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INTRODUCTION TO EIR SPECIAL REPORT

Saudi Arabia in the Year 2023

by Lyndon H. LaRouche, Jr.

From the western border of Iran to the Atlantic, and from the southern border of Turkey into the African Sahel, there exists an Arab World so interdependent, that no economist can consider competently the sovereign interests of any one Arab state without studying the political and economic interdependencies of that World as a whole. It is a World which pivots on Egypt, a world whose existence is defended to the east by Iraq, and to the west by Morocco. It is an interdependency most conspicuously illustrated by the work of Palestinian and Egyptian professionals in numerous Arab states.

It is a thinly populated domain, whose political and economic security depends most immediately upon the state of affairs in certain key nations bordering it. This means, most emphatically, the state of affairs in Iran, Turkey, Nigeria, and the group of black African states encompassing the headwaters of the Nile. If one imagines that a canal were cut from the Nile to the Red Sea, and sees the river systems linked to Lake Victoria as forming a network of islands to their east, from Alexandria into Mozambique, it becomes clearer at once that these “islands,” together with the Arab states of the Indian Ocean’s littoral, form a natural unit of waterborne commerce. Excepting Lebanon and Syria, this entire region east of the Libyan desert orbits around the massively populated Asian Subcontinent. The stability, growing prosperity, and peace, of the region of Pakistan, India, Sri Lanka, and Bangladesh, is the most vital strategic economic interest of this entire, combined region, of Arab and black African states east of the Libyan desert. It is therefore also the vital strategic interest of the Arab World as a whole.

Editor’s Note: This introduction to *EIR*’s 1983 Special Report, “Saudi Arabia in the Year 2023” by Lyndon H. LaRouche, Jr., is appearing in *EIR* magazine for the first time.

To Eastward Trading and Cultural Connections

Unless monstrous catastrophes destroy civilization during the 1980s, catastrophes which are the great, highly probable threat of the 1983–84 period, the economies of the Arab World as a whole will be adapted increasingly to eastward trading and cultural connections. The highlights of such a peaceful development are chiefly as follows: First, we summarize the increased integration of the western and eastern regions of the Arab World, and then examine future connections to the Indian and Pacific Oceans’ basins.

The west-east lines of trade and communication within the Arab World, and the bordering black African states, will be chiefly two. The development of Mediterranean coastal, waterborne commerce is the simplest part of this. A new network of west-east connections through the Sahel region of Africa is the more complex feature of the process.

At the northern, Atlantic-coastal extremity of Africa, Morocco was 10,000 or so years ago the center of radiation of the agricultural revolution into the Mediterranean littoral and Europe. With increased freshwater supplies made possible with a network of nuclear facilities, and with development of natural advantages, the importance of Morocco will be greatly increased. From Morocco, along the Mediterranean coast, to the great new nuclear-hydroelectric complex to be built around the Qattara Depression, the Arab World will attack the Sahara Desert with development advancing from its northern coasts. Here, Europe’s capital-goods traffic into the Arab World will be at its highest importance. France’s nuclear industry will lead in this, and the peaceful development of Spain, both as Europe’s link to Ibero-America and as a partner of Arab West Africa, will be featured. One assumes that Italy will abandon its 15 years of national suicide, and contribute a leading part to this process.

Across the Sahel, from Dakar to Djibouti, France must contribute a leading part in creating—more than a

hundred years since this was first projected—a great, modern railway “spine.” Without this “spine,” the rational development of the Sahel zone is more or less unthinkable. This railway “spine” will intersect south-north water-management complexes. A reservoir in Zaire, contributing water into the Chad region of the central Sahel, will define this south-north connection of water, transportation, and communications as a whole. Large-scale, cooperative water-management programs in southwest parts of this west-east zone, and cooperative water management around the tributaries of the Nile, complete the general structure of this new development. Other transportation and water-management projects will intersect the railway “spine” and the transportation and other developments associated with the water-management projects.

To the west, this development will pivot on Nigeria. A region of black Africa, from Nigeria into Angola, will form a base of South Atlantic commerce into Brazil and the Rio de la Plata complex. So, the combined resources of black and Arab Africa will attack the Sahara from the south. An advancing, protective wall of brush growth, separating Sahara from Sahel, will screen water-management-assisted development of agriculture within the Sahel as a whole. Waterborne and railway commerce will permit this development of agriculture and of the mining and industrial potentialities of this beltway across the continent. An improved north-south railway system for Sudan and Egypt, and a barge canal from the Nile into the Indian Ocean littoral, will complete the main structural features of this west-east integration.

