THERE IS LIFE AFTER THE EURO!

Program for an Economic Miracle In Southern Europe, The Mediterranean Region, And Africa

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THERE IS LIFE AFTER THE EURO!

An Economic Miracle For Southern Europe And the Mediterranean!

by Helga Zepp-LaRouche

June 1—All of us—every nation in Europe, along with its citizens—now face a doubly existential crisis: The euro system, and the entire trans-Atlantic financial system, are in the process of total disintegration, which can be put off only for a few more weeks, by means of hyperinflationary injections of liquidity. This is the result of the failed system of the British Empire, which also, on the basis of the so-called Blair Doctrine, now threatens to draw us into a thermonuclear confrontation with Russia and China.

A solution does exist. That solution, however, is absolutely impossible within our current system. The hopelessly bankrupt system of globalization, and today's casino economy, must be replaced by a credit system that is oriented exclusively toward future investment into the real economy, with high energy-flux densities. Re-attaining national sovereignty is the absolute prerequisite for both economic recovery and the preservation of peace. We need to immediately establish a two-tier banking system in the tradition of Franklin D. Roosevelt, along with a credit system in the tradition of Alexander Hamilton and the FDR-era Reconstruction Finance Corporation, and we must return to national currencies, fixed exchange rates, and an economic reconstruction program for Southern Europe, the Mediterranean region, and the African continent.

The Euro Has Created a Monster

One might well paraphrase the title of Francisco Goya's famous etching to describe the result of the European Union's current policies: "The sleep of economic reason has produced monsters." For who could still have any doubt that the euro is a failed experiment? The situation in Greece, Spain, Portugal, Italy, and also in the Balkan states, is, in fact, hideous, and is already costing many human lives. This is not the fault of these countries' citizens; rather it is the result of the European currency union's flawed policies, and of the monetarist policies of the EU and of Europe's governments, which, especially following the outbreak of the financial crisis in July 2007, have merely continued a policy favoring speculators and banks, against the interests of the General Welfare.

The Eurozone, even from its birth, was not an "optimal currency zone." It ought to have been clear from the very outset to anyone with any economic common sense, that states with such divergent economic structures, and diverse languages and cultures, as Germany, Finland, Greece, and Portugal, could not develop harmoniously into a single currency union.

As is well known, the euro was not born out of solid economic considerations, but rather out of the geopolitical intention to bind the reunified Germany into the corset of the EU, and to force it to abandon the deutsche-

mark. François Mitterrand's former advisor Jacques Attali later admitted that it was clear to all participants at the time. that a currency union could not function without political union, and that this birth defect of the euro had been intentionally designed to force Europe into political union later on! Precisely that is what we are witnessing now, with the advocates of union now attempting, under extreme crisis conditions, to use the introduction of eurobonds as a final step toward a federal EU state.

The extensive powers which the European Stability Mechanism is to be granted—its governing council and directorate would enjoy lifelong immunity, and no accountability—would turn such a federal state into a total dictatorship serving the interests of the banks and the City of London. It would guarantee Europe's plunge into economic, political, and social chaos.

Twenty years after the signing of the Maastricht Treaty, a monster has been created; and 11 years after the introduction of the euro, many Eurozone nations are in danger of descending into African-level conditions social collapse, rising death rates, infrastructure no longer maintained, most economic activity ground to a halt, one in two or three young persons unemployed, and skilled workers fleeing their homelands because they see no future there. The alleged boom in the Eurozone's so-called catch-up nations was in fact a bubble and now that bubble has popped. When the flow of tourists begins to dry up, and when people can no longer afford second vacation homes, it will become clear that there was no increase in social wealth in these countries, and that there's still no adequate infrastructure and industrial capacity. Greece, for example, does not have a single rail connection to the rest of Europe, or to Asia!

But even the citizens of the so-called profiteer of the



"The Sleep of Reason Produces Monsters," from the "Caprichos," by the Spanish artist Francisco Goya (ca. 1797).

euro, Germany, have been left empty-handed. During its 11 years with the euro, its domestic market has shrunk, real incomes have declined, purchasing power has gone down, its health-care system has grown considerably worse, and the spectrum of its employment structure has worsened in the direction of cheap labor. Its ostensible special position as the "world champion of exports"—which primarily benefited the DAX 500 corporations, and much less, the small and mediumsized industrial firms—is quite understandably collapsing, just at the point when its export markets are drying up.

The EU's policies have not secured peace in Europe, as the propagandists of European integration would have us believe; rather, enmity among nations has never been greater since World War II.

Instead of fostering the General Welfare and a sense of community, the Law of the Jungle is spreading its influence, with each out to save his own skin. A continuation of this policy, whether it be through brutal austerity in the tradition of Brüning, or in the form of a hyperinflationary collectivization of debt, represents high treason against the very idea of Europe in the Christian-humanist tradition.

Strategic Confrontation Coming Next

The subjugation of Europe's nations under the British Empire's diktat not only means domestic strife, it also is drawing Europe inexorably into a strategic confrontation with Russia, China, and other Asian nations. Both Russia's President Vladimir Putin and its Prime Minister Dmitri Medvedev have made it very clear that

^{1.} Heinrich Brüning was Chancellor of Germany (1930-32), during the Weimar Republic. His imposition of savage austerity is credited in part for Hitler's rise to power in 1933—ed.

Russia will not accept the undermining of international law as set forth in the UN Charter, and that a policy of violating national sovereignty under the pretext of "humanitarian intervention" will lead to the use of nuclear weapons.

The Obama Administration has adopted as its own the so-called Blair Doctrine, which claims that the era of the Peace of Westphalia is over, and that "humanitarian interventions" around the world should henceforth follow the interests of the Empire, obliterating the nation-state. The Obama Administration's so-called Atrocity Prevention Board has drawn up a long list of states, including Syria, Sudan, and many others, which are to be targeted for military intervention.

Tony Blair, the author of the lies that led to the Iraq War, has offered himself to Obama as an election advisor for the next six months, and while Blair was in the United States in May, he openly stated that, after he has helped Obama get re-elected, he intends to make another try for the British Prime Minister's office. The plan is clearly to rule the world on the basis of the Anglo-American "Special Relationship." Therefore, we have a confrontation of two irreconcilably opposed doctrines: the Blair Doctrine of the world as an empire, where sovereign nation-states no longer exist, and the Putin Doctrine, based on the defense of international law and the defense of national sovereignty.

The overlapping of the Blair Doctrine—according to which, NATO interventions against "rogue states" are possible anywhere in the world, even if member-states are "not directly affected"—with NATO's own policy toward the EU, especially since the adoption of the Lisbon Treaty in 2009, means that all countries in Europe will be drawn into potential confrontation with Russia, China, and other Asian states, without ever being asked, and without any right to veto.

The successive process of relinquishing national sovereignty to the supranational Brussels dictator-ship—a process which has been largely kept out of the public eye—has brought us to a dangerous juncture. The pro-European political establishment, in its desire to belong, has become so accustomed to giving away its sovereignty, that any resistance against this imperial intervention policy—such as former Chancellor Gerhard Schröder's refusal to go along with the Iraq War, and Foreign Minister Guido Westerwelle's refusal to participate in the war on Libya—has been

increasingly eroded.

In a somewhat different context, it becomes clear from European politicians' muted attitude toward the stationing of U.S. anti-missile systems in Europe, that what the Russian government has described as a potential *casus belli*, is by no means mere "propaganda," as some politicians have irresponsibly averred.

The same trend is evident in NATO's new strategic concept of "Smart Defense," which was presented by the head of British Armed Forces, Gen. Sir David Richards, among others, at the recent NATO summit in Chicago. According to this concept, NATO's 28 member-states must renounce all sovereign rights regarding both deployment of their own troops abroad and requisitioning of war matériel. Richards announced that yet another NATO conference, to be held in September, will settle this question of full NATO access, without any ability of elected national governments or parliaments to block it by veto. Richards is a Commander of the Order of the British Empire, along with his colleague, CBE Hans Joachim Schellnhuber, head of the German Advisory Council on Global Change (WBGU), who was likewise personally decorated by the British Queen for his service to the Empire.

The West, and a large part of the rest of the world, is dominated by the institutions of the British Empire, by which I do not mean Great Britain itself, but rather the London-headquartered system of globalization, i.e., the nexus of central banks, investment banks, hedge funds, holding companies, and insurance and reinsurance firms, whose primary interest is to maximize profits for a parasitic class, and to force a gigantic redistribution of wealth from bottom to top. And in practice, the EU, from Maastricht to Lisbon, is nothing but a regional expression of this system.

On the grounds of these two issues—economic self-interest and national security self-interest—the preconditions for Europe's nations to coexist with this EU, no longer exist. Therefore, every nation has the right, from the standpoint of international law, to exit from this union.

On the other hand, self-subjugation under the British Empire's regime of globalization, and under the EU as its regional expression, as it has developed from the Maastricht Treaty to Lisbon, would achieve precisely the opposite of its ostensible goal of preserving peace in Europe. It would lead to economic chaos and war, and

thus it is tantamount to high treason against the peoples of Europe.

The Alternative

Two-Tier Banking and Credit System, and an Economic Miracle for Southern Europe and the Mediterranean Region!

Once we have psychologically digested the fact that today's trans-Atlantic monetary system is beyond salvation—either it will disintegrate in a sudden chain reaction, or else it will obliterate everyone's assets in Europe and North America in a hyperinflationary explosion, such as occurred in Germany in 1923—only then will our minds be equipped to turn to constructive solutions. By implementing a two-tier banking system in the exact tradition of the Glass-Steagall standard established by Franklin D. Roosevelt in 1933, commercial banks would be put under state protection as a first step, while the entire array of "creative financial instruments" and derivatives contracts would have to be struck from the books. A moratorium must be declared on all state debt, and the portion of indebtedness stemming from financing all sorts of bailout measures, would likewise be wiped from the books.

The EU treaties, from Maastricht to Lisbon, must be canceled, and national sovereignty over monetary and economic policy must be re-established. Competent feasibility studies for a "Plan B," comprising technical preparations for, and execution of an exit from the euro, have already been worked out by such experts as Prof. Dirk Meyer at the Federal Military College in Hamburg. An extended weekend could be utilized as a bank holiday to prepare the currency conversion, and to deal with account balances in checking and savings banks. German citizens, resident aliens, and foreign firms with German branches could have their cash assets stamped with magnetic ink. Time-limited controls on capital transfer and border traffic could prevent "non-sector" euros from being brought in, and procedures for timely reporting of assets could be adopted in the interest of preserving public order.

The exit from the euro must be followed by a transfer of the monetary sovereignty that was handed over to the EU, back to the respective national states; this can be accomplished by a quickly drawn-up resolution adopted by the European Council. A new national currency law could then legislate the adoption of the

New Deutschemark, and likewise for other respective national currencies. The euro could continue to be utilized as a unit of accounting among national banks, as was done earlier with the European Currency Unit.

Our return to national currencies would generally be simpler, because we can make use of the experiences and procedures from the euro's introduction. The resulting costs are relatively small, compared with what would happen with a chaotic disintegration of the Eurozone.

Historical Examples of the Use of, or Failure To Use, a Credit System

In the United States, Roosevelt, with the help of a package of measures—the Glass-Steagall legislation, the Pecora Commission, the New Deal, the Reconstruction Finance Corporation, and the Tennessee Valley Authority—successfully led his country out of the Depression. But meanwhile, as we know, Germany took the route of Brüning's austerity policy, into Hjalmar Schacht and Hitler. Germany's government, however, has apparently not learned anything from these various examples, and the infamous Troika—the ECB, EC, and IMF—is imposing the same policy which led to catastrophe in Germany, only now on all of Europe.

But even back then, there was criticism in Germany against Brüning; and there were also economic policy proposals paralleling those of Roosevelt. St. Petersburg, Russia-born Vladimir Woytinsky, head of the statistical department of the General German Trade Union (ADGB), along with Wood Workers Association head Fritz Tarnow and Social Democratic Party (SPD) economic policy spokesman Fritz Baade, drafted an international program for solving the world economic crisis, which was named, after its authors, the WTB Plan.

Woytinsky wrote: "All peoples are suffering from the fact that our world economy is sick. They must therefore concentrate their efforts on joint action to overcome the worldwide crisis." And further on: "The funds which will be liberated by a policy of international credit creation, must be used for job creation, and for the implementation of an ambitious plan for European reconstruction." This plan foresaw the creation of productive jobs for 1 million unemployed people, to be financed via a 2 billion Reichsmark loan. In addition,

long-term credits were to be issued at low interest and amortization rates against bonds which could then be redeemed at Reichskredit AG, and would be discountable at the Reichsbank. The ADGB agreed to this plan, but it was rejected by the SPD's leadership under Otto Wels, and by the SPD's so-called economic experts Hilferding, Naphtali, and Bauer.

As Woytinsky later wrote in his autobiography: "It was as if I were seeing before my very eyes how Brüning was leading Germany into catastrophe.... But one mustn't be too hard on Brüning and his errors. His false ideas were shared by many of his advisors in both his own party, and the Social Democrats. And if they hadn't supported his policy, he would quite possibly have abandoned them."

In tandem with the WTB Plan, Dr. Wilhelm Lautenbach, an economist with the German Economics Ministry, presented a memorandum based on similar principles, titled "Possibilities for Economic Revival through Investment and Credit Expansion," which stated:

"The natural pathway toward solving an economic and financial emergency is ... not shrinkage, but rather increased productivity." He wrote that there is currently the "paradoxical situation" whereby, "despite extraordinary throttling of production, demand continues to lag behind supply, thereby [giving rise] to ever increasing throttling of production." Under these depression conditions, there are "surpluses of goods, unutilized plants and equipment, and unutilized labor power." The exploitation of this strong but unutilized area of productive free-play, he wrote, is "the true and most urgent task of economic policy, and in principle, it is relatively simple to solve."

The state must "create new economic demand, which, economically, represents a capital investment. In this connection we can think of such tasks as ... public works, or works undertaken with official backing, which will economically signify a growth in the value of assets, and which would have to be undertaken anyway once normal conditions return"—road building, improvement and extension of railways, etc.

Lautenbach wrote in conclusion: "With such an investment and credit policy, the disequilibrium between domestic supply demand will be removed, and thus, all production will once again have a direction and a goal. If we forgo such a positive policy, we will be unavoidably steering a course into further economic collapse and the total ruin of our national economy—a situation

which then, in order to avoid an economic catastrophe, would force new, large, short-term public indebtedness for purely consumption purposes—whereas today, we still have the option of drawing upon this credit so that productive projects can bring both economy and our public finances back into equilibrium."

Lautenbach also stressed that at such an early point, credit creation could still be put toward productive investment, whereas later on, it would have to be used for financing unemployment.

If the WTB Plan or the Lautenbach Plan had been adopted in 1931, the social conditions which made Hitler's coup possible two years later, would never have existed. Today we know what the catastrophe forecast by Woytinsky looked like, and we can either rush headlong into a far worse catastrophe, or else we can choose to follow Roosevelt's path.

The Credit System

In 1923, Germans had to learn from bitter experience that money has no intrinsic value. Within a few short months, they saw their entire life's work swept away, even though, nominally, they were billionaires, or even trillionaires. Today, in the age of electronic money multiplication, securitization, and derivatives contracts, the evanescent nature of most of our money is even more obvious. The bursting of various bubbles in the new market, the secondary mortgage market in the United States, Lehmann Brothers and AIG, and the imminent bankruptcy of countless banks which would have long ago gone belly-up, had it not been for "bailout packages": In all these cases, the losses have been of virtual money, and thus they are, in fact, imaginary losses. Something that you have never actually owned, and which has only a virtual value, you're actually not losing at all.

Today's monetarist system has accumulated such a gigantic volume of these debt instruments in the form of outstanding derivatives contracts, securitizations, etc., that any attempt to honor all this past debt would invariably lead to hyperinflation. The only difference between now, and Weimar Germany in 1923, is that this time, we're dealing not with just one country, but with the entire trans-Atlantic region.

The credit system which must replace this bankrupt monetarist system is based on completely different principles. Money *per se* has a function in payment transactions, but much more important, is the credit which a sovereign state's national bank will issue

Bering Strait

Main Lines of a Worldwide Rail Network, as Sketched by H.A. Cooper

Source: EIR, 1997

toward future production. The goal of this credit issuance is to build up the real economy, to create full employment, and to increase the entire labor force's productivity, by means of a scientific driver and targeted fundamental research. It is an application of the principles of physical economy, as these have been developed by Leibniz, List, Carey, Witte, leading up to Lyndon LaRouche.

The issued credits are directed toward future production—a real value, in which human productive ability, refined raw materials, and industrial capacity, create a surplus value which increases in tandem with the scientific and technological level on which that production takes place. Each country shall also create a national bank in the tradition of the first U.S. Treasury Secretary, Alexander Hamilton. This bank shall issue open lines of credit for financing well-defined projects, such as NAWAPA (the North American Water and Power Alliance), the building of a tunnel under the Bering Strait, the reconstruction program for Southern Europe, the Africa Pass, Transaqua, and

so forth (see following articles). Via local and regional commercial banks, these credits will then be issued to the firms participating in these projects, and they, in turn, will contract with suppliers and hire employees, who will, in their turn, spend their income for the normal items required to sustain their living standard.

And thus, above and beyond the stimulation of production resulting directly from the projects, there will be a secondary revival of the economy as a whole. Given the large scope of the above-named and similar projects, full and lasting productive employment will be achieved, while at the same time, the employment spectrum will be shifted away from the services sector and into productive jobs in industry, research, and agriculture.

The historical examples of cases where this method of productive credit creation has been applied, demonstrate that the benefits reaped by the general economic upswing created thereby, along with the concomitant rise in tax revenues, will far surpass the volume of the

MAP 2 **Eurasian Rail Network Plan as First Presented by LaRouche's Associates in 1992**



Source: EIR

originally issued credits. Contrary to the creation of money for retiring the monetarist system's old debt, the credits issued as we have outlined here, will have an anti-inflationary effect, because the emphasis on scientific and technological progress will increase productivity.

'For Future Generations'

But we are also speaking here about great projects which will improve the lives of human beings for many generations to come. For those people in the virtual stockbroker's world, who would rather indulge in hedonistic dancing around the Golden Calf, it might come as a surprising thought, but, in fact, the underlying purpose of an economy is to guarantee the long-term survival of the human species on a level that increases from generation to generation. The purpose of a credit system is to take the wealth created by past generations and "pass it onward, increased and enriched, to future generations," as Friedrich Schiller defined the meaning of universal history.

Mankind is not merely another species of animal which reproduces itself on the same level of development over the course of centuries and millennia; rather, man is the only species with the capacity for creativity, i.e., the capacity to develop its own natural resources to an ever higher level of organization. With our creativity, we can create something that outlasts our own lifespan: We invest in something which will benefit future generations, something which will afford them a degree of material and spiritual freedom which extends far beyond what we, as initiators, have achieved during our own lives.

The idea of a credit system is therefore by no means merely a technical improvement in our banking system; rather it is a harmonization of the financial side of our economy, with the continued existence of humanity for many generations into the future. Therefore it has, if you will, a spiritual dimension. The credit system is thus the instrumentarium which aids us in passing the value created by one generation, and enriched by us, onward to following generations. In order to make it clear that a credit system must be thought of as a human concept, one which places mankind at the very center of the economy, let me quote the concluding sentences from Friedrich Schiller's essay "What Is, and To What End, Do We Study Universal History?"

"There must burn within us a noble yearning to take the rich legacy of truth, morality, and freedom which we inherited from our forebears, and to pass this onward, richly increased, to the future world, and also to make a contribution of our own, and to firmly link our own fleeting existence to the eternal chain that winds through all human generations. As diverse as the future careers may be awaiting you in society, you can all put something toward this! Every action of merit opens up a pathway to immortality—to true immortality, I say, where the deed lives on and speeds its way along, even if its originator's name be left behind."

