

Infrastructure Is Key For Russian Economy

Lyndon LaRouche's "Memorandum: Prospects for Russian Economic Revival" was presented by representatives of LaRouche and the Schiller Institute to a special hearing of the lower house of the Russian Parliament, the State Duma, on Feb. 20, 1995, convened to discuss measures to prevent the disintegration of Russia's economy. It appeared in EIR March 15, 1995. With the section on infrastructure, excerpted here, LaRouche's concept of "development corridors" began to circulate in Russia.

5.4 Special role of large infrastructural projects

The three most critical bottlenecks in physical economy are cubic meters of usable water per hour, kilowatts of power per hour, and ton-kilometers per hour in general transport of goods, each and all per capita, per household, and per square kilometer of relevant land-area. These bottlenecks have an obvious bearing upon the variability of potential relative population-density. That is to say, technology being otherwise equal, the effective productivity which can be developed in one area, as compared to another of comparable size and general quality, varies with the degree to which those three infrastructural bottlenecks are overcome.

5.41 For this reason, we must speak of "development corridors." A typical development corridor is defined by either a railway line, or a functioning inland waterway, or both, identifiable as the "spine" of that corridor. The development of industry and agriculture, and of railway lines paralleling the river, along the Rhine, is a model of reference for this. The extensive application of the principle of such a "development corridor" dates from the development of Western European inland waterways launched by Charlemagne.

5.42 Typically, today, the width of that corridor may extend to approximately 50 kilometers on either side of that "spine." Associated with that "spinal column," or central right-of-way of the corridor are pipelines, power-transmission lines, and parallel trunk highway segments. Along the length of the spine, there are nodal foci of development; extending like ribs from the spine, are the feeder links into the flanking tissue of the corridor on either side of the spine.

5.43 The choice of a network of modern such "development corridors" involves two crucial factors of Russia's economic development as a whole. First, adequate development of Russia's economy across its vast stretches of relatively low population-density, would not be possible without both large-scale development of Russia's vastly underutilized hydrologi-

cal potential, and the development of an efficient set of trans-Eurasian railway-spined corridors. Second, without the development of the inland waterways and rail nets from Berlin through Poland, into Russia and Ukraine, there can not be an economically efficient commerce between Western Europe and Eurasia generally; without that, the development of Russia's economy would be relatively crippled.

Exemplary is the region of Central Asia associated with the presently spoiled Caspian Sea and the ruined Aral Sea. The water levels of these seas, and the levels of water-tables in adjoining areas must be raised. The use of no more than a significant fraction of the vast amounts of flow presently dumped into the Arctic Ocean would serve to flush both of these seas, and would also feed a broader network of inland (barge) waterways and other economic and household uses.

The crucial, more general problem addressed by Eurasia "land-bridge" and other developmental corridors is that low population-density tends to increase the cost of production significantly. The factors of cost are typified by the increase of the amount of inventory which must be supplied to the transport "pipeline," relative to the level of production-output involved, and by increasing the cost per ton attributable to movement of freight.

There are several ways this problem may be addressed successfully; these solutions are all to be found in principle within the notion of the development corridor:

(a) The development corridor provides the means for establishing designed, high-density complexes of production within the most efficient modes of transport and supplies of water and power (and, also, communications). By this method, the corridor is a means by which an efficient form of high-density area is developed within a larger low population-density area.

(b) The "spine" provides means for gaining the benefits of economy of scale in respect to trunk-line transportation, communications, and production and distribution of power and water supplies.

(c) The development of high-speed magnetic levitation, and the serial/mass production of the new, Jülich type of high-temperature reactors (HTR) in the 100-200 megawatt range, transforms the vast, underdeveloped spaces of Russia into a network of development corridors of rich potential. Virtually no other nation in the world could benefit as much from the advantages of maglev speed as the area of the former Soviet Union. Given the costs of transport of fossil fuels for production of power, and the greatly superior energy-flux densities of the HTR over fossil-fuel plants, the gains in efficiency gained through the general use of power-complexes built up modularly of clusters of HTRs has a great potential inside the kinds of development corridors required for the efficient development of the Russian economy in depth.

The function of corridors defined in these and related terms, is to transform what might appear to be the vast disadvantages of Russia's space, into an advantage.