The Greatest Potential

If the 1980s’ threatened destruction of civilization is averted, the Asian Subcontinent, with approximately a billion souls, represents the single greatest potential for economic development worldwide during the coming fifty years. Here is concentrated the greatest underutilized mass of scientific and related professional manpower in the world today. The half-billion of Southeast Asia, is, after the Subcontinent and China, the world’s third-greatest reservoir of potential development for



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“Without a modern railway ‘spine,’ the rational development of the Sahel zone is more or less unthinkable. It will intersect the south-north water-management complexes.” Shown: the Addis Ababa-Djibouti Railway, completed in 2016, connecting Ethiopia to the world via the Port of Djibouti—part of a continental rail network, most of which is yet to be built.

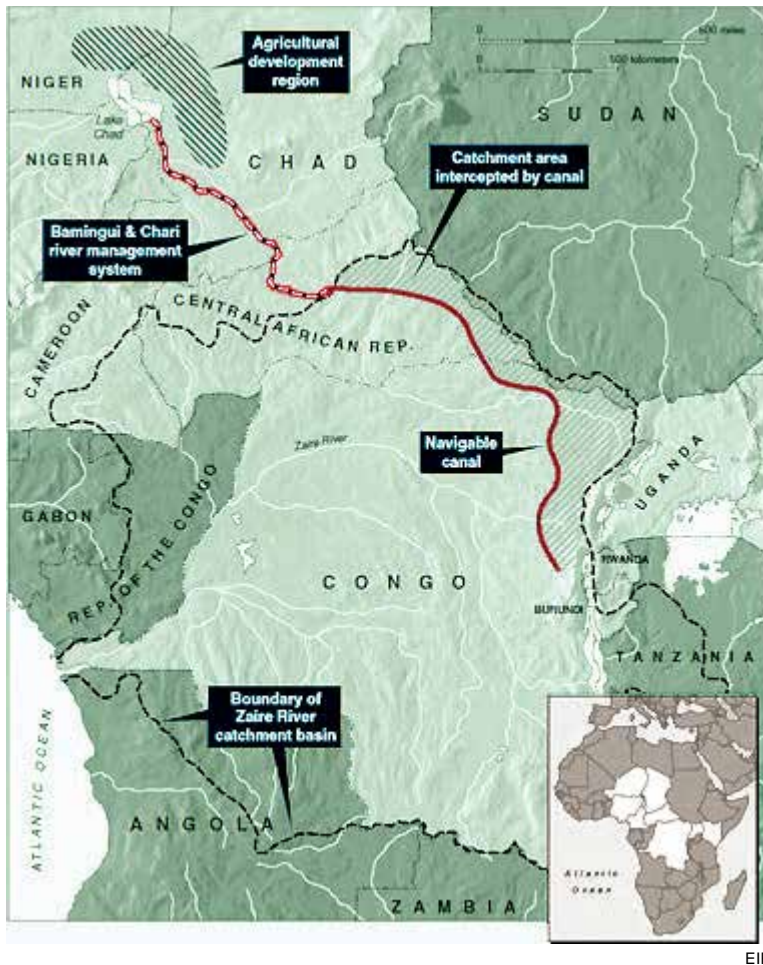
the half-century and more ahead. This will become the natural economic center of gravity of world production and trade toward which vital Arab interests are oriented.

The political difficulties of Southeast Asia’s development, apart from conditions now causing a breakdown of the world’s monetary order, include the hostility to Japan remaining from World War II, and a deeper, more ancient fear of China. In any sane ordering of affairs, the ASEAN nations, including the Philippines, plus Kampuchea and Vietnam, will become increasingly a well-integrated unit of economic and political cooperation. The Sanskrit basis of most of the culture of the region bespeaks a natural cultural and political orientation to the Subcontinent, creating a combined political-cultural unit of cooperation among a growing one-and-a-half billion souls, and the largest concentration of Islamic believers in the world as a whole. A developing cultural harmony between Hindu and Muslim, much encouraged by peaceful cooperation between Pakistan and India, will be potentially the center of gravity of the cultural development of the world.

The most important new element in the development of this region of a growing billion-and-a-half, will be a shifting policy-outlook and economic role of Japan.

The development of Japan since the Meiji Restoration has been based chiefly upon two secular tendencies.