The crisis of civilization that is plunging us into a collapse of the trans-Atlantic financial system, ought to make it clear to even the most dull-headed among us, that we must bring our political and economic affairs into harmony with the ordering of the physical universe—if, that is, we are to avoid the fate which led to the extinction of earlier species. The universe, however, is not a closed system, with a "budget that needs to be balanced," but rather it is an anti-entropically developing, creative universe, whose energy-flux density and complexity of organizational structure is always increasing. And it is high time that we adapt our human economy to these underlying laws of the universe.

The concrete task of the credit system for reconstructing Southern Europe, the Mediterranean region, and Africa, flows directly from this universal task. On the one hand, national banking systems in each participating state must finance the projects described in the following sections of this report, by creating the required lines of credit. At the same time, long-term cooperation treaties must be concluded between sovereign states for joint work on international projects which straddle national boundaries, such as the extension of the Eurasian Land-Bridge's transport corridors into the Middle East, and, via bridges and tunnels, into Europe and Africa. These treaties shall have realistic durations of from one or two generations.

If we abandon the idea of quick profit, and instead dedicate ourselves to the task of eliminating the wretched condition of underdevelopment, by means of a program of reconstruction that will form the crucial basis for expansion of infrastructure and for economic drivers, then, out of the present collapse crisis, together with such projects as NAWAPA and the construction of the World Land-Bridge, we can set into motion the greatest economic miracle in human history. A new era of humanity can then begin.

This article was translated from German.

Greece and a Marshall Plan For the Mediterranean Basin

by Dean Andromidas

June 4—It has become a cliché to say that the treatment of Greece under the brutal policy of the Troika (ECB/EC/IMF), memorandum is an injustice to a nation which was the cradle of Western civilization, but it's true—and the same is true of the Mediterranean basin as a whole. Western civilization was born in the Mediterranean basin because, as a people of the sea, those who lived there were in communication with peoples and cultures far distant from their homelands. The Mediterranean Sea brought together the civilizations of the broad expanse of Eurasia, from the Atlantic islands to the Pacific. To the south it brought in all of the African continent, since it served as a hub of the global trade routes, such as they existed.

Egyptian civilization not only was connected economically deep into Africa along the Nile River, but also, via the Red Sea, to the Indian Ocean, and even beyond, to the west coast of the Americas. To the north, through its relations with the maritime states of the Aegean, better known as the lands of the Hellenes, Egypt had a trade window into the northern regions of the Eurasian landmass, as witnessed by the fact that amber, originating in the Baltic states, has been found in the ancient tombs of the Pharaohs.

Greece drew into itself the trade and cultural influence of its huge hinterland, the so-called Scythians, identifying a region that now encompasses the Balkans, Ukraine, and part of Russia, reaching up into the Baltic Sea. To the east, the conquests of Alexander the Great encompassed a region that was in communication with Greece for thousands of years before his army marched into India.

By the same token, Rome, or more broadly, the civilization of the Italian peninsula, had all of western Europe as its hinterland.

These large regions comprised trade routes which brought in new types of raw materials, such as tin, required for converting soft copper into a much harder and durable bronze, from outside the Mediterranean.

But the most "durable" of resources that came into circulation throughout the Mediterranean basin were new ideas and conceptions of man and the universe, as most dramatically witnessed by the impact of Egyptian science and philosophy on that of Greece. Greek temples were designed on the same principles as those of Egypt: that is, as astronomical instruments. The difference was that Greek temples were far more beautiful, and it was that conception of beauty which became the foundation of what we call Western civilization.

The collapse of the Greek and Roman Mediterranean civilizations was followed by the rise of Islamic civilization, which carried forth the ideas of the ancients, and helped to kindle the European Renaissance.

But then, the shifting of economic development to the north, accompanied by the transmutation of the Venetian Empire into the East India Companies, and finally into the British Empire, relegated the Mediterranean to backwardness, and Africa to the ravages of colonialism. The lack of economic development of this region has led to the most important deficit to civilization as a whole, the generation of new ideas.

The Eurasian Land-Bridge

The future of the economies of Greece and of all the Balkan countries lies in reviving their geostrategic location in the eastern Mediterranean as the economic development gateway to Eurasia to the northeast, Southwestern and Southern Asia to the east, and Africa to the south. This historic role of Greece will resume with full-scale economic development under a new Mediterranean Marshall Plan.

The principal, intercontinental vectors of these connections are shown in **Figure 1**. The Balkan peninsula is at the eastern Mediterranean juncture of these routes, and with full intermodal development for trade and transit—rail, road, waterways, air, ports, and sea—the

Bering Strait: proposed tunnel connection to North America Murmansk Urengo Archangelsk rinenbure Krasnoyarsk Skovorodino Chelyabinsk 4 Irkutsk 🗆 ktogay Harbin 🗖 Almaty □ Tashkent amarkand Teheran Beirut Mashhac Lahore Chengdu Delhi Only some rail lines in Northern Varanasi 1,000 2,000 Africa are shown here kilometers Yangon Khartoum□ Bangkol Eurasian Land-Bridge routes Planned or proposed main routes Existing other lines Other planned or proposed lines

FIGURE 1

Eurasia: Main Routes and Selected Secondary Routes of the Eurasian Land-Bridge

Source: EIR.

critical geo-position of Greece and the Balkans will be maximized for the benefit of all.

First, consider in brief the vast intercontinental corridors connecting through the Balkan peninsula. Then, as we cover in more detail below, look at a few of the priority regional corridors across the Balkan peninsula itself, centered on rail, road, waterways, and port development. There are the two main north-south axes defined by the peninsula—on the west, the Adriatic Sea corridor; on the east, the Aegean Sea corridor, proceeding inland, northward at the port of Thessaloniki, through the Axios/Vardar-Morava rivers corridor.

1. Greece and the Balkans connect to the north, into the full Eurasian east-west land-bridge development corridor. To the west, via the Rhine-Main Canal, there is the connection to the international ports of Antwerp, Rotterdam, and Hamburg. To the east, via the Danube corridor, there are links into the Black Sea basin. This continues eastward to the Dnieper River, the Don-Volga Canal, and deep into central Asia and western Siberia, via the Caspian Sea. Greece and the Balkans will thus be integrated into the trans-Eurasian rail corridors spanning the landmass.

- 2. Greece and the Balkans connect to the east/southeast by railway corridors leading into Turkey, across the Anatolian peninsula, then branching eastward into South Asia through Iraq, Iran, to the Indian subcontinent.
- 3. Greece and the Balkans connect to Africa. By land surface, the connection runs through Turkey, south through the trans-Jordan, across the Sinai, into north and east Africa.

The connections by sea in the Mediterranean are self-evident, but the ease of sea transport extends worldwide, through the Suez Canal and across the Atlantic Ocean.

All along these intercontinental routes—including maritime routes—there are gaps, and links that were proposed long ago but never built, especially in Africa,

so that the question of a new Marshall Plan for Greece, the Balkans, and the Mediterranean, puts these projects front and center on the agenda for world reconstruction:

- In the Mediterranean, the Gibraltar Tunnel is pending, plus a new, widened Suez Canal.
- In Eurasia, the eastern Siberian rail connection and Bering Strait Bridge/Tunnel must be built.
- In Africa, a trans-continental rail grid is urgent. The water shortage in the Sahel Desert can be reversed, by diverting part of the Congo River flow northward into the Chad basin.

In all areas, a crash program for nuclear power is essential.

A TVA Approach to the Balkans

In this larger context, the many priority development tasks in Greece and the Balkan peninsula become clear.

The geo-formation of the peninsula is defined by the Balkan Mountains in the far northeast, in Bulgaria and Serbia; the Rhodope Mountains immediately to the south of the Balkan Mountains in Bulgaria; and by the Dinaric Alps in the northwest. In Greece, the mountainous character is manifest both in the Pindus Mountains on the mainland, and in its 2,000 islands. This gives Greece its fabulous natural asset of 14,480 km of coastline (9,000 miles), 4,830 km (3,000 miles) of seacoast on the mainland, another 9,655 km (6,000 miles) on the islands, and a long, rich maritime history.

The same ridge and upland valley character extends throughout the Balkan peninsula, until its northern border with the great Hungarian Plain. The map definition of the Balkan peninsula is shown by water on three sides—in the west, the Adriatic Sea and Ionian Sea; in the south, the Mediterranean; and in the east, the Aegean Sea, the Marmara Sea, and the Black Sea. The northern boundary is often shown as the Danube, Sava, and Kupa rivers. The combined land area is 490,000 km² (189,000 square miles).

Greece is about 100,000 km² (38,600 sq mi), slightly larger than the state of New York, but with a population of 11 million people, barely half that of New York State. Considered as a region, however, the Balkans have 42 million people.

This entire region was thrown into chaos and misery during the civil war years of the 1990s and NATO bombings, including the destruction of the already inadequate infrastructure—power, water, and transportation links.

Former Yugoslav Republic of Macedonia

(FYROM): 2.06 million Albania: 2.9 million Serbia: 7.3 million Kosovo: 2 million

Bosnia and Herzegovina: 4.6 million

Montenegro: 0.66 million Croatia: 4.5 million Bulgaria: 7.4 million

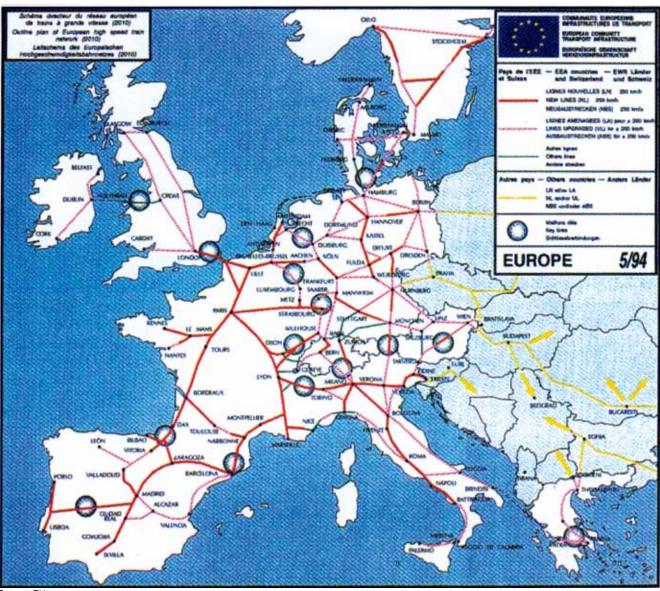
The population has been in decline since. What little reconstruction has taken place has been carried out in a European and worldwide context of globalization and austerity, with the effect of suppressing industry and agriculture that should have been fostered for the benefit of the region. In Serbia, for example, cheap-labor textile production, for garment exports, has been fostered for the multinational retail trade.

What is required is a top-down approach, in the spirit of the famous Tennessee Valley Authority, for actual high-technology agro-industrial development. To remind readers, the TVA is a federally owned corporation in the United States, created by Congressional charter in May 1933, to provide navigation, flood control, electricity generation, fertilizer manufacturing, and economic development in the Tennessee Valley. The TVA was envisioned not only as an energy provider, but also as a regional economic development agency which would use the electricity produced and Federal experts to rapidly modernize the region's economy and society. The area involved was defined by the watershed of the Tennessee River and its tributaries (comprising parts of seven states), and was developed as a whole. The great science center of Oak Ridge, Tennessee, famous for nuclear technology, was established. High-tech farming and industry grew, as intended under Franklin Delano Roosevelt's policy.

The Balkan peninsula, though very different in specifics—with its multiple, smaller watersheds, higher, rugged mountains, historic cities, and ancient sites, not wilderness—is nevertheless, entirely appropriate for the *principle of the TVA*, whose drainage basin of 105,868 sq km (40,876 sq mi) is larger than Greece.

Extending the TVA form to a multinational authority or corporation that would be based on a treaty or corporate organization, where the authority is jointly owned and managed by the states concerned, might be

1994 European Community Infrastructure



Source: EU.

politically attractive for delimited, shared waterway and transportation corridors, or even for larger regional development zones.

The Balkans and Greece must have a completely upgraded platform of power supply, transportation, urban and rural medical and residential services, sanitation, plentiful water, and not only flood control and irrigation, but also defenses against earthquakes and volcanoes. Educational and science centers are crucial.

Peninsular Corridor Priorities

First, consider transportation. A quick overview of the priority transportation/development routes and regions across the Balkans and Greece can be obtained by starting with the picture over 20 years ago, of what were identified as "priority corridors" for modernized rail-lines (and implied, related road, water, and other infrastructure), stipulated by transportation ministers at the March 1994 Second Pan-European Transportation Conference on the island of Crete. There were 10 Euro-

FIGURE 3
The Rhine-Main-Danube Canal and 'Productive Triangle'-Paris, Berlin, Vienna



Source: EIR, 1992.

pean corridors designated, of which five traverse Greece and/or the Balkans.

Figure 2 shows a May 1994 European Community Transport Infrastructure map, from the Crete meetings, presenting an "Outline Plan for a European High-Speed Train Network—2010." Besides a high-speed rail line shown for Greece itself, vector-arrows elsewhere in the Balkans show the direction of other routes to be worked out.

Needless to say, very little indicated on the envisioned "2010" map has materialized, with one of the

few exceptions being the historic completion in 1992 of the Rhine-Main-Danube Canal, creating a waterway corridor all across Europe, from the Black Sea to the North Sea, as first envisioned over a millennium ago by Charlemagne.

Figure 3 shows this cross-nation canal route (mapped as of 1992), and the strategic location of the Balkan Peninsula, in relation to the eastern Mediterranean. However, the connecting intermodal corridors across the Balkans, including Greece, to the Aegean and the Adriatic Seas, and thence to the continents of

Asia and Africa, have yet to be built.

This development perspective must be reactivated on an emergency basis. The specific Balkans priority transportation links, as first proposed at the 1994 Pan-European conference, out of the 10 designated corridors are:

Corridor 4. On the major west-east link across Europe, going from Berlin to Istanbul (Berlin/Nuremberg-Prague-Bratislava-Gyor-Budapest-Arad-Craiova-Sofia-Istanbul), there must be branch links between Sofia and Thessaloniki.

Corridor 5. On the major west-east link between northern Italy and Ukraine, there are important branch links into the Balkans. The main corridor is: Venice-Trieste/Koper-Ljubljana-Budapest-Uzhgorod-Liviv, extended through Rijecka-Zagreb-Budapest and Ploce-Sarajevo-Osijek-Budapest.

Corridor 8. The Adriatic Sea to the Black Sea, from Albania to the ports of Varna and Burgas on the Black Sea. Durres-Tirana-Skopje-Sofia-Plovdiv-Burgas-Varna.

Corridor 9. Going from Greece to Moscow, beginning at the easternmost Greek port of Alexandroupolis to Dimitrovgrad-Bucharest-Chisnau-Lyubas-keva-Kiev-Moscow.

Corridor 10. From Salzburg to Thessaloniki (Salzburg-Ljublijana-Zagreb-Belgrade-Nis-Skopje-Veles-Thessaloniki). The ancient Roman Via Egnatia, from the Adriatic to the Bosporus, is a priority redevelopment route.

The Aegean North-South Axis

The Aegean north-south axis, beginning in the south with the port of Piraeus (**Figure 2**), and proceeding northward, via Thessaloniki, to the Danube valley, encompassing the routes designated above in Corridors 4 and 10, is a powerhouse for development.

The port of Piraeus, at Athens, was until the current crash, the tenth-largest container port in Europe and its largest passenger port. Up until now, it has been Greece's only major port, with little transshipment. But its potential to serve as an international entrepôt is clear.

China has been quick to recognize the strategic location of Piraeus, and the China Ocean Shipping Co. (Cosco) has leased one of its two container terminals for 35 years. Piraeus serves as a hub for China's exports into Central and Eastern Europe.

What is required now, is a master plan for expand-

ing and modernizing the port facilities, from their present, condition, in order to transform Piraeus into the Rotterdam of the eastern Mediterranean—an idea already long popular in Greece. Any local limitations on port expansion are no real constraint, as there are numerous other potential deep-water sites, which could be developed and operated as one maritine authority, for domestic and international transshipment.

This throws into focus the need to upgrade the entire rail and road grid of Greece and the Balkans, to allow fully intermodal freight traffic. The roads northward from Athens/Piraeus have been improved, the railways not. Prior to today's crisis, there was a project to double-track the entire length between Athens and Thessaloniki, which requires construction of several tunnels through the mountains. This was part of the plan to develop high-speed train connections, which would cut travel time between the two cities from six hours to less than three; but the work was suspended. Moreover, Greece was ordered, under the terms of the 2012 austerity memorandum of the Troika, to shut down its rail service going outside of Greece!

These projects must be resumed immediately. This north-south Greek railroad is a trunkline for development throughout the Balkans and beyond.

Thessaloniki is Greece's second-largest city. Before World War I, it was considered the cosmopolitan center of the Balkans, but following two World Wars and the Cold War division of Europe, it lost much of its prominence. As a transport hub, it can once again play a crucial role. For example, Thessaloniki provides Sofia, Bulgaria, with even closer access to the sea than the Black Sea ports of Burgas and Varna.

Realizing this potential—and that of the many other ports in Greece suitable for upgrade to serve a thriving Mediterranean economy—will take infrastructure improvements of the inland routes. One example makes the point, for all the many other river corridors in the Balkans: the Axios/Vardar-Morava Valleys.

Running upriver northwest of Thessaloniki is the Axios River, which becomes the Vardar in the Former Yugoslav Republic of Macedonia (FYROM). Where the watershed divide exists between the Vardar and the northward flowing Morava River, rail and road lines already cross this boundary, going on to Nis and Belgrade in Serbia. The importance of this corridor for the development of all countries involved should not be underestimated.

There has been a project on the drawing boards for decades for connecting the Axios-Vardar River and the Morava, which enters the Danube east of Belgrade. The realization of such a waterway connection has been blocked by the substantial costs and engineering challenges, beginning with the fact that there is no navigation now on either of these rivers, despite the fact that they form the central axis of both FYROM and Serbia. Thus there is no waterway that links the Rhine-Main-Danube waterway complex with the Mediterranean, from either the Adriatic or the Aegean; there is only the Black Sea route back to the Mediterranean. This limits the transshipment of bulk cargo.

There are good arguments against a trans-basin canal in this corridor, including the excessive number of locks required and similar considerations, but now the proposal should be properly assessed in light of modern technology and the needs of the region.

At the same time, the watersheds of the Morava and Vardar (Axios, in Greece) rivers require full-set infrastructure in their basins, for all purposes—flood control, drinking water, irrigation, and navigation where possible, etc., as do similar, mostly smaller, river basins in the Balkans.

The Adriatic Axis

The development of Greece's infrastructure facing the Adriatic is important for the region, especially Albania. The Pan European Plan (Corridor 7 described above), traces the priority route for modernized rail, to connect this region into Eurasia (**Figure 4**).

On the Adriatic coast of Greece is the port of Igoumenitsa, one of the most important ports in the region, with more than 200,000 passengers and 120,000 trucks passing through annually in recent years, and with a major ferry connection linking mainland Greece, the Greek islands, and Italy. There is a project underway to further develop the link between the port of Taranto, Italy's second-largest, and Igoumenitsa, and then through the Egnatia Odos Motorway, across northern Greece, linking it with the ports of Thessaloniki, Kavala, and Alexandropoulis, and then with Istanbul. Thus it would provide access to all the Balkans, including Albania, the FYROM, and Bulgaria.

