Blood for Oil – and Other Things The coming struggles over resources

by John Attarian

A ainstream opinion predicts ever-widening affluence and harmony. But those who kept their grip on reality, such as Michael Klare, director of the Five College Program in Peace and World Security Studies at Hampshire College, are less sanguine about mankind's prospects. In this informative and disquieting book, Klare makes a penetrating reading of current events and argues persuasively that resource

wars, especially over oil and water, will become "the most distinctive feature of the global security environment."

With the Cold War over, selfinterest now dominates America's strategic agenda, especially, Klare observes, "the determination to ensure U.S. access to overseas supplies of vital resources." The main force behind this shift is a

redefinition of national power as based on economic dynamism and technological innovation, rather than on military might. Other major powers are shifting likewise. In short, what's happening is an "*economization* [original italics] of international security affairs." Put another way, economism now drives foreign policy.

Resources are important now, Klare argues, because ideological conflicts have disappeared; and because demand for resources is rising, driven by both relentless

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Resource Wars: The New Landscape of Global Conflict by Michael T. Klare (with a new introduction by the author) New York: Henry Holt, Owl Books 304 pages, \$15.00 paperback

population growth (from 2.6 billion persons worldwide in 1950 to 6 billion by 1999) and the spread of resourcegobbling industrialization and affluence; because resources are limited; and because ownership of many crucial resources is shared and increasingly in dispute.

Klare's treatment of oil is especially good. He rightly deems oil the resource most likely to provoke international conflict. For one thing, it is absolutely crucial to modern economies, which use oil in huge quantities.

> Moreover, demand is rising relentlessly. The Department of Energy projects that world use will rise from 77 million barrels a day in 2000 to 94 mbd in 2010 and 110 mbd by 2020. Unfortunately, oil is also "a finite, nonrenewable substance," and by some time in the next two decades, we will have used up half the world's oil endowment, leading to "recurring shortages." The jury is still out about hybrid cars and fuel cells, Klare

warns, and he is rightly unenthused about nonconventional oil sources such as tar sands. This situation is worsened by "the inescapable constraints of geography." Oil deposits are very unevenly distributed over the planet, mostly concentrated in a few areas **n** some of them, such as the Persian Gulf area, highly unstable. This means that oil availability is closely dependent on the economic and political conditions of a few countries; disruption in these countries and interruption of the oil flow would mean global economic hardship. Given all this, he warns, conflict over oil is "almost a foregone conclusion."

Weaving together fossil fuel endowments, projected population growth, projected energy consumption, the history of America's involvement in the Persian Gulf, international relations, arms races, and much else, Klare devotes about a third of his book to detailed examinations of the three major current or potential sources of oil and natural gas, where the risk of conflict is greatest: the Persian Gulf, the Caspian Sea region, and the South China Sea. He makes a strong case that the Persian Gulf is the oil area most likely to see conflict, because it contains 65 percent of global oil reserves; world dependence on the Gulf oil will therefore inexorably rise; market forces may worsen matters by pushing oil prices painfully high and creating hardship and political crisis in oil-consuming countries; and our deepening involvement in the Gulf is bitterly resented by Muslims. The Iraq War, in which oil obviously figured, has already vindicated Klare.

The Caspian Sea area is widely believed to have great potential as a source of oil and natural gas; Klare cites estimates of possible oil reserves of 200-270 billion barrels. Unfortunately, since Klare finished the first edition in October 2000, estimates of the Caspian's possible reserves have been reduced repeatedly, as the April 2001, August 2001, June 2002 issues of Colin Campbell's ASPO Newsletter reported. Ten years of exploration have found 20 billion barrels; as one of Campbell's contributors observed, this means that finding 200 billion barrels would take a century. One wishes Klare had updated his data for the 2002 edition. His discussion of the problems of transporting oil and gas from the landlocked Caspian by pipeline through politically turbulent territory is intelligent, but if the Caspian does not become, in his words "the new oil El Dorado," the likelihood of conflict will diminish accordingly.

Meanwhile, rapid economic growth is driving up Asia's demand for energy. The DOE forecasts that China's energy consumption will rise from 27 quadrillion BTUs in 1990, to 68.1 in 2010 and 97.3 in 2020. This means a soaring need for fossil fuels, which this region lacks in the required quantities. Most of these nations depend on imported fuels; Japan has virtually no oil. Therefore Asia's industrializing nations are claiming the waters of the South China Sea, in order to gain access to the oil and natural gas believed to exist underwater, and are carving the Sea up into exclusive economic zones (EEZs). Many of these EEZs overlap, however, meaning that in many places two or more states are claiming the same area. China, which has abundant, highly polluting coal but little oil and gas, has been especially belligerent. The countries facing the South China Sea are in a naval arms race, Klare reports, and some small clashes have

already occurred. Also, America is increasing naval deployments to the area, so as to keep sea lanes open for shipment of oil to Japan. Here again, Klare plausibly sees "all of the ingredients for a major military confrontation." However, this depends ultimately on whether substantial oil and gas deposits indeed exist under the South China Sea. Klare admits that this "is still a matter of some conjecture," and that "because so little drilling has been conducted," experts can't yet make "reliable assessments." Time will tell.

