. The Philippines was to have the first nuclear plant in Southeast Asia, whose construction began in 1976. Construction was completed by 1986, but the Bataan Nuclear Plant was mothballed before it had generated any power. The puppet government of Cory Aquino [who replaced President Ferdinand Marcos that year] submitted to [U.S.] pressure to stop plans for the plant, but this was after the entire facility has already been built! To this day, the Philippines, without ever having benefited from the nuclear power the Bataan plant could have given the country, is paying bills for

the construction and maintenance of the facility. The Save the Nation movement in the Philippines, led by Butch Valdes, also the head of the Philippines LaRouche Society, has led the effort to revive nuclear power in the Philippines.

The concept of a nuclear-powered Asia has also come under attack more recently. After the 2011 magnitude 9 earthquake that hit Japan, the focus turned quickly away from the tens of thousands of actual deaths caused by the ensuing tsunami, towards the so-called threat posed by Japan's nuclear power facilities. Japan has a total of 50 nuclear plants, and was forced to shut all of these

down or to suspend operations in the face of this pressure. A handful have since opened back up, and it appears that there is movement to continue in this direction.

There are plans elsewhere in Southeast Asia to build new nuclear plants. Recently, Vietnam struck an inter-governmental agreement with Russia for the construction of the first nuclear power plant, with a loan issued by Russia. Currently, a total of 12 nuclear reactors is planned to be constructed using Russian, Japanese, and South Korean technology. As of October 2012, Thailand was conducting a feasibility study for the construction of a nuclear power plant, and a similar effort is taking place in Cambodia for the construction of a nuclear power plant on Koh Kong Island.

While these developments certainly point towards progress, they are still a far cry from where things should be. China shows a good example, with 16 nuclear plants and big plans for expansion. Close to 30 plants are under construction, and additional reactors are planned, including some of the world's most advanced, such as a 200-megawatt high-temperature gas-cooled nuclear reactor that is scheduled to be completed in 2017. This would give a five- or six-fold increase in nuclear electricity production capacity, to 58 GW by 2020, then possibly 400 GWe by 2050.

Contrast these developments to President Obama, obviously no Promethean, who has never defended nuclear power, and was also famously caught saying that we don't need "fancy fusion energy or anything."

## Rail

An ample supply of power generated by nuclear plants can create great industrial potential in Southeast Asia. This can be further bolstered by a linking up of the major capitals of Asian nations through a high-speed rail network, which is partially underway already.

The world's longest high-speed rail route, running from the Chinese capital Beijing to Guangzhou in the south, opened last year. Travelling at an average speed of 186 miles per hour, the rail traverses 1,428 miles, the equivalent of the distance between Washington, D.C., and Houston, Texas, in eight hours. By contrast, U.S. Amtrak trains travelling from New York to Miami, a shorter distance, take nearly 30 hours.

China's high-speed-rail network was only established in 2007; by 2010 it covered 5,193 miles, and by 2020 it is expected to cover 9,941 miles (**Figure 5**).

The rail links are also spreading to Southeast Asia. The proposal for the Kunming Singapore Railway was put back onto the table last year, when the Chinese offered a \$7 billion loan for a construction of a north-south railway, a missing link between China's major southern city of Kunming, and the capital city of Laos, Vientiane.

The original idea of a rail link between Singapore and Kunming came out after the completion of the Trans-Siberian Railroad in the early 20th Century.

In 2000, ASEAN proposed an Eastern route which would run through Cambodia and Vietnam. In 2004, ASEAN and China proposed a shorter route which would run through Myanmar. This route would also intersect a new Special Economic Zone and deep sea port at Dawei, in Myanmar, which would effectively connect the Indian Ocean Basin and the South China Sea.

FIGURE 5  
**China's High-Speed Rail, Existing and Planned**



*The light blue shows current high-speed rail lines; the dark blue shows the area that is to be included by 2020 (there is some overlap in this graphic rendering).*

The most recently entertained route would run straight through Laos. The railway would be over 250 miles long and would require construction of 76 tunnels and 154 bridges, including two bridges across the Mekong River. When complete, it would take only 10 hours to travel from Kunming to Singapore, as compared to the 72 hours it currently takes only to travel between Singapore and Vientiane.

This rail project, when complete, will link Southeast Asia to China, opening up a whole new potential for Asia-Pacific development.

The link is not only by high-speed rail, but also along the Mekong River, a major trading route between Southwestern China, Laos, Myanmar, and Thailand. Construction of dams along the Mekong River started last year, to alleviate navigational difficulties such as the extreme seasonal variations in flow and the presence of rapids and waterfalls. More importantly, the better water management and distribution along the entire Mekong Basin can transform the agricultural and industrial potential of the region.