To the south, there is the port of Patras on the northwestern tip of the Peloponnese, with its recently completed South Port, and the new Rion-Antirion Bridge across the Gulf of Corinth, which has enhanced the port's strategic location. Further south is the port of Kalamata, the southernmost port in Greece, facing Libya. This has been designated as a priority, named the Ionian/Adriatic Intermodal Corridor, which will link Kalamata, Patras-Igoumenitsa, and Thessaloniki, via a rail and road network. But, although these are labeled priority, little to nothing has been done, and nothing at all since the crisis.

Power, Water, Agro-Industry

We have concentrated here on crucial transportation routes and development corridors, plans which presuppose that full emergency action is taken for vast increases in power and water supplies, building industrial capacity, and modernizing agriculture.

Power. There is a deficiency in power generation throughout the region that needs to be seriously addressed. There are no nuclear power stations in Greece, nor in the former states of Yugoslavia, and their nearfuture construction will be key to providing cheap and plentiful electricity for the industrial renaissance our plan aims at creating, and in particular, for expanding seawater desalination to increase water supplies.

Other sources for energy include natural gas, which is now being provided to a very large extent by Russia, which currently dominates the market; this already serves to integrate the region into Eurasian developments. The entire region supports the South Stream gas pipeline project being promoted by Russia, which will traverse the Black Sea and supply gas to all the countries of the Balkans, as well as Italy and Western Europe.

Agriculture. Greece and the Balkans are now food-import dependent, not because of limited potential, but as a result of the globalization of agriculture imposed under the EU and World Trade Organization regime. As much as 40% of Greece's food is imported, and that supply is now in jeopardy. Measures must be taken to quickly reverse food-import dependency, and increase agriculture productivity and domestic food output. One policy matter, is to shift the cotton-for-export production, into food crops.

Greece and much of the Balkans are home to what agronomists term the "Mediterraean agro-climate," which means there are very favorable conditions for citrus, olives, grapes, and similar crops. There are also zones suited for cereals—wheat, maize, and barley. The land area of the Mediterranean agro-climatic zone is limited by the mountains, with their cooler elevations

FIGURE 4
Greece and Trans-European Project 29



Source: EU.

and shorter growing season, but all this can be compensated for, by making best use of each existing type of land and growing season, through more irrigation, advanced technology, high-yield crop genetics, and live-

stock systems. In total, only 20% of the land area of Greece is suitable for agriculture, but there are pasturelands, hill farms, delta lands, and coastal plains in the inventory, all of which can be made highly productive.

In this respect, there must be full application of space-based infrastructure, comprising satellite and remote-sensing technologies that can monitor the water resources, the soil, and help to determine how to fully develop agriculture potential in the various regions. What is called "precision farming"-global positioning monitoring, sensing, and data storage—will help the farmer maximize yields, by precise application of fertilizers and water, and efficient tillage, planting, and harvesting. Greek agronomists have already done all the groundwork. What is re-quired is fullscale deployment of these potentials under the Mediterranean development drive. This all can be integrated into regional development authorities, such as a Morava-Vardar/Axios Basin Authority, or even a Lower Danube Basin Authority.

Water. The water resource base of the Balkan peninsula must be up-

graded in volume, reliability, and flood prevention, by going ahead with the many indicated river basin, and inter-basin projects of dams for water storage and flow regulation.

The annual average rainfall is heaviest on the Adriatic side of the peninsula, at 1,016 millimeters (40 inches), on the western slopes of the mountains, but the largest farmland regions are eastward, where average annual precipitation is 760 mm (30 in), or even down to 380 mm (15 in) or less.

At many locations, the water level in storage dams has been declining, including in the Drin River valley (not to be confused with the Drina), which parallels the Vardar to the west. The Drin basin includes Albania, FYROM, Serbia, and Montenegro, including the transboundary Lake Ohrid, shared between FYROM and Albania. These systems are important sources of water for the countries concerned, and are inadequate at present.

Navigation potential exists in some areas. But in all locations, water management is essential for flood control. The full hydro-power potential of the region has not been realized. Waste-water treatment systems are also sorely required.

Seawater desalination is a priority, especially for Thessaloniki and other Aegean coastal centers in the low-rainfall zones. Nuclear-powered desalination is the only efficient method for large-scale installations. (See Spain section for details.)

Greece, a Merchant-Shipping Giant

Greece has the world's largest merchant fleet. In addition to what this signifies for general economic activity, it also involves a precious resource of skilled labor in the maritime, industrial, and machine-tool sectors, and a shipbuilding capacity capable of tooling up for high-tech tasks. This resource is vital for the Mediterranean development drive overall.

Greek-owned shipping companies controlled 3,325 vessels with a total capacity of 226.92 million deadweight tons (dwt) in 2011. The Greek-flagged fleet amounted to 2,014 vessels with a capacity of 43.39 million dwt, constituting 39.52% of European Union capacity. As of December 2009, Greek shipping companies ordered 748 new ships amounting to 64.9 million dwt. The related shipbuilding and repair facilities are among the largest industrial establishments in the country, whose capabilities can be deployed for the full range of tasks necessary for integrating Greece into Eurasian and African development.

In Piraeus, there are 1,200 shipping companies, with over 250,000 Greeks earning their living directly or indirectly from the industry.

Greece devotes a sizable shipbuilding capacity to

producing smaller craft, such as fishing boats and coasters, since inter-island transportation is extensive. Nonetheless it has four to six large shipyards capable of building and repairing ships over 20,000 tons. Three of these can build ships over 100,000 tons. There is plenty of room for expanding production, since these yards have underutilized capacity because of the crisis.

All this shipyard capacity also provides machine-tool capacity for fabricating metal for any kind of structure. Elefsis Shipyard is a case in point: It has not only produced state-of-the-art ships, including naval ships and fast modern ferries for the Greek market, but it has also produced rail cars for the Greek National Railways. Thus the shipbuilding industry along with several other large and sophisticated Greek industrial enterprises, are capable of building every aspect of Greece's terrestrial infrastructure, including components for railways, roads, bridges, dams, hydro-electric and other power generation, desalination plants, and petrochemical facilities.

One notorious, negative feature of the Greek shipping sector should be identified, however: The industry is historically an integral part of the financial complex of the City of London, in service for decades to the British Empire. But now, with the crash of the monetarist system, this British-centered nexus of insurance, shipping, and commodity control is in chaos.

Under the new Mediterranean Basin Marshall Plan approach, the valuable Greek shipping capacity can be redirected into heavy-duty service for development, and end its decades of subservience to the London cartel networks, which chartered Greek vessels for global shipments of oil, food, and other commodities under (rigged) free trade.

Seafarers, Looking to Space

The ancient Hellenes were the original "Peoples of the Sea," as immortalized by Homer's *Iliad*. That most famous of poems also documented the alliance between the Peoples of the Sea and the civilization of Egypt, both being navigators and astronomers. It was out of this scientific "alliance" that the great Classical culture of Greece's tragic poets and Platonic philosophy developed, culminating in the conquest of the Persian Empire and the spreading of Hellenistic culture throughout the Mediterranean and deep into central Asia.

Our Marshall Plan will begin the process of transforming Greece from a nation of seafarers into a nation

of spacefarers, in that it will participate directly in the great extraterrestrial imperative for man's future: the Moon-Mars project, and on to our galaxy. In a sense, this has already begun.

It is unlikely that the shipbuilding industry can produce spacecraft, but in one case it has already been marshalled into producing a specialized vessel for Greece's small, but in many respects state-of-the-art, space research program.

The Elefis shipyard built the DELTA-BERENIKE, a self-propelled special purpose vessel that is being used as a stable platform form to build the Cubic Kilometer Neutrino Telescope, one of only four that exist in the world today. It has been erected at a depth of 5,200 meters, the deepest point in Europe.

The site of the telescope is 17 km off the coast of the Peloponnese. The headquarters of the project is in the small city of Pylos on the Bay of Navarino. Ancient Pylos, which is a few kilometers from the modern city, is the location of the palace of Nestor, of *Iliad* fame, giving the name Nestor to the project. The Bay of Navarino was the site of the famous sea battle by that name in 1827. Since modern times, Pylos has been a sleepy city frequented by tourists, but now it is being transformed into the headquarters of one of the most sophisticated research projects in Europe, which also specializes in deep-sea research. It is considered the best location on the planet for such a project, as these researchers, operating from the deepest part of the Mediterranean, will be ultimately exploring the deepest parts of our galaxy.

This brings us to the most important part of our plan for Greece and the Mediterranean: bringing these countries into the front lines of the world extraterrestrial imperative. This can be incorporated into the fundamental project of creating the infrastructure for the Russian-proposed Strategic Defense of Earth (SDE). Much of this infrastructure will be "dual purpose," such as the erecting of 50 stations in the seismic region of Europe to monitor earthquake precursors, and the positioning of 10 satellites as part of an earthquake warning infrastructure, which, at the same time, will provide necessary data for the study of cosmic radiation. The ultimate design of the integrated infrastructure would be the mission of a Manhattan Project-type program that

would entail setting up a number of research centers on the scale of Los Alamos and Oak Ridge National Laboratories. Athens' old airport could provide an ideal site for one of these laboratories. (As it is, the airport is now up for sale, under the Troika's Memorandum demanding privatization!)

Greece is well placed to participate in such a program from the highest scientific standpoint. There are now 12,000 Greek scientists working outside the country, and the number is increasing every day. While Greece spends less per capita on research than almost any other country in the EU, the research that is being done and the researchers themselves are among the best in Europe. They are concentrated at a handful of research centers, notably the National Observatory in Athens, the National Center of Scientific Research Demokritos, institutes at the big universities of Athens and Thessaloniki, and several others.

Founded in 1842, the National Observatory has five programs, including the Institute for Astronomy, Astrophysics, Space Applications, and Remote Sensing. The Nestor project was a spinoff from the National Observatory. The Observatory already has programs for Solar Terrestrial Physics, including space weather studies. The Remote-Sensing program already has applications for earthquake studies. Although the institute has expanded in the last decade, it is still relatively small, but sufficient funding could scale it up rapidly.

The National Center of Scientific Reseach was founded in the 1950 as the Nuclear Research Center of Demokritos, with a boost from the U.S. Atoms for Peace program, from which it received an experimental reactor. The founding of this institute initiated a wave of repatriation of scientists who had been conducting research abroad because of the total lack of opportunities in Greece.

Today, the institute is involved in a broad range of basic research, with a staff of about 1,000 researchers and administrators. Therefore, the foundation for a large, integrated National Laboratory is there, to be built upon.

Greece can become a scientific gateway, serving as an international center with a specific mission of attracting students and researchers from the Asia-Pacific, Balkan, African, and Eurasian regions.

Spain: The World Land-Bridge's Bridge to African Development

by Dennis Small

May 28—Spain, today notorious as the epicenter of the current disintegration of the trans-Atlantic banking system, and for having the highest rates of unemployment in Europe—an official 24.4% overall, with shocking youth unemployment of more than 50%—tomorrow will be one of the key geographic and economic bridges from Europe to Africa, in a recovering world economy. It will play a central role in providing crucial science-driver programs, infrastructure, engineering, and capital goods to North Africa in particular; and in the process it will productively employ and re-employ its own massively un-, under-, and mis-employed labor force, most especially its youth, in high-productivity jobs.

In order to create 10+ million new productive jobs in Spain, and to help create further millions of jobs throughout the Mediterranean Basin, Spain—along with its sister nation on the Iberian Peninsula, Portugal—will develop major projects in the following areas:

- Rail: Spain will build high-technology industrial corridors on either side of some 15,000 kilometers of new, high-speed rail lines (including magnetically levitated systems) that will crisscross Spain and Portugal, and link up with the World Land-Bridge in southern France.
- Strait of Gibraltar Tunnel: A 40 km tunnel built under the Strait of Gibraltar, from Spain to Morocco, will allow European rail corridors to be connected to future North African rail systems. This will be a project on the scale, and of the significance, of the Bering Strait tunnel and the Darién Gap project, because like them, it will link an entire *continent* into the World Land-Bridge.
- Water: Spain will dust off existing, viable water-transfer projects, such as the Ebro River project, to transfer about 1 cubic kilometer of water per year to the semi-arid Mediterranean coast; and it will also produce some 1.5 km³ of fresh water yearly with nuclear-powered desalination plants.
- **Nuclear energy:** In addition to the nuclear plants needed for desalination, Spain will build modern nuclear power plants to produce about three times the 7,500 MWe per year that the country currently gets from its

eight aging nuclear plants. This will allow Spain to rid itself of the economically destructive (and scientifically incompetent) emphasis on wind and solar power, which has been imposed on it by the British Empire's fascist Greenie movement, led by the World Wildlife Fund (WWF). Where is Don Quixote when we need him?

• Space science: The Canary Islands is an ideal location for a new Euro-African space center, including a major satellite-launching facility and related science city. This will be coordinated with critical work being done in Greece, Italy, and other nations around earthquake precursor detection and other endeavors involved in the Strategic Defense of the Earth program, in furtherance of the common aims of mankind.

This will not be the first time in its history that Spain will play a catalytic role at the crossroads of cooperating civilizations. Under the personal guidance of Alfonso X, "The Wise," King of Castile and Leon from 1252-82, the Castilian capital of Toledo was built into Europe's most important scientific center of the time, and the nexus for the transmission of the Greek Classics and the highest achievements of the Arab Renaissance into continental Europe. Alfonso was especially known for his work in astronomy, and for his Toledo school of translation, which brought together the outstanding scholars of the world's three major monotheistic religions—Islam, Christianity and Judaism—to render the most advanced religious and scientific texts of each culture, into the languages of the others.

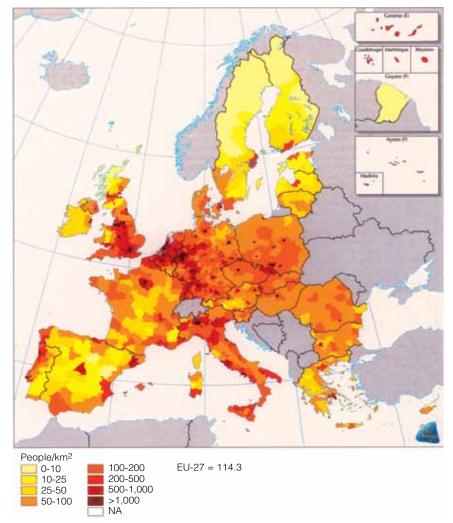
It is past time for a new "Alfonsi Era."

Under-Populated...

Since the development of the productive powers of labor is the only source of true value in an economy, the demographics of Spain's labor force provide the proper starting point for our diagnosis and proposed solutions.

Spain's total population is about 46.2 million people, with an average population density of some 91 inhabitants per square kilometer. But that population is distributed very unevenly across the national territory,

MAP 1 **Europe: Population Density**



Source: Ministry of Agriculture, Fishing and Food (Spain)

with heavy demographic concentration along the Mediterranean coast and in the capital, Madrid; whereas the entire central area, about half the national territory, has a population density of less than 25 per km². So, as usual, mathematical averages don't mean much in the real world of physical economy.

As can be seen in **Map 1**, Spain compares unfavorably to the rest of Western Europe in terms of population density, with the exception of sparsely populated countries such as Finland and Sweden.

Over the course of the 20th Century, Spain's total population tripled, but 11 of its 50 provinces had net reductions in population over that period, as it became increasingly impossible to survive in traditional agriculture, and there was inadequate internal development

to employ people. So people fled to the coasts and the larger cities, where they are now unemployed in huge numbers.

A satellite photograph of the Iberian Peninsula by night shows the same picture: a band of light along the Mediterranean coast; bright concentrations in Madrid and Lisbon; and general darkness in the interior.

A map of annual precipitation (Map 2) points to the same problem, showing that about half the country—especially the central mesetas area—is semi-arid (less than 500 mm, or 20 inches, of precipitation per year). The lack of any significant water projects to take water (and development and population) to this region, is a key feature of the country's historic lack of development.

A map of railroads shows an interesting contrast. Spain has about 19,000 km of rail which crisscross the country, of which over 2,600 km are high-speed lines. This has made Spain #1 in Europe in total high-speed rail kilometers in service, and second in the world after China.

... and Underemployed

Spain's economy is destructively skewed towards tourism and real estate, with 69% of all official em-

ployment being in the so-called services sector (including 370,000 "legal" prostitutes). Only 13% is in manufacturing; 9% in construction and mining; 5% in transportation; and 4% in agriculture. In fact, if the British Empire has its way, the whole country will be driven into "whoreticulture."

Most explicit in this regard was the early April 2012 offer by Sheldon Adelson, the biggest owner of gambling casinos worldwide, including the las Vegas Sands Corp., to invest \$35 billion in Spain for the construction of 12 casino resorts, of 3,000 rooms each, to attract 11 million tourists per year. This would create 300,000 new jobs in Spain, claimed Adelson, who is also infamous for being the big bankroller of Newt Gingrich's failed Presidential candidacy in the United States, a close friend of war-mon-

FIGURE 1 **Economically Active Population (EAP) and Employment** (millions)

	2008	2009	2010	2011
TOTAL EAP	22.8	23.0	23.1	23.1
Employed	20.3	18.9	18.5	18.1
Productively Employed	10.7	9.7	9.4	9.0
—Productively Employed as % EAP	47%	42%	41%	39%
YOUTH EAP (16-24)	2.4	2.2	2.0	1.9
Employed	1.8	1.4	1.2	1.0
Productively Employed	8.0	0.6	0.5	0.4
—Productively Employed as % EAP	35%	27%	24%	20%

Sources: INE, EIR

gering Israeli Prime Minister Benjamin Netanyahu, and an all-around leading light of the circles around Britain's dirty-money and organized-crime syndicate, Dope, Inc.

Spain's official unemployment rate is 24.4% overall, and 50+% for youth 16-24, which is the worst in Europe. The regional breakdown in terms of official unemployment shows 3 of the country's 17 autonomous regions with over 30% unemployment: Andalusia (33.2%), Canary Islands (32.3%), and Extremadura (32.1%). Of these, Andalusia is the most populous region in the country, with almost 8.3 million inhabitants.

But as bad as official unemployment is, it is nothing compared to what *real* unemployment is, calculated from the physical economic standpoint of Lyndon La-Rouche's bar diagrams pedagogy.¹

Of the total population of 46.2 million, some 30.7 are working age (16-64). Of these, only 23.1 are considered part of the Economically Active Population (EAP), or labor force. Although 18.1 million are considered to be employed (down from 20.2 million 4 years ago), and 5 million unemployed (up from 2.6 million), the fact of the matter is that fully *half* of those "employed" are unproductively employed, in areas such as tourism, finances, retail trade, administration, etc. (This was calculated according to the official statistics of employment by sector, as provided by the INE, the National Statistics Institute.) (See **Figure 1**.)

Viewed this way, the real unemployment rate in Spain today is probably about 60%. Although some small part of the unproductive employment category is

arguably socially necessary, and therefore should fall in the category of real employment, that factor is probably more than compensated for by disguised unemployment within the category of the 16-64 age group who are not formally part of the labor force (EAP)—i.e., those who have gotten so demoralized that they have stopped looking for a job, etc.

If you look at these same categories for the youth segment (16-24), you find that the total youth EAP has dropped from 2.4 million in 2008, to 1.9 million today, a 21% drop. This demonstrates the existence of huge

disguised unemployment among the youth, in the form of people simply dropping out of the labor force. Official youth employment has plunged from 1.8 million to 1.0 today (a 44% drop); while productive employment among youth went from 836,000 to 390,000 (a 55% fall). The country is simply devouring its youth, its own future, under the current EU model.

So if the current labor force (EAP) is 23.1 million, and only 9 million of these are actually productively employed, this translates into the need to create up to 14 million new, productive, high-technology jobs in Spain in short order, of which some 2 million will be for youth.