However, humanity does unquestionably face terrible trouble regarding water, as rapidly rising demand presses against a limited supply. Despite historical errors (claiming, for example, that General Gordon's death at Khartoum and the Anglo-French confrontation at Fashoda were over water), Klare's treatment of water is well informed and convincing. The Earth's human population is estimated to reach 8 billion by 2020. Trouble is, less than one percent of the Earth's fresh water, or about 0.01 percent of all water on the planet, is available for human use. While the world population doubled between 1950 and 1990, human water use rose some 300 percent. If this continues, Klare warns, we will soon be using all of the available water. The World Bank calculates that the minimum per capita human water need, taking into account agricultural and industrial uses, is 1,000 cubic meters a year. Many Middle Eastern and African nations had available water below that minimum already in 1990; population growth will push many more below that level by 2025. Like oil, water is very unevenly distributed

Klare ably surveys the most urgent instances of international conflict over water: along the Nile, the Jordan, the Tigris and Euphrates, and the Indus. Although details of these situations vary, they manifest a common pattern: a river running through two or more nations which share it as a water source; rapid population growth in these riparian nations, with more growth projected for the future; the upstream nations seeking to divert the headwaters to meet their own rapidly rising needs; the downstream nations alarmed at this and exerting pressure to ensure the water flow they need. For example, Egypt's population is projected by the World Resources Institute to grow from 65.7 million in 1998 to 115.5 million by 2050; and so far, Egypt has succeed in appropriating the lion's share of Nile water for its own use. But the countries upstream, which also have exploding populations (Ethiopia's population is projected to rise in the same period from 62.1 million to 212.7 million), have ambitious water-use plans of their own, to which Egypt has responded with threats. Conflict over the Jordan's water was a major element of Arab-Israeli conflict in the 1960s and remains important today, with Israeli settlers on the West Bank getting most of the water. Turkey's pursuit of a massive irrigation and reservoir system threatens Syria and Iraq, both of which depend heavily on the Tigris and Euphrates for their water.

Oil and water are not the only resources in dispute. Clashes are also occurring, Klare reports, over minerals in Africa, copper on the island of Bougainville in the Solomons, and old-growth timber on Borneo. Resource extraction on Bougainville and Borneo is ruining the environment and the natives' way of life. Their requests for a halt to timber cutting spurned, the natives of Borneo are resisting by force, and enduring brutal repression. Klare argues that Africa, especially sub-Saharan Africa, is where resource conflict will most likely be bloody and protracted, because Africa has "vast reserves of untapped resources," especially oil, minerals, gems, and timber. American foreign and defense policy, he points out, has reversed its long neglect of Africa. Other major countries such as China are also deepening their involvement in Africa.

Resource wars will be costly, Klare warns. Some \$75 billion, a quarter of America's defense budget, goes for the Persian Gulf. Usefully, he points out that resource wars cost resources. The coalition in Operation Desert Storm burned up 19 million gallons of oil a day **n** a daily consumption about as large as Argentina's. International cooperation may prove more effective than conflict for securing resources, he argues, and recommends implementing cooperation with "robust international institutions" which could allocate resources "equitably" in times of need and promote research for better resource extraction and use. A model for such institutions exists in the International Energy Agency. To avert costly resource conflicts and "ensure an adequate supply of essential materials, we must work now to establish a global system of resource conservation and collaboration."

While Klare's command of the strategic studies literature is excellent, he is weak on ecology, resource depletion, ecological economics, and so on. For example, and very oddly, he never cites Walter Youngquist's magnificent *GeoDestinies*, although a more germane book for his purpose is hard to imagine. And he has barely scratched the surface of the oil depletion literature.

This deficiency impairs Klare's thinking. His solution is hopelessly inadequate, because it does nothing about the exploding demand for resources. If conflict flows from growing demand driven by population growth and rising per-capita consumption colliding with finite supply, it inexorably follows that the problem cannot be solved, and conflict averted, without resolutely tackling demand. Reshuffling resources among nations is not enough. In the language of ecological economics, Klare addresses only the allocation problem and does not confront the crucial problems of optimal scale and minimizing matterenergy throughput. He would have done well to read Herman Daly.

Reading Garrett Hardin, whom he also overlooked, would have helped, too. Klare persistently refers to resource "shortages," and although his book bristles with downright frightening projections of population growth, he never draws the obvious conclusion that the real problem is what Hardin calls "longage" of demand, which necessarily takes us to population control.

Nevertheless, Klare's merits outweigh his shortcomings. *Resource Wars* is a persuasive and timely refutation of the cornucopians. Klare's basic thesis is unarguably right. He not only confirms my own arguments that economism generates conflict rather than harmony, and that its triumphalism will be demolished by resource limits, he powerfully supports Hardin, Daly, William Catton (*Overshoot*) and Malthus. A wellstocked magazine of intellectual ammunition for realists, *Resource Wars* is must reading.