The Transaqua Project, as Proposed by Bonifica



“A reservoir in Zaire, contributing water into the Chad region of the central Sahel, will define a south-north connection of water, transportation, and communications.” Shown: the multi-nation Transaqua Project, and the massive new agricultural zone it could potentially create.

policy-crisis. The destruction of scientific and technological progress in Europe and the United States, especially with the past quarter-century of drift into a “post-industrial society,” requires Japan to expand greatly the scientific and related development occurring within Asia.

This policy-crisis cannot be solved within Japan alone. The great scientific potential of India becomes now the natural, indispensable basis for cooperative programs of fundamental scientific and related research and development. Japan has the potential to supply the laboratory and related equipment which foreign-exchange-short India cannot provide adequately to its universities and other laboratories. The technological progress effected within the division of labor among nations representing now approximately a billion-and-a-half souls is Japan’s principal source of hope for prosperous trading partners urgently wanted for its own future. This Japan-India cooperation will provide Japan the capacity to develop more effective economic relations with the internal development of China.

So, the greatest part of the human race will be shaped in a peaceful future of development. These will be the paramount economic-strategic realities, under those conditions, for the Arab World as a whole. Within that combined strategic setting, we discover the options available for the long-range development of Saudi Arabia.

The first is the successful introduction of the anti-British American System of political economy, initially largely through the assistance of E. Peshine Smith. Although the British System’s influence has persisted from then to the present, the chief source of Japan’s superior performance today is that Japan is the last nation still to adhere, in large part, to the principles of the American System—at a time that the United States has foolishly abandoned that system in favor of the inferior system of the British East India Company economists, Adam Smith, Thomas Malthus, David Ricardo, and John Stuart Mill. At the same time, Japan has depended upon using the most modern forms of existing technologies, wisely using technologies foolishly underdeveloped in the United States and Europe. It is this second feature of Japan’s past development which now leads Japan into a serious

Conquering the Desert

The thematic task of the Arab World over the coming four decades is the conquest of the desert.

During a long period following the last Ice Age, once-fertile areas of northern Africa, the Middle East, and Central Asia were transformed into desert and near-desert. The entry of the warming Gulf Stream into the northern polar regions, shifted the Arctic ice mass to the nearby continents of Eurasia and North America. The astronomical evidence contained within ancient Vedic and related sources shows that polar civilization familiar with the progression of geological and magnetic poles, and galactic star cycles developed during the period of the last great glaciation, a period when the waters of the oceans were hundreds of feet lower than today. Under the conditions of that and later features of

the Ice Age and glacial melt, into circa 4000 B.C., the coastlines and climate of the Mediterranean and Middle East were far different than today, and Central Asia was the habitation of the Indo-European peoples into the third millennium B.C. Where the forbidding Libyan desert exists today, there were rivers. The Arab peninsula was not yet a desert.

To restore this desertified region of Africa, the Middle East, and Central Asia into a fertile region of habitation, does not require the catastrophic return of the Ice Age, but, most essentially, water to sustain plant life. A small portion of the water required for this purpose is available with aid of large-scale engineering projects which enable us to make better use of existing water supplies. A more extensive conquest of the desert will require other means: chiefly large-scale desalination of seawater to increase qualitatively the total supply of freshwater for the regions involved.

There are principally three technological means required for this general program of increasing absolutely, qualitatively, the freshwater throughput of the arid regions. First, abundant, cheap energy supplies, to an extent and with a quality not available except with reliance upon nuclear and related technologies. Second, developments under the heading of qualitative advances in relativistic physics, to make the necessary development and economic application of nuclear technologies efficient. Third, the use of large-scale development of plant growth to create the climatological basis for new weather systems, through which much of the freshwater supplied to each part of the entire region is reacquired as rainfall in the same and adjoining regions.

Water

The economical production of water by desalination, requires heat sources of an energy-flux density available only with nuclear techniques. The amount of heat required to effect desalination of a kilogram of seawater can be qualitatively reduced by methods already the subject of several significant patents involving special effects of forming small droplets of saline water, thus lowering the critical temperature below that associated with ordinary evaporation. More broadly, although hydrodynamics was established as a science by Leonardo da Vinci and thermodynamics' principles were essentially completed with the nineteenth-century work on fundamentals of physics by Bernhard Riemann, the science of thermo-hydrodynamics—the physics of relativistic-beam processes, for example—is poorly understood among most physicists today, largely

because of British philosophical hostility to the methods of Kepler, Leibniz, Riemann, *et al.* in universities. If this error is corrected, as it could be corrected rather quickly with significant understanding of its importance, a broad, qualitative improvement in methods of applying heat to desalination could be effected within a short period of research and development.