The existing brain drain from both Spain and Portugal must be stopped, and reversed. Current Troikadictated policies are actively encouraging that the most valuable resource of Spain and Portugal, their youth, be driven to emigrate in order to survive. In the case of Portugal, which is experiencing one of the biggest emigration waves in its history, as citizens look abroad for the jobs they cannot find at home, Prime Minister Pedro Passos Coelho suggested in December 2011 that unemployed teachers should stop "complaining" and go ahead and emigrate to Portuguese-speaking Angola, Mozambique, or Brazil.

Portugal has one of the lowest schooling levels in Europe, with an average of only 7.7 years spent in schooling among its under-25-year-olds, but as far as the current government is concerned, "Portuguese teachers can look at all the Portuguese-speaking market as a whole and find an alternative."

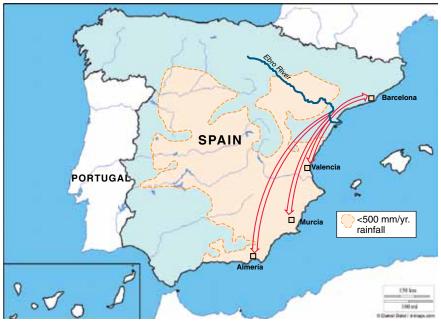
That statement set off a wave of protests in the country around the slogan: "Mr. Prime Minister: *You* emigrate!"

Spain's Prime Minister Mariano Rajoy's policies

^{1.} Lyndon H. LaRouche, Jr., *Dialectical Economics: An Introduction to Marxist Political Economy* (New York: Heath, 1975)

MAP 2

Spain: Annual Rainfall and the National Hydrological Plan



Sources: INE (Spain); EIR

are no different—and they are also dictated by the EU and the IMF. His government has announced a 22% cut in education spending, with 37% cuts to pre-school and primary school budgets. With over 50% youth unemployment, Spanish youth are already leaving the country *en masse* after finishing their education. Spanish scientists warned of a "brain drain" and "collapse" of research in Spain, in a mid-March 2012 Open Letter to the government.

Stopping this deadly brain drain requires a reconstruction plan centered on Spain and Portugal's role within the World Land-Bridge, and its special role as one of the key bridges from Europe to Africa. Spain must be put to work to rebuild its own economy, and to provide crucial infrastructure, engineering, and capital goods to Africa.

Great Water Projects

Spain's precipitation produces about 112 km³ of water per year, which comes to about 2,700 m³ per capita per year. That compares to an average of 10,600 m³ for Europe as a whole. Of that total available, the amount actually used (withdrawals) is 875 m³ per capita per year, which is pretty much on a par with the rest of Europe. But again, the average conceals the fact that the central mesetas and Mediterranean coast of Spain are desperately short of water. As a result, there is serious

over-exploitation of aquifers in these drier regions.

Average precipitation in Spain as a whole is 650 mm, but most of the central mesetas and Mediterranean coast get under 500 mm, and much of that under 300 mm (Map 2). The province of Almería in Andalusia is probably the most arid region in all Europe; its Cabo de Gata area receives barely 125-150 mm of rain a year. (Arid or desert areas are conventionally classified as receiving 0-250 mm of precipitation per year; semi-arid is 250-500 mm.)

Spain has constructed a significant number of dams (the total went from 60 at the beginning of the 20th Century, to about 1,000 today), and has reservoirs capable of storing some 54 km³ of water—almost half the annual runoff, which is the highest proportion in all Europe. About

80% of all Spain's water withdrawal is used in agriculture, especially in the more productive southeast. About 20% of the agricultural land area is irrigated, and it is estimated that that land produces about half of the country's total food output.

In June 2001, the Spanish government proposed to implement a very modest National Hydrological Plan (PHN), which would have transferred about 1 km³ of water per year from the Ebro River in the northeast of the country, down the Mediterranean coast, complemented by about a half-dozen desalination plants. But it was stopped dead by the British Monarchy's World Wildlife Fund (WWF), and their Greenie allies inside Spain.

Of all Spain's rivers, the Ebro has the highest discharge rate. The average discharge registered in the Tortosa gauging station, located 48 km from the river mouth, was 13.8 km³ per year from 1960 to 1993 (equivalent to an average flow of 425 m³/s), which is, however, highly irregular over the course of the year. That amount has also been reduced over the years, as more water has been withdrawn upstream, with the 2000-08 average at Tortosa reportedly being 8.8 km³ per year, down from 13.8, two or three decades earlier.

Since the 1930s, 138 reservoirs have been constructed in the Ebro River basin, with a total storage capacity of 6.8 km³—more than half the average annual

discharge from 1960-1990.

The idea of the PHN (see Map 2) was to transfer 1.05 km³ per year, or about 12% of the Ebro's current annual discharge of 8.253 km³. Of this total amount, 0.19 km³ was to be transferred northwards to Barcelona; 0.315 km³ south to Valencia; 0.45 km³ south to Murcia; and 0.095 km³ south to Almería. About 120 new dams were to be built, along with canals and 10 pumping stations. Other than the northward portion for the urban area of Barcelona, the remainder of the transfers were intended for primary use in agriculture.

By international standards, the Ebro project, with its transfer of 1 km³ per year, is quite modest. For purposes of comparison, the NAWAPA (North American Water and Power Alliance) project would transfer 165 km³ of water per year; and even the modest PLHINO (Northwest Hydraulic Plan) in northwest Mexico, would transfer 7 km³ per year.

But by 2004, the Spanish government of José Luis Rodríguez Zapatero had shelved the PHN, and put in its place a program for providing a lesser amount of water to the Mediterranean coast (0.715 km³) by desalination plants—a project which predictably never materialized. The prime mover in the sabotage of the Ebro project was Prince Philip's WWF, which is explicitly opposed to *any* water transfers from one basin to another, anywhere in the world.

The WWF published a report in 2004 which classified Spain as among the three worst countries in Europe in terms of water management, and in a press release headlined "Seven reasons to stop the Spanish National Hydrological Plan," denounced the PHN as "illegal under EU legislation," "not economically justified," and—of course—"environmentally damaging." This led to a European Parliament inquiry (i.e., inquisition), which likened the planning involved "to the old Sovietstyle of water management," and demanded the Spanish government answer the WWF's accusations. The upshot was that the project was shelved.

Under our Marshall Plan for the Mediterranean Basin, Spain will immediately restart the stalled National Hydrological Plan's Ebro water transfer project, which will require expelling the WWF, and its influence, from the country. This will produce numerous side benefits, such as ending Greenie mental pollution of the youth, as well as possibly putting an end to the Spanish monarchy—after all, King Juan Carlos is also the honorary president of WWF Spain.

However, the Ebro project alone is insufficient to

put a serious dent in the water shortfall in most of the country. An ambitious nuclear desalination project should also be initiated, with which fresh water will literally be *manufactured*.

The most efficient power source to drive desalination plants is nuclear power. One leading type of reactor is a modular High-Temperature Gas-Cooled Reactor (HTGR), capable of producing 350 megawatts. One "island" of four modular HTGR reactors can produce a total of 1,400 megawatts of power. This level of power, when transmitted to a multi-stage flash distillation desalination plant, will generate about 145 million cubic meters of fresh water per year. It will also generate, beyond that, 446 MW of net electrical output.

If Spain were to build, initially, 10 such nuclear islands, principally along the Mediterranean coast, each hooked up to water desalination plants, it will generate about 1.5 km³ of new fresh water per year—50% more than the amount to be transferred from the Ebro. That will allow for high-technology agriculture to really take root in the country, along with the numerous downstream industries that this implies.

In this way Spain will become a net food exporter not only to Europe, but to Africa as well.

Full Tilt for Nuclear

Spain will never develop unless it rids itself of the British Empire's green ideology which has taken over the country, especially the youth, and has transformed Spain into a world leader in the clinically insane policy of fostering solar panels and windmills.

Spain got a good start in nuclear energy, beginning construction on its first nuclear plant in 1964, which went into operation in 1968. Over the course of the 1970s and early 1980s, eight nuclear reactors were put into operation. But then in 1983, a moratorium on further nuclear plant construction was adopted under the London-run government of Prime Minister Felipe González (1982-96), which reaffirmed the moratorium in 1994 and abandoned five units that were then under construction.

Today, the country has eight aging nuclear power plants, which in 2010 provided 21% of the country's electricity generation. Natural gas produced 32%; coal 9%; and a stunning 15% came from windmills, and 5% from solar and other so-called renewables (see **Figure 2**). In other words, wind and solar—with their destructively low energy-flux densities—today produce as much electricity in Spain as nuclear energy!

FIGURE 2 **Total Electricity Generated, 2010**(thousand GwH)

	Amount	% of Total
Natural Gas	96	32%
Nuclear	62	21%
Wind	44	15%
Solar, Other Renewables	17	5%
Hydroelectric	39	13%
Coal	26	9%
Fuel Oil-Gas Oil	16	5%
TOTAL	300	100%

Source: INE

FIGURE 3

Primary Energy Consumption, 2010

(millions TPE)

	Consumption	% Cons.	Production	% Prod.	% Self-Sufficiency
Petroleum	62.5	47%	0.1	0%	0%
Natural Gas	31.0	23%	0.1	0%	0%
Nuclear	16.2	12%	16.2	47%	100%
Renewable Energy	14.7	11%	14.7	43%	100%
Coal	8.5	6%	3.0	9%	36%
TOTAL	132.1	100%	34.3	100%	26%

Source: INE

Over the last few years, vast financial subsidies to wind and solar led to huge increases in the installed capacity in these sectors. But in 2010, the government reneged on its rate subsidies for solar, when budget austerity became the order of the day.

Total electricity consumption in Spain had been rising steadily until 2008, but since then has declined to the current level of about 5,600 kwh/year per capita. Total energy consumption also peaked in 2007, and since then has fallen by 15% per capita. In terms of energy self-sufficiency, Spain is extremely dependent on oil imports: Oil is 47% of total energy consumption, and natural gas another 23%, and in both categories it is all imported. Nuclear is 12% of the total energy consumed, and it is 100% produced in Spain. All in all, Spain only produces about one-quarter of all the energy it consumes (**Figure 3**).

Under our plan, nuclear energy will replace the insane current emphasis on windmills and solar power, which produce neither the energy output nor the energy-flux density levels required by modern society.

Even the addled Don Quixote knew that it made sense to get rid of windmills.

Currently, nuclear produces about 7,500 MWe per year, one-fifth of the total electricity produced in the country. The proposed 10 nuclear islands required for desalination are a good start on improving that situation, generating about 14,000 MWe per year, which will nearly triple the current level. Of this, 9,500 MWe will be "earmarked" for desalination, and 4,500 MWe will be available as net electrical output. A dozen or more fourth-generation nuclear plants will also be built in the interior of the country, to produce some 20,000 MWe per year. This will allow Spain to immediately phase out the economically destructive wind and solar em-

phasis, and to gradually reduce Spain's enormous dependence on imported oil and natural gas.

In Portugal, at least three such nuclear islands will also be built along the southern coast, to similarly desalinate water and produce net electrical energy.

Building the Bridge to Africa...

One of the bright spots of Spain's physical economy is its rail sector, both in terms of existing infrastructure as well as world-class engineer-

ing and production capabilities. High-speed trains now run on 2,600 km of track in Spain, with significant additional lines under construction. The existing government plan—which can never be executed within the euro straitjacket—projects having 10,000 km of high-speed track by 2020.

Historically, Spain has had a different gauge (1,668 mm) from most of Europe (1,435 mm, also called the UIC gauge), which has created major bottlenecks requiring—until relatively recently—transfer of passengers and freight at the French border. Portugal's slightly larger gauge of 1,774 mm is inter-operable with Spain's, so the two are often referred to as the "Iberian gauge." This is also a major problem as you move east into Ukraine, Belarus, and Russia, which have a third gauge (1,520 mm).

The very *raison d'être* of the World Land-Bridge, especially as you move into maglev and other high-speed rail lines, demands a solution to this problem. New lines can and should be standardized, but interim solutions to link existing rail networks of different

MAP 3

Spain and Portugal: High-Speed Rail Lines (EU Project 19)



Source: EU

gauges are also required. Rather than transferring passengers and cargo between trains (and switching out locomotives), which is highly inefficient, there is now technology, pioneered by Spanish companies, to automatically change the gauge of the existing axles while the cars are in motion (at about 15 kph). This requires axles specially constructed for this purpose.

Spain's Talgo company pioneered work internationally in this area, developing the first commercial application of a track changeover system in 1969. A second Spanish company, CAF, developed its own system in 2003. Other countries now producing similar systems include Poland (SUW 2000, in 2000), Japan (in 2007), and Germany (Rafia, no commercial application yet).

In 1988, Spain decided to construct all of its new high-speed rail corridors at the European (UIC) gauge. There are currently four principal high-speed corridors: Madrid-Barcelona; Madrid-Valencia; Madrid-Valladolid; and Madrid-Sevilla/Málaga (Map 3).

There are a number of Spanish companies involved in high-speed rail today, including Talgo, Renfe, CAF, AVE, etc. CAF recently signed contracts for building five high-speed rail lines in Turkey. And Talgo has built and runs rail lines in Kazakstan, Argentina, the United States, and the Portugal-Spain-France-Switzerland-Italy corridor in Europe. They also just sold 17 cars and

one locomotive to Russian Railways, which will now be able to run continuously between Moscow (standard gauge) and Berlin (UIC gauge). Existing high-speed rail lines also link Berlin to Paris and Perpignan, and from there they will go under the Pyrenees Mountains through a new tunnel, to Figueras on the Spanish side, and down to Barcelona and Madrid.

The success of the entire Marshall Plan for the Mediterranean Basin will rely on Spain building on strength, and assuming a leading role in engineering, building, and exporting high-speed rail systems. It will simultaneously develop related downstream industries, including

construction, steel, metalworking, electrical and electronic components, telecommunications, etc., while leapfrogging ahead into magnetic levitation (maglev) technologies. The new, productive, high-technology jobs so created will make a serious dent in today's unemployment problem.

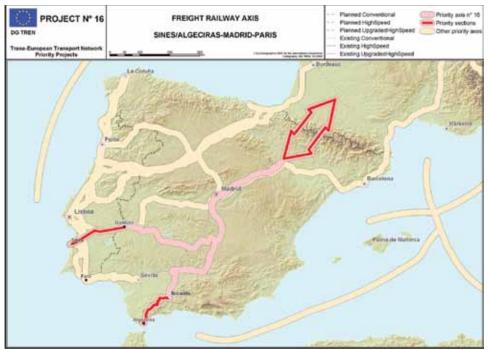
There are some existing rail links connecting Spain and Portugal with the rest of Europe, and these will be improved and broadened (see Map 3). In addition to the Barcelona-Madrid corridor (which is operational), this will include:

- An Atlantic branch: Madrid-Valladolid (operational)-Burgos-Vitoria-Bilbao/San Sebastián-Dax-Bordeaux-Tours (Paris).
 - An Iberian branch: Madrid-Lisbon-Porto.

Similarly, the EC's Priority Project 16, for a freight railway axis Sines/Algeciras-Madrid-Paris, links the key ports of Sines (southwestern Portugal) and Algeciras (southern Spain), with the center of Europe (**Map 4**). This requires the construction of a high-speed freight corridor, including a new high-capacity rail link for freight across the Pyrenees, which would involve a long-distance tunnel through the Pyrenees.

Although technically viable, these EU projects are financially and politically frozen, and will never be implemented under the current Maastricht diktat.

MAP 4
Spain and Portugal: High-Speed Freight Rail Lines (EU Project 16)



Source: EU

As for *Portugal*, the agreement with Spain to build a high-speed rail line from Madrid to Lisbon was suspended by the current government of Passos Coelho in 2011, on Troika orders. Not only should that line be built, but existing Spanish plans to link the two countries with four high-speed rail lines (Vigo-Porto; Salamanca-Porto; Madrid-Badajoz-Lisbon; and Seville-Huelva-Faro) should go ahead, and internal Portuguese high-speed lines connecting Lisbon with Oporto, and Lisbon with Faro—all at international UIC gauge—must also be built (see Map 3).

The southernmost point of this network in Spain is Algeciras. From here, a new high-speed rail line will be constructed to Tarifa and Cádiz, since Tarifa will be the Spanish terminus of a tunnel with high-speed rail going under the Strait of Gibraltar to Tangiers, Morocco, and from there will link to the whole Africa leg of the World Land-Bridge.

The idea of a tunnel was first proposed in Spain in 1930, and since that time, various options have been considered, including a fixed bridge (ruled out because of the impossibility of building supporting pillars in 300 meters, or more, of water), a floating bridge (discarded because of the strong cross-currents in the strait), and a tunnel bolted to the seabed (not viable, both because of the strong currents and the seabed's in-

stability in that region).

In 2003, Spain and Morocco agreed to explore the construction of a fixed tunnel, and in 2006, their SECEGSA (Spain) and SNED (Morocco) state companies hired the renowned Swiss tunnel engineering company Lombardi to draft a design for the project. In 2009, the Lombardi proposal was presented to the EU—after which absolutely nothing has been done, because the entire Eurozone and world financial system is collapsing.

The Lombardi plan considered the option of a bridge at the narrowest point between the two continents (14 km), but since the seabed there is a very deep 900 meters, it was discarded as

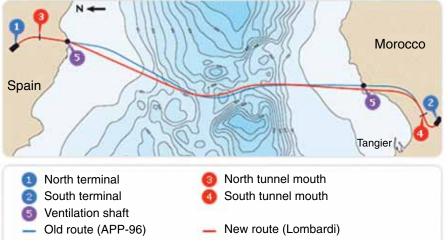
impracticable. The selected route instead runs at a more western point, from Tarifa, Spain, to Tangiers, Morocco, a route where the sea floor is "only" 300 meters deep—which would make this the deepest undersea tunnel in the world. The length of the tunnel would be about 40 km (see **Map 5**). It would consist of two tubes for train lines for both passengers and freight, with an emergency or service tunnel running between them.

Lombardi estimated that it would take about 15 years to build, given the engineering problems to be solved—including the fact that it would run through a highly active seismic area (the Azores-Gibraltar Transform Fault), and difficulties in the stratification of the seabed there, described as a virtual "cocktail of sand, stone, and mud that make for a digger's nightmare." In fact, engineers have had to invent new boring methods just to drill exploratory holes, given the rock formations and the fierce underwater currents.

For purposes of comparison, the Channel Tunnel is only 50 meters below sea level, and is 49 kilometers long. The Bering Strait Tunnel would be at about the same depth (54 meters), and run 85 km in total, but it would make use of the Big Diomede and Little Diomede islands as "stepping stones," making the longest stretch only about 35 km long.

Once completed, and linked to high-speed rail lines,

MAP 5
Projected Tunnel Under the Strait of Gibraltar



Source: SECEGSA (Spain)

SECEGSA/SNED calculate that it would take 1.5 hours to get from Casablanca to the tunnel terminus in Tangiers; 30 minutes to cross to Tarifa, Spain; under 3.5 hours to then get to Madrid; and then 2.5 hours more to get to Barcelona. In other words, it would take less than 8 hours to get from Casablanca to Barcelona!

The joint SECEGSA/SNED website summarizes their concept of the project as follows: "The Fixed Link Through the Strait of Gibraltar can be considered the decisive connection between two continents and two great seas, which will articulate a heretofore unknown system of transportation between Europe and Africa and the Mediterranean surroundings."

As part of this project, it would be appropriate to return Gibraltar to Spain, from which the British stole it in the 1700s.

On the Morocco side, the Strait of Gibraltar tunnel will link up with high-speed rail lines in North Africa. The French are already helping to build high-speed rail lines in Morocco, and the entire North Africa rail project is a perfect area for French-Spanish cooperation.

... and on to Other Planets

Achieving these ambitious projects on planet Earth, however, depends on inspiring coming youth generations with mankind's true mission, his extraterrestrial imperative. The scientific breakthroughs, and the related cultural optimism, that is so sorely lacking today, will only come with such a focus and mission.