## SEAWAPA

There are numerous proposals on the books for the development of the water resources and land potential in Southeast Asia. One aspect of these developments is represented in a concept developed by Thone Siharath of Laos, which he calls SEAWAPA, or the South East



Asia Water And Power Alliance, modeled on the concept of the North American Water and Power Alliance for North America.

What distinguishes Laos from the rest of Southeast Asia is that the seven-month monsoonal rains, the Pacific typhoons, and the melting ice from Tibet deposit more freshwater on Laotian territory than anywhere else on Earth.

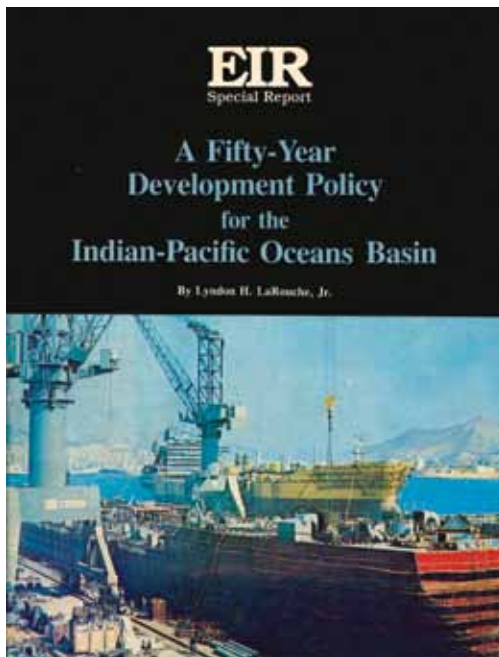
SEAWAPA presents a comprehensive plan of development for Southeast Asia as a whole. One component of SEAWAPA calls for the completion of on-the-books proposals for dams along the Mekong River, and to comprehensively dam the river at geographically suitable points, to make it navigable all year 'round, from the sea. There are almost no dams on the Mekong currently outside of a few in China. Environmentalist groups typically shriek in response to these proposals. Laos has recently won a victory in the face of this opposition, by breaking ground on the Xayaburi Dam site.

A sketch of how SEAWAPA could unfold, as envisioned by Thone, would begin with the completion of dam and hydropower projects such as the Houay Sompoy and projects for the Xe Bang Fai River. He also envisions using the abundant precipitation in Laos for modern hydroponic systems, with a hydroponic tower pilot project to be built in Vientiane.

Dams such as the Nam Ngum, the oldest dam in Laos, should be upgraded. Other Mekong dams should be built in Laos and elsewhere, and dams can be built on other Laotian Mekong tributaries, such as the Kong and Banghiang rivers. These rivers flow from the Annamite Mountain Range, which runs for hundreds of miles between Vietnam and Laos. Thone adds that Laos needs the technical advice of the American water engineers who would be guiding the NAWAPA project, for the best location and specifications for some of the dams.

Excess water can be stored in existing underground reservoirs in Laos. The fresh drinking water and hydroelectricity that is surplus to Laos's needs can be distrib-

uted using oil pipeline technology to other countries in Southeast Asia, southern China, Afghanistan, and even the dry Middle East, completely transforming the potential of the land.



*This EIR Special Report by Lyndon LaRouche, dated August 1983, was circulated widely among political and scientific circles in Asia.*

## Conclusion

Counterpose this vision of what Southeast Asia could look like to the accepted “way of life” of many poor Southeast Asians, including the “tourist industry” which employs many of them, exposed in the wake of the 2004 Indonesian tsunami, with tens of thousands of Thais killed as they worked at southern beachside resorts for foreign tourists; and compare it also to the memory of the mass bombings of past decades.

As Japanese economist Daisuke Kotegawa has noted, collaboration around the Kra Canal project of China and Japan, for example, would not only help to defuse tensions between them, but encourag-

ing this type of collaboration would also outflank the dangerous geopolitical game which the Obama Administration has created.

This can be accomplished if the United States does what is required to return to the world outlook of President Franklin Roosevelt.

As Lyndon LaRouche once wrote: “Discussions of Pacific Basin cooperation will continue to be merely discussions, until the question is directly stated: How might the foreign policy of the U.S.A. toward Asia be transformed to conform to the vital interests of the United States? The question must be posed: How might the United States return to the political philosophical world-outlook of its founders, or, more recently, the proposed post-war foreign policy of President Franklin D. Roosevelt?”

This outlook can be revived by taking action similar in principle to that of Roosevelt: starting with the restoration, globally, of the Glass-Steagall Act, restoring sanity to the world financial system, such that great visions, typified by the Kra Canal, can become reality.