Even with such improvements in use of heat-energy, there are unpleasant limits to economical desalination of large quantities of seawater today. Fission-nuclear heat-energy, even using the optimal high-temperature gas-cooled thorium reactor, still means a relatively high cost for desalinated water. This does not prevent very significant use of desalination. The lack of freshwater is so critical a bottleneck in obvious situations, that providing freshwater even at a relatively high cost is economical, in net effect, on the local economy as a whole. When the costs of this water's production are averaged together with other costs of production in that local economy, the result is a profitable local economy where, without freshwater, it would be impossible to have any local economy at all.

This will be radically improved with the emergence of commercial thermonuclear fusion as a prime energy-source. Although initial versions of fusion-energy facilities are projected to achieve energy-flux densities approximately those of fission-energy facilities, the “second” and “third” “generations” of fusion-heat sources will advance far beyond the projected operating limits of fission-energy facilities. Cheap, large-scale production of desalinated water will then be generally in reach. There can be a qualitative improvement in projectable benefits through developments in relativistic physics. Such latter developments partly overlap and also parallel fusion technologies' development. The development of strategic and tactical beam-weapons systems against strategic and tactical missiles, for example, will tend to force this latter development of high-energy relativistic-beam systems applicable to industrial tasks.

The general effect of these frontier developments on the economies of the entire world will be much greater, more profound, than the effects of the eighteenth century's development of the heat-powered machine, and the coming of electricity into general use in industrialized economies around the beginning of the present century. Unless threatening global catastrophes prevent this, the coming twenty-five to thirty years will witness the greatest, most profound technological revolution in all human history to date. It is in that context that the Arab conquest of the desert is situated.

New Cities

Urban development has been the driving force of civilization for more than ten thousand years. From economic science, we know that the first step beyond the most primitive hunting-and-gathering existence occurred through development of fishing, with the ocean mouths of great river systems the leading sites for such development. The earliest advances in civilization were products of developments of boats for fishing, boats which became the means for diffusion of cultural advances from one river mouth and other coastal fishing settlements to the other. The development of astronomy for navigation, a form of science more than ten thousand years old, was the beginning of science. Out of this came the development of riparian city-states, based on development of the agricultural revolution, cities which were the administrative, trading, and technological centers for the development of rural life in the regions surrounding these cities.

Since then, technology has greatly advanced, but certain characteristic principles have persisted to the present time, over intervening thousands of years, over the time span of about ten thousand years indicated by the account of Egypt's dynasties in the fragment of the priest Manetho. Again, today, in Egypt, the same basic method is pointing toward a wonderful uplifting of the life of the people of that Arab state.

These cities have had a twofold function over the intervening thousands of years, to the present day. First, such new cities, as centers for promotion of agricultural development, perform an indispensable economic function. Second, properly designed such new cities have a critical cultural function, breaking the pattern of poverty, despair, and pessimism infecting the existing cities of most of the Arab World, and ending an artificial and socially dangerous division between urban and rural life.

First, the task is to increase greatly the number of hectares of fertile land under cultivation, while also increasing per-hectare yields on the average, and also reducing the percentile of a man-year of labor required for each average hectare. Large-scale programs well designed for this purpose may temporarily increase the



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Properly designed new cities perform a dual function: “promoting agricultural development, and ending the artificial and socially dangerous division between urban and rural life.” Shown: a view of the Central Business District under construction in Egypt’s New Administrative Capital. Oct. 12, 2020.

percentile of farm labor in the total national labor-force, by slowing down the rate at which farmers are squeezed out of the land and packed as unskilled or semi-employed labor into urban slums. Once the programs have had an initially successful effect, the long-term purpose and result must be to reduce the percentile of the total labor-force required to produce an adequate food supply for the entire population. The targets are, first, not more than 25 percent in rural occupations, and later, to 15, to 10 and to 5 percent, over the progressive phases of the coming two generations, approximately fifty years.

Agriculture, Industry and People

The first objective is to make states self-sufficient in agriculture by increasing the number of hectares and yields per hectare simultaneously. As the number of hectares per farm increases sufficiently, once the required number of high-yield hectares has been reached, the increase in hectares of agricultural land will continue, but the size of the rural labor-force, as a percentile of the nation’s total labor-force, will contract, in the general manner indicated.