With that in mind, our Marshall Plan for the Mediterranean Basin will also construct a world-class EuroAfrican spaceport and associated science city on the Canary Islands. This location—100 km off the western coast of Morocco, at the same latitude as the U.S.'s Cape Kennedy—is ideal for such a project.

There is, in fact, already advanced scientific work underway in the Canaries. The Canary Islands are the site of a number of observatories, the latest and biggest of which, the solar telescope GREGOR, was inaugurated on May 21, 2012 on Tenerife. There, on the plateau at the foot of the 3,718-meter-high Teide volcano, the telescope, Europe's biggest, is

being run by a consortium of researchers from the Kiepenheuer Institute for Solar Physics, the Astrophysical Institute Potsdam, the Institute for Astrophysics Göttingen, the Max Planck Institute for Solar System Research, and other international partners, who began constructing the GREGOR solar telescope there in 2000.

Scientists at GREGOR will not look directly at the Sun; this will be done using electronic detectors, such as spectrographs, polarimeters, interferometers, and cameras. GREGOR's rotating-fold mirror deflects the bundled beam generated by the adaptive optics system to the various instruments. Their purpose is to measure various physical solar parameters with an unprecedented level of precision, in particular, the Sun's magnetic field, and in doing so, reveal small structures down to a scale of 70 kilometers—an astounding resolution capacity, given that the Sun is located approximately 150 million kilometers from Earth.

Tenerife is already the site of numerous astronomical observatories, and will become the site of a larger scientific complex, a space city, which will be connected to the existing airport by a maglev train—especially since the area is mountainous and not suited for traditional train systems. A feasibility study for a maglev track connecting the south and north of the island has already been done by the German Railway Research Institute in Berlin.

The island of Lanzarote, a lava-dominated landscape that strikingly resembles the surface of the Moon and of Mars, could serve as a testing site for coming Euro-African space missions—mankind's true destiny.

The Rebirth of Italy's Mezzogiorno Means a New Renaissance in Italy

June 2—Speaking about a "Marshall Plan" for Southern Europe, the mind goes naturally to the original Marshall Plan which, although only a shadow of Franklin Roosevelt's real intention for postwar world reconstruction, supplied urgently needed credit for the reconstruction of Europe. Italy owes its reconstruction to that credit, but also to the competence of its ruling class of that time, which was able to use it for policies and institutions modeled after the best experience of FDR's New Deal.

The Fund for the Development of Southern Italy (Cassa per il Mezzogiorno), established in 1950, was perhaps the experience closest to the New Deal on the European level. The Cassa is still today a model for the development of Southern Italy and other underdeveloped regions of the Mediterranean area.

Italy's Mezzogiorno, with a population of 20 million, includes the regions of Molise, C ampania, Basilicata, Puglia, Calabria, and the islands of Sicily and Sardinia.

This region saw strong sustained development from 1950 to 1965, and less so until 1975, when it was interrupted, Italy, which today could have the highest productivity in Europe, has instead, a northern part which is as productive as Germany, and a southern part which is exactly one-fourth less productive than the North. Accordingly, whereas unemployment in the North is around 10%, in the Mezzogiorno it is over 25%. The rebirth of the Mezzogiorno means the rebirth of Italy.

The reasons for the Mezzogiorno's historical backwardness are to be found in the long centuries of foreign domination, starting with Byzantium, then the Norman, the French, and lastly, the terrible Spanish domination. The Spanish Hapsburgs (Bourbons) were the worst colonizers in history, looting resources and keeping the population in a state of semi-slavery.

The Bourbon domination and the post-Napoleonic

British influence promoted the growth of the Mafia, first as private police force for the landed aristocracy, and later as a tool of terrorist destabilization. (Today, the Mafia is a severe impediment to the development of Southern Italy, but Italy's EU puppet government of Mario Monti is going in the other direction. Monti cut the money for law enforcement, whereas in Southern Italy it should be doubled.)

Thanks to the Cassa, the development of Italy's Mezzogiorno took off, going through a decade (1950-60) in which, for the first time, the income of southern families grew at the same rate as the income of northern families.

Private land ownership, the figure of the "independent farmer," appeared in Southern Italy only in 1950, with the De Gasperi¹ land reform that distributed 30% of the latifundia to farmers. The Cassa was fundamental in ensuring that the new farmers would get credit and means for productive improvements, irrigation, seeds, machines, livestock, etc.

In the 1950-60 decade, the Cassa was flanked by the role of the state conglomerate IRI in building infrastructure and industries throughout Italy, and by the state oil company ENI (Ente Nazionale Idrocarburi), in providing cheap energy through the discovery of large gas reservoirs in the northern Po plain. The steady 7% yearly growth was called the "economic miracle"; inflation was defeated, and for a short time, even became negative. The national currency, the lira, was recognized for its stability. In 1959, full employment was reached.

When, in 1975, the role of the Cassa was abruptly downsized through the devolutionary introduction of regional governments which took over jurisdiction of long-term investments, the Cassa per il Mezzogiorno

^{1.} Alcide De Gasperi (1881-1954) served as prime minister 1945-53; and as foreign affairs minister and interior minister before that.

had created 2 million hectares of irrigated land, built 62 dams, 52 aqueducts, numerous sewage systems, modernized 20,000 km of roads, built 6,000 km of new ones, electrified railway lines, and started numerous industrial centers. However, the job was only half done.

After the model of the Tennessee Valley Authority and the New Deal projects for the entire Appalachian region, the Cassa was given unprecedented technical competence and power, including funding to finance a ten-year program which was drafted and executed by the Cassa itself, under approval of a special government committe composed of the Minister for the Mezzogiorno, and the ministers of the Treasury, Finance, Public Works, and Labor.

In addition to the long-term projects, which the Cassa leaders drafted with an integrated approach, new projects could be adopted yearly, according to the changed situation. The Cassa's structure allowed it to move funds which it had earmarked for a project, to another project, if priorities changed along the road. Local authorities were forced to collaborate with the Cassa and put their competencies at its disposal. As the Cassa's long-time president, Gabriele Pescatore, often said, the aim of the Cassa was to create "a process of self-subsistent capital accumulation."

The regional devolution meant a shift from a unitary integrated approach for infrastructural development of the entire Mezzogiorno, to local approaches and views, breaking up the unitary vision and ending the development process, which degenerated into localism and clientelism.

Today, the original approach of the Cassa per il Mezzogiorno must be revived, if we want a rebirth of Southern Italy, and a locomotive for the entire Italian economy, and that of all the Mediterranean.

Springboard for Development of North Africa

If we want to plan a rebirth of the Mezzogiorno, we have to consider its geographical role in the center of the Mediterranean, and its potential land connection from central Europe through the Italian peninsula, to Africa.

From its northeast to its southernmost point, the Island of Lampedusa, Italy stretches for 1,291 km as a natural "bridge" between Northern Africa and Central Europe. It is 140 km distance from the coast of Tunisia, and 70 km from the Albanian coast. There are projects to connect at least one of these two dis-

tances through a submarine tunnel.2

Italy is the only country belonging to "Southern Europe" which has a self-subsisting industrial capacity, able to provide capital goods for itself as well as other countries. Italy has the second-largest manufacturing sector in Europe, after Germany. The problem is that this industrial base is concentrated in Northern Italy, and partly in Central Italy, whereas Southern Italy is underdeveloped.

Italy's industrial potential is now blocked by its loss of sovereignty. The euro system vetoes the creation of credit for development, and forces industrial companies to outsource production. These two main problems must be eliminated through re-establishing monetary and credit sovereignty, and protective measures of commerce.

If this is done, Italy can go back to the FDR-style methods used in the postwar reconstruction, and use its tremendous scientific and industrial potential to develop its southern part, while helping develop neighboring countries, such as Greece, Spain, Portugal, and Northern Africa.

By extending its capacities in the Mezzogiorno, northern Italian industry will enjoy the unique advantage of being closer than any competitor to its export markets. Italy's Mezzogiorno must become the production site for capital goods for itself and for the entire Mediterranean region.

The Mattei Tradition

In the 1950s, when the Anglo-French-Belgian colonial interests still controlled most of Northern Africa and the Middle East, Italy developed an independent policy of friendship with those countries through the work of its greatest industrialist and political leader, Enrico Mattei. Whereas the Anglo-French colonizers exploited natural resources, offering little in exchange, Mattei offered not only the largest portion of the pie, but also to educate a local skilled labor force able to participate in an industrialization process.

A leader of the anti-Fascist Resistance, Mattei, after the war, was assigned the task of liquidating the stateowned oil company Agip. Soon, Mattei realized that for Italy, a country poor in raw materials, Agip could become a tool to achieve energy independence. Thus,

^{2.} See Dr. Nino Galloni, "The Sicily-Tunisia Tunnel: Link to Africa," *EIR*, Feb. 25, 2011.

he disobeyed orders, and instead of liquidating Agip, he set up a false oil discovery in the northern Italian Po plain, and with the support of Prime Minister Alcide De Gasperi, carried out his plan to make out of Agip a powerful tool for development.

Mattei forced the government to give Agip concessions over the entire national territory, excluding foreign companies. He did not find oil, but did discover enough gas to provide cheap energy for the industrial recovery. In a few months, Agip's sister company Snam built a large network of gas pipelines in Northern Italy, and brought natural gas to every household.

When he realized that the high price of fertilizers, established by private producers in a cartel agreement, was hindering the development of Italy's agricultural sector, Mattei built a large plant in Ravenna and produced fertilizers, and sold them cheap, forcing the cartel to break up, and lower its prices.

In 1953, Mattei built the conglomerate ENI, and launched an international offensive against the "Seven Sisters," as he named the seven companies that formed the powerful international oil cartel. With the exception of Esso, which drilled oil in Saudi Arabia, the Seven Sisters were the same British, French, and Dutch companies which had shared among themselves control over oil-producing countries, following the famous "Red Line" agreement of 1928, which basically followed the lines of the Sykes-Picot agreement.³

The Seven Sisters drilled oil according to the 75/25 formula: 75% to the company and 25% to the producing country. U.S. companies gave better treatment: 50/50. Mattei offered 25/75: 25% to ENI and 75% to the producing country. Furthermore, Mattei offered a development package: employment of the local labor force, schooling of labor, and infrastructure.

Mattei made agreements with Persia (Iran), Libya, Tunisia, Jordan, Lebanon, and Morocco. He also struck major trade deals with Russia, and with Egyptian nationalist leader Gamal Abdul Nasser; and he opened negotiations with China. In 1962, with the Kennedy Presidency, a new situation allowed a deal with U.S. oil companies and Mattei signed a secret agreement with the new Iraqi government to become the main partner

in the national oil consortium, with concessions on the largest oil fields. The British Foreign Office viewed this as a *casus belli*.

In 1962, on the eve of Mattei's visit to the U.S.A., where he was supposed to meet President Kennedy, Mattei was killed by a bomb placed in the landing gear of his private jet. However, his policy was continued by his successors, and the Italian governments in general, until the political system was rocked by the pro-euro coup of 1992.

Mattei built an image of modern Italy which still resonates among African and Asian countries. His policy was strongly backed by State President Giovanni Gronchi, and by prime ministers such as Amintore Fanfani and Aldo Moro. ENI was the calling card of a modern, anti-colonialist Italy, and opened the door for the powerful state conglomerate IRI to build dams, roads, and railroads throughout the world. An engineering firm of the IRI group, Bonifica, developed the ambitious plan for the development of central Africa called Transaqua (see article, p. 44).

Defeating the Environmentalist Mercenaries

Any development program in Italy must reckon with an occupation force called the environmentalist movement. After 1987, environmentalists have, for two decades, successfully prevented any major infrastructure from being built in Italy, inducing anti-science and technology psychosis in the population. An attempt by the central government to bypass this in 2001, with a bill called "Legge Obiettivo" (Objective Law), which made local approval not binding for a list of strategic infrastructure projects, has been only partially successful. A program for an Italian economic recovery must therefore involve a war against the foreign occupation force, the environmentalist movement, steered by London. This must be conducted both at a cultural level, by organizing the population with cultural optimism, bringing forward the real values of the Italian culture rooted in the 15th-Century Renaissance, as well as on the political-intelligence level, exposing and destroying the foreign intelligence networks controlling the environmentalist operatives.

Here are the main projects to be implemented.

1. Energy

Energy is the main deficit item in the Italian trade balance. Italy imports 78% of the energy it consumes,

^{3.} The Sykes-Picot Agreement of 1916 was a secret pact between Britain and France, establishing their respective spheres of influence and control in the former Ottoman Empire.

both as electricity, and as fuel for industrial and domestic consumption. Twelve percent of its electricity (43 TWh) is imported from France, Switzerland, and Slovenia. Natural gas constitutes 66% (230 TWh) of energy produced through imported fuel. Coal is 18% and oil is 16%.

This causes energy prices for production to be on average 30% higher than Italy's industrial competitors. In order to stay in the market in today's insane system of free trade and globalization, Italian producers are thus pressured to reduce labor costs. Due to this and to the higher taxation (over 50% of the gross wage), Italian wages are among the lowest in Europe.

This is the result of the demolition of Italy's nuclear capability which, in 1966, was the third-largest in the world after the United States and Great Britain; in 1987, when that capability was shut down, Italy was in the front line of technology in Europe. A solution to Italy's energy problems will come through a massive comeback of nuclear energy.

Italy's nuclear tradition goes back to Enrico Fermi, the father of the first nuclear reactor, built in Chicago, in 1942. Enrico Mattei built the first Italian commercial reactor in 1958. After the first oil crisis in 1973, Italy had four active nuclear plants and the government pushed a plan to build six new reactors. A massive British-led economic and political assault against Italy, using the new-born environmentalist mob, brought the Italian nuclear program first to a stop, then to a shutdown, with a national referendum conducted in 1986 under the emotional shock of the Chernobyl accident.

When the government resumed a nuclear program, planning to build eight new plants in order to achieve 25% of its electricity from nuclear, the same forces organized another referendum in 2011. Destiny had it that the referendum coincided with the Fukushima accident following the Japanese tsunami in February 2011. The massive Goebbels-like media propaganda resulted in another plebiscite against nuclear energy, and the nuclear program was cancelled.

The large-scale use of referenda as a form of direct democracy is part of a whole range of elements which have corrupted the Italian system of government, and goes back to the period immediately after World War II, when British-allied forces insisted on building into the Italian constitutional system elements of weakness, such as pure parliamentary democracy, decentraliza-

tion of power, and popular referenda. As a result, virtually nothing can be built today in Italy, as the smallest local authority has acquired a disproportionate veto power.

This system must be urgently corrected, by correcting not only the law but the underlying culture, going back to a Westphalian state, and to a system of Classical education that produces responsible citizens.

The new nuclear reactors can be built in Southern Italy, starting with one per region: Campania, Basilicata, Puglia, Calabria, Sicily, and Sardinia. With a mixed system of EPR (European Pressurized Reactor) and HTR (High-Temperature Reactor) complexes, production of ca. 10 GW can be reached with the first shot. Anti-seismic and other considerations will lead, in some cases, to building the plants on floating platforms off the coast. At the same time, four plants can be built in central and Northern Italy, in Trino Vercellese, Latina, Caorso, and Montalto di Castro, on the same site as the old plants, for a total capacity of ca. 16 GW (16,000 MW). In a second phase, this capacity can be doubled.

Although due to the nuclear moratorium, Italian industry has not built any nuclear plants since 1987, companies such as ENEL, ENI, and Ansaldo (Finmeccanica Group) have continued to participate in international consortia, so that the know-how has been maintained. This means that Italy could start exporting nuclear technology once the first phase of its own nuclear program is completed.

2. Transportation Networks

A revolution in freight transport is indispensable in Italy, and will produce a great boost in productivity. Currently, only 10% of commercial goods are moved on rail, 0.1% on barges, and 0.6% on coastal waters, despite Italy's 7,750 km of coastline. The huge remainder goes by truck on the roads, with a great expense for gasoline and rubber, and creation of massive traffic congestion. Producers do not use rail because it is slow and inefficient. It takes a container less time to go from Milan to Berlin than from Palermo to Rome. An effort to change this involves upgrading the rail network, making it faster and more efficient.

Currently, Italy is completing three Trans-European corridors of high-speed rail which connect most of the country's major cities: Corridor 6 (Lyon-Kiev), Corridor 1 (Berlin-Palermo), and Corridor 24 (Genoa-Rot-

Italy and the Trans-European Project 29



Source: EU

terdam). The Milan-Salerno part of Corridor 1 (Map 1), which involved a major engineering work in its Bologna-Florence Appenine part because of 73 km of tunnels, is already functioning. The Turin-Venice section of Corridor 6 is being completed. The Milan-Genoa

section of Corridor 24 is being developed (Map 2).

The Italian sections of Corridors 6 and 24 are opposed by environmentalist groups, which are often violent, and backed by the media. The environmentalist mobilization against the Turin-Lyon section. which includes a new 57-km-long tunnel under the Alps, has developed into violent clashes with the police and against the construction site (Map 3). Recently, prosecutors in Turin arrested 24 leaders of the insurgents, among whom were two former members of the Red Brigades terrorist group.

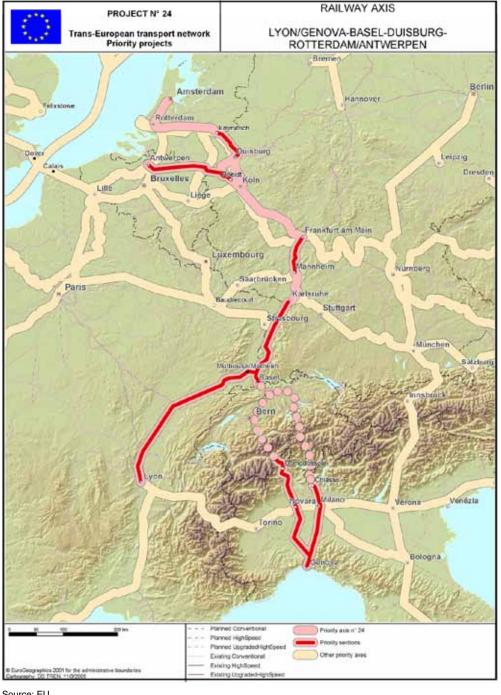
The same groups oppose the new Genoa-Milan high-speed project.

implemented, Once however, these three lines will not be sufficient. Italy has 55.4 km of rail per 1,000 km², about half the density in Germany (94.5 km). Italy has 238 km of rail per 1 million inhabitants, as compared to 481 in France, and 412 in Germany. The high-speed section is currently 13 km per million inhabitants, as opposed to 16 in Germany, 30 in France, and 35 in Spain. Furthermore, if we take the conventional lines, only half of the total 22,935 km are

electrified, and 9,213 km are single rail. The latter case dominates, for instance, in Sicily.

These figures, however, supplied by the national railway company, do not reveal that a large portion of the secondary lines is in a state of decay. This involves

MAP 2 Italy and Trans-European Project 24



Source: EU

both connections among minor centers as well as lines used by commuters.

Thus, an effort to modernize the Italian railway system means double-tracking the single-track lines, electrifying half of the current network, and doubling it on a national scale.

In the Mezzogiorno, railway lines must be quadrupled, and high-speed rail lines must be extended beyond the current southern terminal, Salerno, to the tip of the "Boot" and, over the future Messina Bridge, to Palermo.

From Palermo, the line will be continued to the small town of Pizzolato, in the province of Trapani, where a submarine tunnel will connect with Capo Bon, in Tunisia.

The bridge over the Messina Strait will be a major engineering enterprise. With its 3,3 km, it will be the longest singlespan suspension bridge in the world (Map 4).

The bridge will connect the two cities of Messina and Reggio Calabria, creating a single, large urban conglomerate, with more than 2 million people. This urban center will be connected by the high-speed line to Central and Northern Italy, and to Central Europe, and, via the same line and the Sicily-Tunisia tunnel, to North Africa.

Part of this center, on the Calabrian side, is the deep-sea port of Gioia Tauro. which could

become the main port receiving cargo ships coming from the Suez Canal. Currently, 30 million containers per year (20-foot equivalent units, or TEU) move through the Mediterranean, and Italy handles fewer

MAP 3
Italy and Trans-European Project 6



Source: EU

than 4 million, 3 million of which are in Gioia Tauro. At least 20 TEU head to Gibraltar, circumnavigate the Iberian Peninsula, and dock in Rotterdam in order to reach Central Europe. It would be much easier to unload the freight in Gioia Tauro, put it on a train, and ship it to the North, but this is not convenient now because of the inefficiency of the rail connection.

Once Gioia Tauro is efficiently connected via rail, starting by making the current conventional rail efficient, while building a high-speed connection to Salerno, freight would take 30 hours or less to reach Berlin, as opposed to the current time of one week.

The high-speed rail must be extended over the Messina Bridge to Palermo and beyond, so that Corridor 1 can be projected all the way into Africa.

This will be achieved with the undersea tunnel to Tu-

nisia, a project of the Italian national research agency ENEA. The distance between the coastlines is about 155 km, and would be reached by five tunnels constructed between four intermediate artificial islands which will be built with the excavated material. There would be two tunnels in each direction, plus one service tunnel.

The tunnel will provide a fast commercial railway route to export capital goods for the development of North Africa, not only from Italy, but from Central Europe as well (Map 4).

2b. The Maglev

The Italian railway industry has been weakened by the lack of demand resulting from the slow modernization over the last two decades. Thus, Fiat has sold its Fiat Ferroviaria division to the French Alstom, leaving An-

MAP 4
Italy: Messina Bridge and Tunnel to Tunisia



Source: Movisol

saldo-Breda (Finmeccanica Group) as the only company able to produce modern locomotives. However, the current government is planning to privatize Ansaldo-Breda too, because its balance sheet is in the red. Ansaldo-Breda produces the newest version of the Italian high-speed train, ETR 500, which was designed in the 1980s.

The new private French-Italian company NTV has now been allowed to run on the Italian high-speed line with the most modern version of the TGV (build by Alstom!) which has a better performance than the

ETR-500. Thus, things are looking grim for the Italian rail industry.

However, the Italians could outflank such problems by going for magnetically levitated trains (maglev), after the Chinese model. The Chinese have obtained a license to build the Transrapid, a Siemens technology, on the condition that they do not sell it abroad.

2c. Waterways

Italy has a very poor internal waterway system. Basically, only the river Po is partially navigable, along with a network of channels in the Veneto-Emilia Romagna region which go back to the time of the Republic of Venice.

And yet, the Lombardy region is studying plans for making the Po entirely navigable from the Adriatic coast to Milan.

At the same time, a major waterway could be opened in North-East direction, connecting the river Adige with the Inn, creating a waterway that goes from Venice to Passau, connecting the northern Italian

MAP 5 Italy and the Central European Waterway



Source: Tyrol Adria, Ltd.

network to the entire central European waterway system (Map 5).

The project, developed by the company Tyrol-Adria AG, foresees a canal-tunnel between the Inn River in Austria and the Adige in Italy, which come within 70 km of each other on the plain. The tunnel-canal would be 78 km long, and would be large enough to allow the passage of barges of the EU Class V. The water would be pumped into the tunnel, creating an artificial current that would push the ships, thus avoiding the use of egines and pollution of the tunnel. The energy for pumping the water is produced by hydroelectrical plants built along the Inn.

3. Science-Driver: Space and Earthquake Prevention

Italy's strong space sector and its advanced earthquake research program can be combined to form a powerful science-driver for the Italian economy.

Earthquake research is very advanced in Italy, because of its extensive seismic activity, and also due to the research on earthquake precursors that began in the 19th Century. 4 Today, the Italian school of seismic precursors is one of the two most advanced in the world, together with the Russian school. There are several teams of physicists and geologists who are studying earthquake precursors, and are now able establish a multi-parameter system. For instance, Prof. Pier Francesco Biagi of Bari University insists that a network of 50 ground-based receivers, and 10 geostationary satellites would be sufficient to build a system capable of forecasting, with 90% probability, 10-15 days in advance, earthquakes from Magnitude 6 upwards. Biagi has collected impressive evidence of precursors of the 2011 Japanese quake using GPS data.

Unfortunately, there is little or no government financing for those programs. Professor Biagi financed his system with private funds he himself organized. This must change. Research on earthquake precursors must be integrated with space research in a Strategic Defense of the Earth (SDE) policy.

Italy has built its own satellites since the 1960s, thanks to the work of scientist Luigi Broglio, founder, in 1956, of the Department of Aerospace Engineering at the University of Rome, and author of the "San Marco"

program. In 1964, Italy was the third country in the world to put its own satellite in orbit, after the Soviet Union and the United States. Using a platform built in international waters in the Indian Ocean, at the Equator, Italy launched the "San Marco" project of five satellites, which were sent in orbit thanks to vectors provided by NASA.

Since then, Italy has developed its own aerospace industry which is today part of the state-owned Finmeccanica corporation and, in 1988, established its own space agency, Agenzia Spaziale Italiana. ASI contributed, among others, to building major parts of the International Space Station. Italian astronauts participate in European Space Agency (ESA) programs, and have been on board of several missions of the U.S. Space Shuttle.

Thanks to ASI, the Italian scientific community achieved major successes in astrophysics and cosmology in the last decades, moving fundamental steps towards the undersanding of the phenomenon of gamma ray bursts and of gamma ray sources. ASI has also given major contributions to space exploration, building scientific instruments that travelled with NASA and ESA probes to discover the secrets of Mars, Jupiter, and Saturn. ASI is present in all missions already planned for the coming years.

Italy is also on the front line with satellites, such as Cosmo Sky-Med, which is currently used for environmental monitoring, but can also be used for seismic monitoring. ASI is also leader of the European Vega project, a launcher able to carry a payload of 1,500 kg into lower orbit, being thus currently one of the three available launchers worldwide, together with the French Ariane 5 and the Russian Soyuz.

ASI's capabilities can be mobilized in a Moon-Mars space program and in an SDE project, providing a important scientific driver for the civilian economy.

At the same time, a general overhaul of existing buildings, according to the most modern anti-seismic construction standards, must be implemented. Whereas recent laws are forcing new buildings to be made according to such standards, older buildings are not. Furthermore, Italy is rich in ancient buildings, monuments, churches, and palaces, which are extremely fragile to shocks. An effort must be made to at least make strategic buildings, such as schools, hospitals, and public administration, safe from earthquakes. It has been calculated that this effort would cost at least EU100 billion.

For example, Alessandro Serpieri's studies of earthquakes in Italy between 1873 and 1883. His complete seismological studies were published in 1889.

Afro-Mediterranean Revolutionary Project

by Hussein Askary

May 28—The following article is based on a preliminary study (no feasibility studies are conducted yet) presented publicly by Egyptian engineer Aiman Rsheed in the months following the Egyptian revolution of January 2011. The original study is in Arabic, and parts of it have been translated into English by this author and included in this article.

Born in 1964, Rsheed is a member of a generation that grew up between the generation of Egyptian independence from British colonialism and the generation of President Gamal Abdul Nasser, on the one hand, and the young generation that has now revolted against the social and political injustice imposed on Egypt and the rest of Africa by the IMF-World Bank with the support of the EU and the United States,

and implemented brutally inside Egypt by the regime of Hosni Mubarak.

The Africa Pass project (**Figure 1**) shows the great human potential in this ancient but young nation. According to Rsheed, there are today more than 470,000 Egyptian engineers. Each year 20,000 graduates are added to this enormous army of engineers. Egypt's population is at 80 million, but lives on a narrow strip of land on the banks of the Nile River and Delta. Africa Pass will open the desert in the west of the country for development and population. The project will also revolutionize the economies of Sub-Saharan and North Africa and relations within the continent and across the Mediterranean into Europe.

Rsheed presented a draft of this project to the office of Prime Minister Kamal Al-Ganzouri in February 2012. It has recently garnered the support of thousands

FIGURE 1 Artist's Depiction of the Africa Pass Project



Source: http://www.facebook.com/#!/aiman.rsheed

of engineers, university professors, and the public at large. Rsheed has been interviewed on many Egyptian television channels to present his idea to a nation which has been hungry for a solution for the deep poverty and social injustice, which still oppresses the people even after the fall of the Mubarak regime. The IMF is desperate to come back into Egypt, but a strong resistance movement is not letting the leadership of the country make compromises.

Aiman Rsheed served in the Egyptian Military and Air Forces as Colonel, specializing in aviation engineering, disaster relief, and planning. He ended his military service in 2008, and went to complete his PhD in mechanical engineering in Ain Shams University. He studied at the Institute of the Air Force and worked there as chief engineer for planning and maintenance workshops. He received his Bachelor of Science degree in



Source: http://www.facebook.com/#!/aiman.rsheed
Africa Pass author Aiman Rsheed's campaign poster for
Chairman of the Egyptian Engineers' Union, 2012

1986, graduating from the Military Technical College.

Rsheed is a candidate for the chairmanship of the Egyptian Engineers Union, whose 470,000 members he regards as the army which will support and carry out this mega-project. Rsheed is politically independent and not a member of any political party.

Presently, he is working as planning manager at Misr Training and Technical Consultation firm in Cairo.

Summary of the Project

The Africa Pass will include two major components:

A. Transport: In the first phase, it includes the building of a major modern seaport in Sidi Barrani in northwestern Egypt near the border with Libya, which will be connected to the Great Lakes nations (Rwanda, Burundi, Uganda, Democratic Republic of Congo, the Central African Republic, and South and North Sudan) by high-

speed rail and modern auto highways (**Map 1**). In the second phase Somalia and Ethiopia will be connected. In the third, Egypt will be connected to Asia through a tunnel underneath the Suez Canal and a bridge from south Sinai to Saudi Arabia across the Tiran Island in the south of the Gulf of Aqaba. In the fourth a high-speed rail network across North Africa westward will connect to Europe through the planned Gibraltar tunnel.

Inside Egypt alone and along the Africa Pass corridor, five large cities are envisioned to be constructed like a string of beads with 250 km between each city, in an area that is practically only desert now. That will alleviate the demographic pressure on the Egyptian cities and help make the desert bloom with life and activity again, with the help of the canal bringing water from the Congo (see below).

The building of the Sidi Barrani port, a modern container-handling and industrial center on the Mediterranean with a large international airport, is the first and easiest part of the project to accomplish, according to the study. The large industrial zone and tourist zone in the area will attract industries, skilled Egyptian labor, and investors, and immediately provide work for large numbers of Egyptians, who are currently unemployed.

B. Water: The more impressive water project presented by Rsheed is similar to the Transagua Canal Project (presented thoroughly by EIR and the Schiller Institute based on the work of Italian engineer Marcello Vichi). An irrigation canal, 40 meters wide and 15 meters deep and about 3,800 kilometers long, will extend from the Eastern side of the Burundi-Rwanda-Uganda watershed and flow northward through eastern Congo, the Central Africa Republic, South and North Sudan, into Egypt to fill the Qattara Depression west of Cairo with fresh water (Map 2). Seven hydropower stations will harvest the power of the flow of water from a height of 1,500 meters above sea level in the south and down into the Qattara Depression, which lies 80 meters below sea level. The study does not specify whether this canal would be navigable. It is obvious that bulk transport can become cheaper and more easily transported, shipping it by canal, as compared to by rail or road.

The canal will be constructed parallel to the rail lines and roadways. Electrical and electronic communication lines will accompany the Africa Pass to allow for building agricultural and urban centers along it. Oil pipelines can be added to the corridor to allow the landlocked countries to export their oil.

Around the Qattara Depression alone, millions of acres of agricultural land can be created, turning Egypt into a breadbasket, rather than being, as is the case now, dependent on imports of food. The freshwater Qattara lake and the green areas around it will have enormous hydrological effects, moderating the weather in the desert and increasing the hydrological cycle in the region with ever greater rainfall, diminishing the size of the desert.

Objectives of the Project

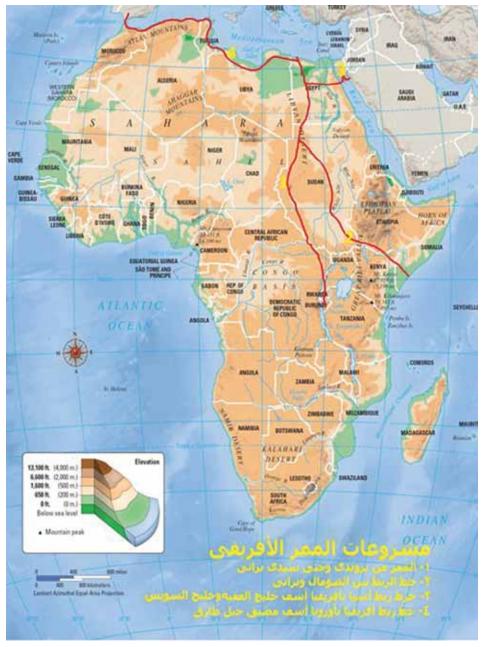
- 1. Development of nine African nations through real economic development projects.
- 2. Turning Egypt and the other African nations through which the project passes, into industrial, labor-attracting centers instead of labor-flight disaster areas.
- 3. Opening an export outlet for the agricultural products of the nations of the Great Lakes region, which are now wasted for lack of storage and low-cost, rapid means of transport. It is estimated that agricultural and other products will be ready for shipping from their place of origin to the Mediterranean within two days, with the help of the high-speed rail and Sidi Barrani port. This

project will open up new agricultural sectors in the region which have lain dormant and isolated, such as the enormous potential of livestock and dairy production in both parts of Sudan. It will also lead to the elimination of hunger and starvation in many parts of Africa, especially the Horn.

4. Redistributing the population, especially of Egypt, into new cities, towns, and service centers in a

MAP 1

Africa Pass: Four Phases of Transport Corridors



Source: http://www.facebook.com/#!/aiman.rsheed

fertile environment that is aspiring to grow.

5. Re-establishing Egypt's leading role and connection to Africa with renewed economic and diplomatic cooperation, which was launched by Egypt's new government and Foreign Ministry after the revolution. This project can contribute greatly to the conflict-resolution initiatives among the nations of this region, especially South and North Sudan, development of Darfur,

MAP 2 **Africa Pass: Canal from Eastern Congo to the Qattara Depression**

Source: http://www.facebook.com/#!/aiman.rsheed

and the opening of cooperation with Chad, which has become part of the conflict in Darfur.

6. Developing the water resources of all the nations included in the project and ensuring the production of

large amounts of clean hydroelectric power. Inside Egypt, the Africa Pass will be complementary to the New Nile Valley project, which will start at the Toshki Canal in the south near Aswan and run parallel to the

Nile northwards, opening new agro-industrial centers in the desert. Dr. Farouk Al-Baz, Egyptian-American scientist and former NASA expert, has pioneered this project, which he call the "Development Corridor." Africa Pass will create a third Nile Valley, but with regional and international connections.

7. The cultivation of millions of acres of land around the Qattara Depression, and generation of power.

Rsheed has called upon the Egyptian government, i.e., the Prime Minister, to hold a five-day conference, in which the idea of the project would be thoroughly presented with the participation of experts from the different Egyptian ministries, in order to give the project the character of a national mobilization. He also recommends that the Foreign Ministry should immediately start negotiations and hold conferences with the other nations that would benefit from the project. Rsheed suggests that the Egyptian Engineers Union be made the official consultant for the project, in order for it to benefit from the local capabilities of Egyptian engineers. According to him, the Sidi Barrani port/industrial zone should be launched immediately as a first shot, regardless of the fate of the rest of the Africa Pass, in order to give an example of the great potential that exists in the country and what can be done with it.

Although the very specific technical data and topographical difficulties will be assessed and dealt with through specialized studies by the different Egyptian ministries as recommended above, the general overview and intention provided by Rsheed is both sound and doable. There are in this study certain problems regarding the thinking about its financing, which stem from the lack of sufficient knowledge and trust in a system of state-generated credit, after so many years of IMF policies and corrupt regime practices. However, this project will not be isolated from the solution provided by the LaRouche movement internationally for the current global financial/economic breakdown crisis.

Besides, there are misunderstandings and illusions regarding the feasibility of solar power in Africa. The Desertec project for solar power generation, which is a financial and scientific swindle imposed on Germany, the EU, and some partners in North Africa, is presented positively in this report. It has been definitively and clearly refuted in *EIR* and 21st Century Science & Technology magazine. As most Africans actually realize, there is no other alternative for Africa's future development than nuclear power. The subsidy of solar power on

a very small scale by the EU in Morocco, for example, is intended to both delay Morocco's decision to go nuclear and to brainwash Europeans who believe in this type of green utopianism.

Egypt's commitment to build four nuclear power stations by 2025 to generate 4 gigawatts of electricity did not end with the Mubarak regime. On Feb. 13, 2011, interim Egyptian Prime Minister Ahmed Shafiq reiterated that these plans will not be affected by the political developments in the country. Current Prime Minister Kamal al-Ganzouri, on Jan. 16, 2012, informed ministers that the government will follow through with its plans to build Egypt's first nuclear power plant. The plant's construction site is located in Dabaa in Matrouh Governorate on the Mediterranean, in proximity with the same region where the Sidi Barrani port/industrial zone is proposed in the Africa Pass project. All leading companies from Japan, Russia, China, France, the U.S., and South Korea have expressed interest. Bidding for the projects was supposed to be presented this year, but has been postponed pending on the establishment of a new government after the current Presidential elections.

It is important, as the fight continues for a new and just world economic system, based on respecting the sovereignty of nations, that Europeans on the other side of the Mediterranean see the enormous human and natural potential in Africa through the eyes of such patriotic and passionately creative Africans as Aiman Rsheed. Bridging both the physical and socio-economic gap between Africa and Europe will depend on the realization of such ideas and aspirations as presented in this report.

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The Transaqua Project: Beginning of an African Rebirth

by Portia Tarumbwa-Strid

Africa is dying! Everything the media is saying about an economic recovery in Africa, is not merely false, but a fraud. Africa *can* be developed, but only in the context of global financial reform and the World Land-Bridge program presented in this report.

The paradox lies in the fact that some of the world's greatest reserves of mineral resources lie in Africa. So why is Africa still so poor? The answer is simple: British colonialism and its prohibition of any infrastructure programs, especially water management, which would raise the population's productivity. If the problem had been a mere lack of money, then the contributions from Europe would have developed Africa long ago. Money is only worth as much as the objective for which it is spent. I would like to preempt anyone inclined to blame this on the corruption of all Africa's heads of state: The cause of the crisis is not corruption, but the folly of a system based on so-called "investments" in fictitious assets, as well as the faulty design inherent in the euro system itself.

Africa has the potential to become the breadbasket of the world, if we could but overcome the problem that there is too much water in the equatorial region, lying unused in swampy areas, breeding mosquitoes faster than humans, whereas to the north and south, the deserts are encroaching further and further into the dry steppe regions.

Water for a 'Blue Revolution'!

The Transaqua Project has been lying on the shelf for more than 20 years, when it was officially tasked to the engineering firm Bonifica by the Italian government. The project foresees the transfer of water from Congo to Chad, and should function, like the Tennessee Valley Authority of President Franklin Roosevelt's New Deal, as a pilot project for jump-starting the economy of the entire continent.

Lake Chad has shrunk to one tenth of its original size in the last four decades. This is a tragedy which affects Chad, Nigeria, Niger, and Cameroon. Between sandstorms and the great reduction of irrigation and fishing, this lack of water is a matter of life and death.