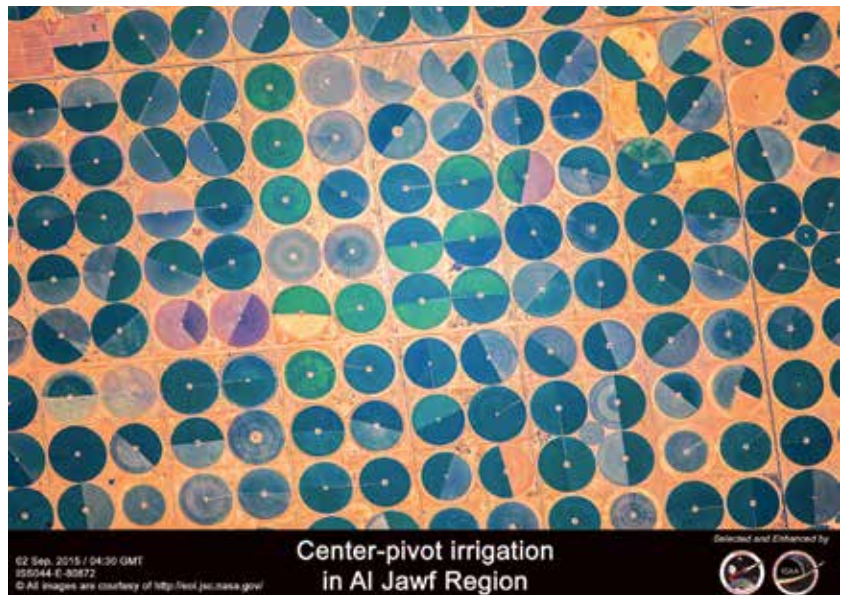
Second, this progress depends in several ways upon industrial production. First, irrigation and land reclamation are large-scale engineering projects, which are creations of the industrialized section of the labor force.

Second, the maintenance of these improvements and providing further improvements require an increasing supply of industrial products and technological services. These require markets and relevant forms of production provided by urban centers situated within the locality of agricultural development. These urban centers, the new cities, are centers of transportation into and out of the region of agricultural development. They are centers of education and culture for the combined populations of the cities and surrounding agricultural areas. As a population-shift begins from agricultural to urban employment, the expandable new cities permit this transition with least injury to family, community, and culture.

It is much cheaper, in terms of total social cost to the state, to create new cities than to improve decaying old cities now existing. The program being implemented in Egypt is brilliantly conceived, well executed, and effective on this point, and provides a basis for comparison with situations in other parts of the Arab World. Modern engineering methods, of building entire cities from sub-surface installations upward, provide modern housing at the relatively lowest cost. By expanding the projected housing program at rates consistent with growth of industrial employment in the new city, the condition of life of the majority of the souls of the state can be improved most greatly, at the lowest cost. If a shift of more than ten to fifteen million of the population of Egypt to new urban-rural development regions can be effected within the remainder of this century, Egypt will become a powerful modern state, curing most of the threatening social ills within itself.

The Arab World's greatest task, complementing the conquest of the desert, is conquering its scarcity of population. Every general advance in productive powers of average labor depends upon advances in technology. A significantly self-reliant advancement of technology requires an increasing complexity of the social division of labor. Advances in complexity of the social division of labor require an increase in the total labor-force. This requires a population-growth rate appropriate to that increase.

This requires defeating infant mortality rates and improving life expectancies of surviving infants, while maintaining a population of households adequate to



“The first objective is to make states self-sufficient in agriculture, by increasing the number of hectares and yields per hectare simultaneously.” Shown: a view from the International Space Station of an array of center-pivot irrigated agricultural plots in Saudi Arabia’s Al Jawf Region, Sept. 2, 2015.

growth of the labor-force. The social cost of maintaining such households of pre-labor-force-age souls, is such that we must enhance the life expectancy of the adult population to European levels of the early 1970s. This means increasing substantially the section of the population in the age-interval of sixty-five to eighty-five years.

As the recent foolishness of the United States and Europe shows, the social costs of maintaining decently persons in the age-interval of sixty-five to eighty-five require a significant birthrate, to produce those growing number of the active labor-force needed to carry retirement costs. This requires a modern health program, whose economic effect is to increase the health and productivity of the population, and to increase beyond sixty-five and seventy years the range of a fully productive life of members of society. Older persons have earned special privileges for long service to their families and to society generally, but they also require opportunities to be important members of the community, and require the medical and other protection of their powers so that they may continue to perform such useful functions as they may choose to contribute.

To conquer the desert requires people. To inhabit the conquered desert requires an increased number of Arab souls.

The full 45-page, 1983 Special Report, Saudi Arabia in the Year 2023 by Lyndon H. LaRouche, Jr., is available [here](#).