Through the Transaqua Project, 100,000 million cubic meters per year of freshwater would be diverted from the Congo River to fill up Lake Chad. That is around 5% of the freshwater of the entire Congo basin, which now flows unused into the Atlantic Ocean. The wild Congo River itself, second in flow only to the mighty Amazon, will be tamed by 2,800 km of navigable canals—equivalent to the distance between Paris and Moscow—with an average depth of 25 meters and width of 100 meters.

The project is based on the natural geographical conditions of Central Africa and runs from the watershed between Congo and Chad, where the flow turns westward in the Central African Republic, until it meets the Chari River.

Africa's first inland port will be constructed at the very location that has seen a 60% reduction of water levels over the last few decades. A further blessing deriving from the project will be a constant supply of electricity, to be generated from the estimated 3,200 m³ of water flowing down the Chari River, which is about double that of the Nile north of Aswan. A series of hydropower plants would generate about 4 gigawatts of electrical power.

Even with the water flow topping that of the Nile, Transaqua would remain only a partial solution if it were not integrated into a transcontinental African railway network. The development of continental Europe took place in not very different terms. The construction of canals and, later, railway trunk-lines, was indispensable to the growth of an educated middle class in Europe, and made possible the first financially viable

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FIGURE 1
The Transagua Plan for Water Infrastructure Development

The development of the Lake Chad basin is only part of the huge Transaqua project. Lake Chad is in the northwest on this map, straddling the borders of four countries, Niger, Chad, Central African Republic, and Nigeria.

social welfare state under German Chancellor Bismarck.

Coming to Chad itself, the southward expansion of the Sahara Desert will be halted by directing the water into the regions of Chad and Niger north of Lake Chad, partially by means of the Chari riverbed in the Central African Republic. These parts of the Sahel Region would thus see 5-7 million hectares of irrigated land—an area where today up to 20 million Africans are threatened with starvation, if nothing is done to stop it.

FDR vs. Churchill

The approach taken by the Transaqua Project is not totally new, however. While at the World War II Casa-

blanca Conference in January 1943, U.S. President Franklin Delano Roosevelt spoke of his inspired vision for this part of the world. The report comes from his son Elliott Roosevelt who accompanied him and gave this report of his father's discussion with British Prime Minister Winston Churchill in his 1945 book *As He Saw It*:

www.transaguaproject.com

"We discussed the great salt flats in southern Tunisia, which must have at one time been a vast inland sea. He reminded us of the rivers that spring up in the Atlas Mountains, to the south, and disappear under the Sahara, to become subterranean rivers. 'Divert this water flow for irrigation purposes? It'd make the Imperial Valley in California look like a cabbage patch!' And the salt flats: they were below the level of

the Mediterranean; you could dig a canal straight back to recreate that lake—one hundred and fifty miles long, sixty miles wide. 'The Sahara would bloom for hundreds of miles!' It is true. The Sahara is not just sand, it has an amazingly rich potential. Every time there is a rain, there is a consequent riot of flowers for a few days, before the dryness and the sun kill them off....

"'Wealth!' he cried. 'Imperialists don't realize what they can do, what they can create! They've robbed this continent of billions, and all because they were too short-sighted to understand that their billions were pennies, compared to the possibilities! Possibilities that *must* include a better life for the people who inhabit this land...."

The intention of the British Empire today, to depopulate Africa, lies, among other things, in the self-contradicting pseudo-science of so-called anthropogenic climate change. The argument made, is that man should not be allowed to change the climate, but that he does so anyway, regardless of efforts to the contrary, and always has a negative impact. One could just as well say that it were better we humans didn't exist at all, as our very presence on this planet, in this very universe, only accelerates its destruction. Physicists have given this belief the title of the Second Law of Thermodynamics.

What does that have to do with the development of Africa? Why, everything!

Developing the Biosphere

All "aid" for Africa is destructive, when guided by this assumption: that man is the plague of the planet. Projects such as Desertec, for example, which would plaster the Sahara with solar panels, ignore the primary principle of development of the planet Earth and of nature—that life is a higher domain than non-life. In other words, photosynthesis uses sunlight much more effectively than photovoltaic processes ever could. This means, that the potential for life is *reduced* by the deployment of photovoltaic devices, not least because arable land is diverted from use for agriculture, and groundwater remains untapped.

It is therefore much more natural for man to imitate nature consciously, intervening into the processes of the biosphere by introducing green into those regions which have become a dried-out brown. For this reason, Transaqua is much more environmentally friendly than Desertec, because human potential is being drawn upon, in harmony with nature.

Transaqua also promises to affect all aspects of life for the average African. The probability of whether a child born in Congo today will become a chemist or a child soldier, for example, is closely connected to the implementation of this project. Also, the leisure time or free energy to create an orchestra or to build a space program in the Central African Republic, for example—a nation which today is mostly covered by forest—can only be created upon a new economic "platform," as defined by the physical economist Lyndon La-Rouche.

Most politicians depict the billion-dollar bill for Transaqua as impractical, in comparison with the currently fashionable micro-credits. But if you consider the *trillion*-euro bailout packages, which are being carried out almost every other day now, then it becomes apparent which alternative is actually cheaper.

But what one is actually accomplishing with a project like Transaqua lies thus in a different, more important domain than the monetary.

The Italian engineer and originator of Transaqua, Dr. Marcello Vichi, went right to the point when he wrote in 1992:

"The measure of investment costs does not lie in the millions of dollars alone, but also in the liberation from wars, millions of individuals rescued from dying of hunger, social peace, and an international conscience."

The question of whether Italy or Europe would be in better economic condition today, had the technology transfer for such projects already begun, has been answered by the current crisis in Europe. Transaqua's immense number of contracts for productive small and medium-sized enterprises would, without doubt, have saved many lost jobs. China, Russia, and India have profited rather well from Europe's lack of interest in such projects.

The rebirth of the African economy by means of the construction of Transaqua would also mean a new beginning for Europe. The rise of Africa does not at all mean that Europe must fall! Rather, the *Götterdämmerung* of the EU shows that Europe has neglected its actual common mission for much too long: the development of Africa!

This article was translated from German.

From Roudaire's 'Inland Sea' Project to the Blue Revolution

by Yves Paumier

Nov. 2, 2010—In 1874, the **Revue des Deux Mondes** published an article by French officer and topographer François Elie-Roudaire (1836-1885) titled "An Algerian Inland Sea," which would later be popularized by Jules Verne (1828-1905), in his 1905 novel **The Invasion of the Sea.**

Roudaire was convinced that he had discovered a vast depression of salty marshlands (the "chotts") extending over nearly 400 kilometers, from Algeria to the Gulf of Gabès in Tunisia (Figure 1). With the backing of the architect of both the Panama and Suez Canals, Ferdinand de Lesseps (1805-1894), he proposed to bring seawater back in by digging a 240 kilometer canal. Among other advantages, Roudaire argued, the introduction of such a huge volume of water would change the local climate, and could transform the whole region into a "breadbasket." For various reasons, some good, some bad, the project failed at the time. Today, however, from the standpoint of a higher cognitive and scientific "platform," that undertaking can now at last succeed.

Prologue

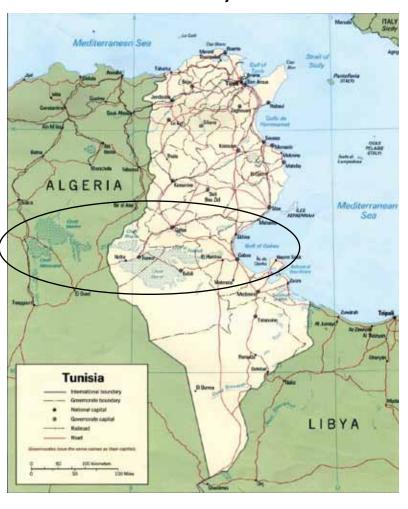
The peoples of North Africa, in this, the first decade of the 21st Century, are shattered. National economies are in a shambles, while the egoism pervasive in modern culture has worsened the disaster. Although the fundamentals of the relevant economies are different, they have one point in common: their dependence on an outside world, defined by the collapsing neoliberal paradigm. Internally, the consequences are disastrous: corruption, lower living standards, discrimi-

nation, a lost generation, etc.

Escape from this prison lies along the path laid out by American economist and statesman Lyndon La-Rouche:

· Regain control over world finances by returning

FIGURE 1 Location of the 'Inland Sea' Project



to a public credit system and the separation of banks (the Glass-Steagall standard introduced by U.S. President Franklin Roosevelt in 1933) in order to break the imperial rule of a monetarist oligarchy.

- Remove from power the agents of that oligarchy, in the White House and elsewhere.
- Reconstruct the world economy through great infrastructure projects, based on the most advanced technologies, and fundamentally transform the biosphere.

The decisive momentum for such a Renaissance could be given by implementation of the North American Water and Power Alliance (NAWAPA), a project to divert rainwater in the northwest of America to the arid regions of the United States, as well as Mexico.

This is not just a colossal project, involving land and resource improvement, but an actual cultural revolution. In that spirit, we wish to take up Roudaire's brilliant idea, with the improvements needed. His idea may be 140 years old, but its underlying principle goes back thousands of years, to a time when mankind had to change the environment through agriculture. By mobilizing creative powers thusly, man asserts his freedom.

To bring this story to life, we now project ourselves into the future.

Roudaireville-les-Palmiers, 2050

Our beautiful city of Roudaireville-les-Palmiers will very soon have half a million inhabitants. Over the last 40 years, the youth of the Maghreb have settled here, rather than fleeing to the suburbs of Paris, Berlin, Amsterdam, or London. After all, the jobs are well paid, and children have access to the best health care. Over those four decades, thousands of jobs were created in the agro-chemical industries and space research.

All of this thanks to the "Great Blue Revolution," which made water abundant. What a change! In this very spot, at the beginning of the century, lay the vast arid breadth of the Sahara, the world's largest desert!

Even if patches of desert are still to be found here and there, lakes have emerged from mirages, and thousands of oases have been created since 2011, under the Paumier-Roudaire plan. Today, each oasis shelters one or several new cities, all interconnected by a rapid transportation network reaching out to distant countries. Cheap vegetables and the most beautiful orchards in the world! Such is today's Roudaireville-les-Palmiers!

FIGURE 2



A ship arrives at the port of Gabès, carrying a strange object.

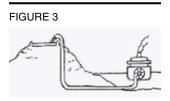
Our children are curious: "Daddy, tell me again about the four phases of the Blue Revolution.

Phase A. Tunisia: From Gabès to Djeridville

Let us begin at the beginning. One morning, in 2011, a ship arrived from the great north carrying unusual cargo (**Figure 2**). It anchored off the coast at Gabès, the Tunisian fishing port, which also exports phosphates. Although the appearance of the ship worried the elders and the tourists sun-bathing on the island of Djerba, the young people came over to have a look at the strange object.

The ship's arrival made a greater impression on the

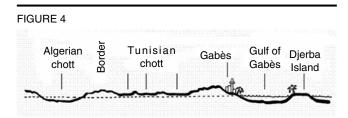
coastal population, especially since it had been carefully prepared. Months earlier, a huge concrete reservoir had been installed atop the hills overlooking the coastline, with a large conduit descending down to the bay, and then to the mooring (**Figure 3**).



A concrete reservoir is placed at the top of the hills overlooking the coastline.

One month later, the sound of water was heard near the reservoir, which was quickly filled up. People were doubly surprised: first; to see a reservoir installed on top of a hill, when rivers do not run uphill; and second, to see it fill up with seawater! Where did the salt water come from? That's when the elders discovered that the strange floating object was not a ship, but a small nuclear power station able to pump water uphill!

In fact, the reservoir itself was only to be used as a water tower for the next phase. When the water runs back down to the sea, hydroelectric power can be generated.



One month later, new noises were heard, the humming of the hydroelectric turbines in the tower to generate electricity for the city, and especially for a new desalinization plant. The newly produced freshwater was first distributed to the city's waterworks. Since then, the rays of the Sun have joyfully danced on the sparkling water of the public fountains.

Let us now look inland, toward those areas which were only desert, and the arid regions where only sheep could be herded. This is where the real work began! First, an aqueduct was placed around the el-Fejal Chott, and filled with freshwater produced in Gabès.

Just what is a "chott"? In the south of Algeria and Tunisia, at the foot of the Aurès mountain range, near the Sahara, was a vast depression, some 400 kilometers long, which, in the rainy season, was transformed into marshland and sometimes even small lakes. The depression was partially covered with salt crystals and divided into secondary basins, which the Arabs called chotts (from the Arabic word "chatt," or coast) (Figure 4).

Now, the Herculean task was to begin: getting rid of the salt which had accumulated in the soil of these basins for thousands of years. When the aqueduct

poured freshwater into the first chott, that water rinsed the soil, and carried the salt water to the sea, via specially built underground conduits the size of a man. Rainfall accelerated the overall process of carrying the salt to the Mediterranean.

The joy of the city dwellers in Gabès, delighted with their fountains, paled in comparison to the joy of the rural inhabitants: The prospect of having fresh and abundant water every day of the year, instead of brackish water on the floor of the chotts, was truly revolutionary. While it all seemed strange and confusing at first, the doubts soon disappeared. The Blue Revolution was clearly on the march.

However, the water needed considerable time to complete its work. No

bulldozer could have done the job, because the salt that is so deeply encrusted in the soil cannot be extracted quickly. However, as planned, the freshwater moved the salt upwards, month after month. Most had been eliminated, but not all. We had a solution for that, too. Agronomists planted halophytes, plants that like to grow in saline areas and absorb the salt.

Only recently has it become possible, thanks to biotechnologies, to create halophyte varieties of rice. That represented a world revolution, quiet but real. Since then, a halophyte variety of the main grains has been developed and is now a staple.

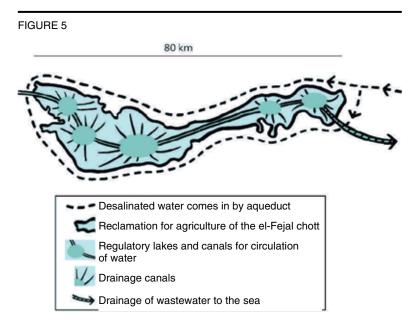
So, after a few years of rinsing, a real lake replaced the first chott, which is a much better solution than Roudaire's "inland sea," which would have increased the soil's salinity. Then, pretty much in the same way as the famous Dutch polders, where large areas of useful farmland were won from the sea: By using a network of hundreds of small irrigation canals, land was won over and water evaporation decreased. This new area was then transformed into cropland. At first, halophytic plants and bushes specially developed for the purpose, were planted. They were replaced, a short time ago, by palm trees.

Earlier, cattle-raising had been drastically cut back, due to lack of fodder and pasture land. Only poor people still herded sheep, and practiced seasonal migration on a local level. But the soil was not arid, and the effects of the lakes quickly reduced the pressure on the fallow land, which began to regenerate (**Figure 5**). The now-confident peasants shifted progressively to other types



USDA

Agronomists plant halophytes, plants that like to grow in saline areas, to absorb the salt. Shown: a clump of Spartina alterniflora.



of livestock, although the risks were greater in uncertain times. The region also became an exporter of camel milk and cheese! Camel milk is much esteemed by young mothers, as babies digest it much more easily than milk from cows. In short, a new agro-business sprang up, but in opposition to that of the 20th Century, it is centered on the local farmer.

After the el-Fejal chott, the next to be reclaimed were the el-Djerid and el-Gharsa chotts. The freshwater available attracted great numbers of people, and, at the very place where mosquitoes used to proliferate, we founded Djeridville, the city that emerged from the mirages. With human civilization, the birds also came, in particular migrating birds which found the climes welcoming, after centuries of shunning them.

Then, yet another indispensable phase of the Blue Revolution took off. Derricks were installed alongside the network of aqueducts, not to pump oil, but to inject freshwater produced in Gabès, into the geological depths. In this way, the aquifer underneath what had been an arid desert, was revived. That aquifer allows our agriculture to flourish, and gives us water to drink every day (**Figure 6**).

Of course, the underground water had been there historically, and was the source of the oases in the middle of the Sahara desert. It also supplied seasonal moisture, but much less, to the chotts. However, from the beginning of the 21st Century on, the relative over-exploitation of these water resources increased the pressure on the aquifer. Without our intervention at that

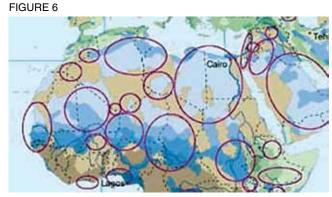
time, the aquifer would have been lost. As a result of the fresh water injections into the depths, the rainwater falling on the mountain ranges some hundreds of kilometers away, and sinking into the acquifers, feed more oases, rather than reemerging in the now-filled chotts.

Phase B. Algeria: The Gabès-Roudaireville-les-Palmiers Irrigation Canal

All the work being done in Tunisia was not lost on those on the other side of the border, in Algeria. They saw slowly shrinking oases suddenly revive, and tree stumps, thought dead, sprouting buds. Then, Algeria launched her own Blue Revolution, by founding Gabès Roudaireville-les-Palmiers.

In the middle of the Melrhir chott, armies of workers had already prepared the ground, and a huge network of dikes was set up to subdivide the entire chott into smaller basins. To facilitate the gradual desalinization process, water was brought slowly into each new basin, one after the other. At the center of the system, an extra desalinization plant was built to extract the salt on the ground which had dissolved into the freshwater flowing in from Tunisia. The recrystallized salt was stored in a place set up for that purpose. When properly conditioned, that salt can be used as a support material, including for building roads.

Near space was also called upon to help, with spacebased sensors allowing an overview of such a large area, with satellites monitoring the process step-by-step. In that way, Roudaireville and the whole region became a reference point for geology and space agronomy.



Aquifers under the deserts are revived by a system of aqueducts.

Meanwhile, in Tunisia, off the coast of Gabès, the floating nuclear power station was replaced by other nuclear power plants, ten times more powerful. Freshwater was produced in a desalinization plant, which was towed there, and now floats like an island in the gulf. For the workforce, another exceptional living area was created nearby, the island-city of Aquagabès.

This increase in power and size made it possible to enter the next phase: the creation of an irrigation canal connecting Gabès to the newly founded city of Roudaireville in Algeria. This canal, running through the south of Tunisia into Algeria, was designed as a manmade river, with derricks set up alongside to inject water into the underground aquifer.

With water now flowing generously in the Sahara, the population grew, including the bird population. Thanks to the Blue Revolution, Algeria recovered a certain sovereignty. Instead of exporting oil and gas resources cheaply, the gas pipeline was redirected to transit through the newly created cities in the chott area, whereas it used to go directly from Hassi Messaoud to the ports on the Mediterranean.

The state set up a large petrochemical facility in Roudaireville. The population boom in the region spawned many other activities, especially manufacturing and mining, once the roads and high-speed transportation had been built. The technology of the Tracked Air Cushion Vehicle (TACV—aérotrain), whose development was stupidly stopped in France in the 1970s, was put to excellent use here. Thanks to "development corridors," the processing industry took hold.

Solar rays penetrating water is all it takes to get microscopic algae to grow, and here, they are produced in quantity, in large manmade lakes that also serve as resort areas. You just have to add a few nutrients, such as carbon dioxide, and combined nitrogen derived from gas, oil, and the local phosphates. The algae are used for fish farming as well as, to replace the fodder usually fed to livestock.

Once these production sites were in operation, the phosphate plant that polluted Gabès was shut down and relocated here, where it doesn't pollute any more, but offers many useful minerals. A complete biochemical branch dealing with algae has developed. and the skills required in that field intersect tropical agronomic re-



crazy-frankenstein.com

"Oasis farming" was developed, featuring grainfields and citrus orchards growing under the palm trees. Shown: a Libyan desert oasis.

search. The old port of Gabès now attracts mainly tourists and amateur geologists.

The cooperation between Tunisia and Algeria, in the course of the Blue Revolution, also brought about a revolution in international law. Since water flows ignore manmade borders, a new body of property law was developed, based on water law and on the 1648 Treaty of Westphalia. The latter put an end to the Thirty Years War and replaced the notion of "might makes right" with that of mutual development corresponding to natural law, i.e., the "advantage of the other."

According to Prof. Aly Mazaheri, "water law" comes to us from Persia. The fact that there are aqueducts in Iran, Turkey, Andalusia, or Algeria today, that distribute freshwater fairly to many users, or allow irrigation one day here, and somewhere else tomorrow, is because this principle was adopted, and adequate regulation authorities were set up. In fact, a law evolved historically in the Persian desert region, which disregards the surface area of your land, but is careful to identify where the water in your well is coming from, and how it was discovered.

Besides being nests of spies, most international organizations created at the end of the 20th Century to manage water conflicts in border areas, treated the issue in the same way the right of the sea had been treated: by respecting the right to piracy established by the historic power, the British Empire, with its common law and empiricist approach. In other words, "positive" law,

based on "might makes right," was created.

Now, the principles underlying the new law on the right to water allowed us to end border conflicts by applying the principle of mutual development, something the modern positive law of the West could never allow.

Phase C. The Sahara: Beyond Water, Opening **Up the Continent**

Almost every day, a new town cropped up out of a former oasis, lost in the sands and pebbles. Generally, they were on the mountain slopes, which were more hospitable, while the plains remained desert. Geologists made considerable progress, and their knowledge of the

underground aquifers allowed them to predict where the next new city would be. What at first appeared to be one great uniform mass turned out to offer many different opportunities, each one giving a specific resource to the new talents attracted to this El Dorado.

Beyond the Blue Revolution as such, two major road and rail transportation axes gave access to the remote areas of the Sahara. The first one linked the Algerian-Tunisian area to Lake Chad and Central Africa, the second connected the Morocco-Algerian region to the inland Niger delta and to West Africa. All this activity put an end to the exodus to-

wards the North, and some of the young populations of the Maghreb left the overpopulated coasts of the Mediterranean to settle in these now inviting places.

"Oasis farming" was developed, featuring grainfields and citrus orchards growing under the palm trees. Morning dew could be seen here and there. Hundreds of microclimates were created out of nothing. What was once a desert, inhospitable to any form of life, now feeds not only North Africa but also distant continents. Progressively, bamboo, grasses, and algae are used instead of oil to create plastics, and talso help build living soils. The winds of the Sahara are now rare and calm.

Phase D. Go Continental, from Gabès to Lake Chad

The Sahara was rolled back with the water coming from the northeast, first from Gabès, then from other areas of Algeria, Morocco, and Mauritania. The Liby-

ans, who were then pumping fossil water from the reserve in the desert, have recently decided to reverse the flow of their "great artificial river," and bring freshwater to the south. Some years ago, Libya even launched another great project: the revival of the "second Nile," a river that was dried up for centuries, and the course of which was discovered in 2009. Now, the waters of the second Nile again flow on Libyan ground.

The other radical transformation of the desert arose from the successful cooperation among Egypt, Sudan, and other countries further south, which have been working together to manage the great Nile River itself, for the past decade.

> However, the most crucial link was to the efforts to revitalize Lake Chad, a project also launched early in this century. This lake, which is located south of the desert, is the mainstay of a system of aquifers running under Chad, the eastern part of Niger, one third of the Central African Republic, and parts of Cameroon and Nigeria (Figure 7).

From the standpoint of water, this system of aquifers constitutes a single entity: It is an endorheic basin, i.e., a continental zone where rainfall does not flow out into the

ocean, but is retained. It is only because we won the battle for this entity as a whole, that we were able to conquer the desert. Any local effort, limited to specific circumstances, but with no real future, would have been an illusion, and would have failed. As we already said, the reason that our countries today maintain neighborly relations, based on cooperation, is because we joined hands during the Blue Revolution. A culture of the common good, of a shared destiny, grew out of the fight for water, first created, then shared. That was the end of

tion of Mars is no longer a fearful prospect.

makeshift solutions, and every man for himself. Today, in 2050, mankind is able to settle Mars, and our discoveries contributed to that: Now that life has been brought back to the desert sands, the terraforma-

FIGURE 7

Major endorheic (closed drainage) basins which retain water, allowing no outflow to rivers or oceans.

The French original of this article is posted at http:// www.solidariteetprogres.org/article7125.html.

What Europe Can Learn from Argentina

by Cynthia Rush

May 28—Repeatedly in recent years, as the European crisis has intensified, Argentine President Cristina Fernández de Kirchner has denounced the murderous austerity policies being imposed particularly on Greece and other Southern European nations by the International Monetary Fund (IMF) and its supranational banking allies, warning that those same policies imposed on Argentina in the 1990s led to national economic disintegration and social catastrophe.

Speaking in July 2011, Fernández referenced the austerity being imposed on Greece at that time, noting that "when I see a patient with the same symptoms and the same pathology" that Argentina suffered in the 1990s, "and see that [economists] want to apply the same medicine that killed the [Argentine] patient, it makes me question the so-called rationality of economists." All the "remedies they want to apply ... are based on a restriction of consumption, which affects the most vulnerable sectors, and ultimately the entire economy," Fernández warned.

On April 24 of this year, during a ceremony at the Ministry of Science and Technology, Fernández again denounced the austerity being imposed on Europe, by recalling Albert Einstein's adage that "insanity is doing the same thing over and over again and expecting different results." This is the case with the austerity policies that continue to be discussed by some in the G-20, she said, and especially in Europe, "where they intend to keep applying the same policies of adjustment and want to obtain different results than those seen in all parts of the world," where these same policies have "meant failure and misery, not social inclusion."

As Fernández pointed out on May 18 from Luanda, Angola, the real problem is a collapsing global economy dominated by the idea that money in itself has value. Echoing American economist Lyndon La-Rouche, she asserted that "money by itself only repro-

duces when it goes through the market of production of goods and services; money by itself, sitting inside banks, doesn't reproduce itself. It has to leave the bank and go to industry, agriculture, cattle-raising and all services in order to reproduce itself."

On numerous occasions, she has pointed to Franklin Delano Roosevelt's policies and the New Deal as the way to deal with economic depression.

'Odious' Argentina

As Europe borders on cataclysmic upheaval, Argentina's bold assertion of economic and political independence, and defense of national sovereignty through the pursuit of social justice, and technological and scientific advancement are seen as dangerous threats. The fact that the Fernández government hasn't backed down one bit from its policy commitments, and has also stood up to the Empire's wild colonialist provocations regarding Argentina's claim to sovereignty over the Malvinas Islands—Britain has militarized the South Atlantic region, including with a nuclear submarine—makes it even more of a threat.

As the late President Néstor Kirchner said upon concluding the 2005 debt restructuring which delivered a 60% writedown to vulture fund bondholders, "There is life after the IMF and it's a very good life." The bankers' great fear is that nations such as Greece might see Argentina's model of default, voluntary debt restructuring, and sovereign economic development as an alternative to the IMF and City of London austerity dictates that are killing their citizens—and then take the required additional steps of dumping the euro altogether, reestablishing sovereign national currencies, and separating productive from speculative banking as stepping stones to creating a new credit system.

In fits of apoplexy, the City of London, Wall Street and their allied vulture funds and supranational bank-



UN/Evan Schneider

Argentine President Cristina Fernández has asserted her nation's independence from the collapsing trans-Atlantic financial system, and endorsed the anti-depression policies of Franklin Roosevelt.

ing agencies have unleashed waves of attacks and financial warfare against Argentina to punish it for challenging the axioms of a trans-Atlantic financial system that is disintegrating at breathtaking speed. Argentina is a "pariah," they scream, a failed nation, because it "doesn't play by the rules." These attacks reached fever pitch this March after the Argentine government asserted its right to "hydrocarbon sovereignty," and expropriated the 49% stake that Spanish financial speculator Repsol held in the privatized YPF oil firm.

Bankers try to frighten Europeans into believing that were they to follow Argentina's model, they would in short order suffer from frozen bank accounts—the infamous *corralito*, or little corral—and exchange controls that were enacted in Argentina in early December 2001, as the country was exploding in political and financial chaos. This ignores the reality that disaster ensued, not because of these measures themselves, which were absolutely necessary to stem the hemorrhaging of the banking system, but by the fact they were too little, too late. The Argentine banking system

had already been bled white, by foreign-controlled "Argentine" banks. When the population began to demand their savings and checking accounts back, then-President Fernándo de la Rúa discovered that the money was no longer there. On Dec. 20, 2001, he was forced to resign in the face of massive "pots and pans" demonstrations.

On Sept. 21, 2011 the IMF's then newly elected Managing Director Christine Lagarde, who today demands that Greece be reduced to African levels of poverty, snarled at a reporter who asked whether Argentina might be an appropriate model for Greece to follow, "I find such comparisons are odious. You can't compare the situation of one country with another."

IMF's Embrace Is 'Not Exactly Heaven'

When Néstor Kirchner was sworn in as President on May 25, 2003, having won just 22% of the vote, Argentina was suffering from the worst economic crisis in its history, with 25% unemployment and an unprecedented 57% of the population living in poverty. At that moment, he vowed to put an end to the model of "permanent

adjustment," warning two days before his inauguration, "We can live without the IMF." At his swearing-in, he emphasized that creditors would only be paid if "Argentina is doing well," and policies would be judged by whether they "approximate the goal of concretizing the common good."

Remember, Kirchner said later in 2005, during a visit to Germany, "Being in the IMF's embrace is not exactly like Heaven." By putting people's interests ahead of the banks, he said, Argentina had begun its gradual climb "out of Hell to Purgatory."

As then-First Lady Cristina Fernández recalled, her husband realized that "dead people can't pay their debts." So, internal consumption, he said during his inaugural speech, "will be at the center of our strategy of expansion, and the state will be an active agent in national development."

From the standpoint of the City of London and its allies, it was all downhill from there. Kirchner was the biggest thorn in their sides, not only acting to defend his own nation's sovereignty against financial predators, but also by taking a regional and international leader-

ship role in the battle to create a "new international financial architecture" to prioritize sovereign economic development of nations.

Against 'Genocidalists and Thieves'

In March 2005, Argentina successfully concluded the restructuring of most of the \$88 billion on which it had defaulted in December 2001. As Kirchner explained during a trip to Germany two months later, the crisis that exploded in December 2001 and led to the default, was the product of "a political-economic model at the service of *interests alien to the common good*, which favored the proliferation of the corrupt, genocidalists, and thieves."

Although the bond swap's 60% "haircut" enraged bondholders, particularly the predatory vulture funds that had speculated on Argentine debt prior to default in hopes of making a killing, bondholder participation was 76.07%. In early May of this year, President Fernández recalled that the debt restructuring "allowed us to get that [vulture fund] scum off our backs." We will continue to reject them, she said, "and will never allow them to dig their talons into the Argentine Republic or into our companies ever again."

On Dec. 15, 2005, Kirchner used Argentina's Central Bank reserves to pay off the \$9.8 billion owed to the IMF, explaining that the debt owed to the Fund "has been a constant vehicle for interference."

Young Europeans who are now emigrating to Argentina in large numbers, are attracted by what the nation has achieved as a result of the Kirchners' insistence on economic sovereignty: uninterrupted economic growth, averaging 8% annually over the past eight years, making Argentina the second fastest-growing economy in the world after China; the creation of millions of productive jobs; the increase of wages, and the state retaking control of the privatized pension system; the internal market strengthened and protected. The optimism and pride that Argentines feel about their country's achievements and their own futures are palpable, in stark contrast to the despair felt in Europe.

Yes to Science, No to Green

If there is anything that the British Empire finds "odious" about Argentina, it is the President's commitment to science and technology as the means to ensure her nation's advancement and to inspire current and future generations. The establishment of the wonderful,

and now permanent, Tecnópolis science and technology exhibition, which has attracted millions of Argentines—especially children—to observe the history of the country's scientific achievements, is one reflection of that commitment. The development of nuclear energy, and satellite and rocketry technology, are also top priorities.

President Fernández wants none of the Club of Rome's Malthusian agenda of genocide and depopulation, as made explicit on May 18 by Silvia Révora, Undersecretary of Planning for Environmental Affairs of Argentina's Environment Ministry, who announced that at the upcoming June 20-22 "Rio +20" summit in Rio de Janeiro, Argentina "will say 'No' to the Green Economy." The fundamental issue is defense of national sovereignty, Révora said, and the right of every nation to choose its model of economic development without "the industrialized nations imposing conditions" on nations that are deemed to be insufficiently "green."

Cristina Fernández has stated that the development of science and technology "is a policy of state, never to be abandoned." Speaking April 23 at the Ministry of Science and Technology, in the presence of 30 directors of Germany's Max Planck Institute—this prestigious institution has chosen Argentina as the location for its Ibero-American headquarters for biotechnology operations—Fernández announced that, since 2003, the government has increased the investment in science and technology by 937%, and repatriated over 900 scientists who had been forced into exile in the 1990s, after madman Finance Minister Domingo Cavallo stated that Argentina had no need for them, and that they would be better off seeking jobs as dishwashers.

Fernández is emphatic that science and technology are crucial to the development of the nation and its young people. When Argentina's SAC-D Aquarius satellite was launched in June 2011 from Vandenberg Air Force Base in California, Fernández told the school-children watching the event that "this is the Argentina we must put on display every day for these kids ... to teach them about space activities and to train new scientists." It is so important, she stressed, "that our chldren see the infinite possibilities which these new [technologies] offer."

Toward that end, she told the students that rather than studying law or accounting, "what I want now is for many more engineers, many biologists, and many physicists, because that's where the future lies."

A German 'Economic Miracle' for Europe and the Entire World

by Kasia Kruczkowski

June 1—Germany's experience in postwar reconstruction provides a case study of how a production-oriented credit system, rather than a monetarist system, allow a nation to rapidly rebuild from total destruction. The principles remain applicable to the Mediterranean countries today.

Prosperity in Germany and its robust economy were built up after the Second World War under very difficult conditions. The reconstruction of the German economy, which came to be known as the "economic miracle," is often belittled today by the upholders of the current system as having been unavoidable, given the total destruction of the country and the acute distress at the time. Such arguments avoid actually coming to grips with the economic principles applied at that time, and have prevented the relevant and urgently needed change of course for decades now—in line with the interests of the global players of the system.

After World War II, the situation in Germany was catastrophic: Most of the infrastructure was destroyed; the supply of electricity and heating fuel for industry and the population had largely collapsed; food rations were low; and millions of refugees from the East streamed into the bombed-out cities, where over one-fourth of the housing stock was uninhabitable. The financial situation was no better.

Germany was not considered creditworthy, and so could not issue government bonds on the international financial markets in order to secure liquidity. Imposing an austerity policy—which is stupidly praised today as a cure-all—was impossible, for obvious reasons.

How was Germany, reduced to such a state, supposed to gain the "confidence of the markets"? And even more importantly, how was it supposed to restore the population's confidence in the economic future of the country and of all of Europe?

Nonetheless, by the end of the 1950s, Germany had become a leading economic power and a sought-after partner in export markets. From mass unemployment

in the immediate post-war period, the country had achieved full employment by the 1960s (7 million jobs were created within 7 years!). The foreign debt was even paid back ahead of schedule, while at the same time, both investments and living standards were rising.

It was not only desperate need that drove reconstruction, but the passionate determination of the population, and a targeted, dirigistic reconstruction policy, backed up by the sensible use of the Marshall Plan funds. Between 1948 and 1952, almost \$1.6 billion (nearly DM4 billion) flowed into Germany. This aid was made available to businesses and local communities, mainly in the form of U.S. credit for purchase of goods (food and industrial raw materials).

FDR's Reconstruction Finance Corp.

Germany's reconstruction was influenced by the success of an American model: the Reconstruction Finance Corporation, which had been set up in 1932, and was used by President Franklin D. Roosevelt to get out of the Great Depression; this included forcing "casino" banks to serve the productive economy.

In 1948, the German banker Hermann Josef Abs initiated the creation of an institution modeled on the RFC: the Kreditanstalt für Wiederaufbau (KfW/Reconstruction Credit Corporation).

The equivalent value of the U.S. imports was paid into "counterpart accounts" (in the framework of the European Recovery Program/ERP). The U.S. authorities released funds from these accounts for important projects in application of the Marshall Plan (ECA). The KfW received capital from the ERP counterpart accounts (DM3.7 billion) for pre-financing of reconstruction projects. For that, the KfW would draw up a list of the most urgent investments, with an overview of the products and machines required, and commission the relevant enterprises to produce them. The enterprises had to submit a loan application to the KfW

with the corresponding proposals for operational investments.

But the KfW only became the lender, if private credit institutions considered the loan too risky. That was particularly the case in the coal, gas, water, electricity, and transportation sectors. Those public investments sparked a considerable amount of private investments, which were additionally supported by the government.

In contrast with other European countries that received Marshall Plan funds, all the reconstruction credit given to Germany was paid back into these counterpart accounts, so that their capital was increased, and continued to finance major projects long after the Marshall Plan had expired.

Having the investment credit flow back into the original Fund, so that it can be reinvested in the production process, corresponds to the practice of a middle-sized entrepreneur who reinvests his earnings in his company in order to achieve a higher energy-flux density, with attendant improvements in product quality and employee skills.

In England and Norway, for example, the funds were used to pay off the public debt, or, as we commonly say today, to balance the budget—and thereby worsen the situation. Only in Germany were the counterpart funds entirely and repeatedly invested in reconstruction. The foreign debts were then paid out of the additional tax revenue collected, so that this "investment fund" remained available for further loans.

Asking the Right Questions

Today, such investments can and must be carried out through issuing public credit, and the KfW should again assume its historical role.

A highly indebted budget should be no impediment to taking on a reasonable amount of new debts. What counts is to avoid an endless spiral of indebtedness, such as the bank bailouts have become—especially since 2007. What is needed is initial funding from the state, that encourages private investments and eventually pays for itself thanks to the impact of productive growth.

Instead of eternally posing the question of costs, which leads nowhere, we have to ask the right ques-

tions: What workers with what skills need meaningful jobs, and what productive capacities can be made available? What infrastructure projects are required, and what investments can be made to create the extra capacities?

We will quickly come to the conclusion that such an investment program requires at the same time a massive training program, because, to carry out such projects, we will need many new engineers, technicians, and skilled workers in the construction sector and in industry.

We must of course bear in mind that we are not dealing with over-indebtedness or the destruction of the real economy in one country, but with the collapse of the entire trans-Atlantic financial system. The bankruptcy of the EU and IMF policy, based as it is on a monetarist approach, is the most glaring in the case of Greece. But beyond Europe, the situation in many other countries is similar to, or even worse than, that of post-1945 Germany. The amount of "aid" from the IMF or various relief organizations is not the decisive factor, as is evidenced in the lack of development in Africa and most of Asia.

The policy approach underlying the "economic miracle," which used to be studied and admired abroad—public investments in infrastructure, a dirigist and regulatory credit policy—are incompatible with the degeneration in the European Union of the past 20 years. They are even in violation of a series of provisions in the Maastricht Treaty, the Stability Pact, etc. That is exactly where the problem lies: The endemic liberal dictate of the markets, with all their axioms and treaties, from Maastricht to the European Stability Mechanism, is a hopelessly bankrupt failure, and all such arrangements should be immediately cancelled!

In fact, the "economic miracle" was no miracle, but rather the result of an understanding of economy steeped in humanism, the main objective of which is development of the creative potential of one's population, and the well-being of future generations.

It is high time to revive this forward-looking tradition of Germany and to become an important link in a strong Europe of sovereign nations.

This article was translated from German.