Resource Scarcity and National Security in the Middle East

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Observers and analysts alike generally agree that the Middle East is among the most volatile areas of the world. The region harbors a wide range of conflicts and hosts a multiplicity of conflict systems, distinctive for their duration as well as for their intensity. Then, too, the region is composed of a set of countries that are very diverse in size, scale, and socioeconomic development. This diversity in itself can, at times, provide added sources of volatility. Most compelling, of course, is the fact that the region is also blessed with the largest known reserves of crude oil. This geological blessing has become a source of stress on numerous occasions.

Together, these three factors — a multiplicity of conflict, extensive diversity, and large oil reserves — provide much of what makes the region so volatile. At the core of the resulting volatility are the dual problems of resource scarcity and threats to national security.

The purpose of this paper is to (1) examine the dimensions of resource scarcity in the region and the dimensions of national security threats, (2) compare forms of resource scarcities, and (3) identify some directives for reducing prospects of violence associated with access to natural resources.

While the demise of the Cold War and the shift in superpower relations all but invalidate many conventional concerns regarding the role of the Middle East in global strategic contexts, the fact remains that the region is still

important to the United States and the national interest. Indeed, many of the commitments made by the present as well as by previous administrations have expanded U.S. involvement in the fate of the region. The shifting geopolitical picture has not substantially affected the overall U.S. posture. So, too, there remains the danger that local difficulties, among the contending forces in the region, would escalate into international ones, further impeding prospects for peaceful resolution of the wide range of persisting conflicts.

It is not difficult to come up with an accounting of conflicts in the Middle East. The usual list includes disputes among Arabs and Israelis, Palestinians and Israelis, and Sunni and Shiis, Iranians against Iraqis, the invasion of Kuwait, the war against Iraq, and on and on. But it is more difficult to rank the conflicts in terms of degree of danger to the regional and the global welfare and, more importantly, in terms of the implications of the lack of resolution for all the parties involved.

With respect to diversity, it is obvious that the differences among the countries of the Middle East are near legendary. Almost every conceivable combination of characteristics is evident in the area. There are large countries and small ones. There are rich ones and poor ones. Some are agricultural; others are industrialized. Some are affluent; others are poor. Some have considerable abundance of natural resources; others do not. Some are highly urbanized; others are not. Some have a high degree of ethnic homogeneity; others are very diverse. And the list goes on.

The profile of the region with respect to oil and energy resources is relatively noncontroversial. There are a set of known "facts" whose interpretation is generally agreed upon. The oil-rich countries are well-known. Those with promising possibilities are also well-known. And those whose geological prospects are bleak are clearly identifiable as well.

Less certain, and clearly more controversial, are the implications of the region's water resources. Not only are there great uncertainties about who needs what and how much, but the contentions are also mounting regarding who should have access to what and how much. More to the point is the emerging complexity associated with water resources: access to fresh water that traverses the territory of neighbors, access to aquifers and availability of desalinization technology are among the most pressing issues affecting the security of countries whose survival depends on access to scarce water.

Together, these issues call for a closer accounting of the dimensions of resource scarcity and its implications for national security.

RESOURCE SCARCITY AND NATIONAL SECURITY

The most useful definition of resources is one that is broad: a resource is that which has value — to societies, to economies, and to people. Generally, resources are regarded as synonymous with raw materials. Although this is a conventional usage, it is relatively narrow and obscures the ways in which the lack of "that which has value" could generate profound insecurity — both of sentiments and indeed of fact. Such sentiments may be grounded in reality. Even if they are simply a product of perceptions and cognitions, they can have dangerous consequences. Whether such sentiments are grounded in reality or not, their implications for assessments of national security could be profound indeed.

This chapter considers resources to mean: energy, water, and skills (human resources). There is a degree of arbitrariness in this selection, but it is made largely on pragmatic grounds, dictated by those "scarcities" that have implications for the security of nations in the Middle East. Food, agricultural products, and inputs into industrial processes are all resources by the definition as things that have value, to be sure, but for convenience only, this chapter focuses on oil, water, and skilled people.

By the same token, this chapter considers national security in multidimensional terms. Security, in this chapter, is viewed as a function of three crucial conditions: security at the border (military security), security of governance (regime security), and security of natural environments (ecological security). A state is "truly" secure to the extent that it is able to protect all three dimensions of security. In essence, these conditions constitute the broad parameters of national security.

This threefold perspective on security is useful, because it enables us to define rather precisely the sources of insecurity, that is, the specific bases upon which a nation may consider itself threatened. Threats may come from outside, from above, or from below — or whatever alternative idiom one might prefer to adopt. Not all sources of threats to security are identical in their implications, nor are the consequences for domestic and international politics the same. Further, the costs of managing or responding to security threats could differ substantially, depending on the sources of the threat and on their potential consequences. For these reasons, this multidimensional view of security yields bonus information beyond the basic military dimension.

A full accounting of salient resource scarcities for the countries of the Middle East and their implications for national security is beyond the scope of this chapter. Nonetheless, an initial assessment can be made by drawing upon a procedure designed to facilitate delineation of saliencies and of scarcities. In essence, I propose an approach for evaluating the politics of resource scarcities and their impacts on the security of nations.

PROFILE OF STATES AND RESOURCE SCARCITIES

In previous studies, I have suggested the notion of a state "profile" as a useful device for summarizing a set of characteristics that shape and influence the behavior of a nation. These characteristics pertain to population (including all indicators of needs and wants of people), technology (applications of knowledge and skills to generate products and processes, both organizational and mechanical), and resources ("that which has value" as crucial inputs into production processes and as essential elements for the survival of people, such as water, air, and space).

This profile perspective then enables us to compare countries in terms of abundance or scarcity along each of these factors, termed "master variables." Together, interactions among population, resources, and technology define the parameters of permissible behavior — what countries can or cannot do with what they have. None of these variables is fixed. People are born and they die; some stay where they are and others move to other places. Resources can be discovered or used or depleted, or, more generally, a combination of all three possibilities. Technology can be invented, it can be imported, or it can be borrowed (or transferred).

More to the point is the fact that this singular designation of variables masks a complex of interconnected factors. People, for example, are at once counted as population, as human resources, and as embodied technology. Therefore, the power of the profile designations is mainly as indications of relative attributes of nations, not as hard-and-fast rules of differentiation.

It should be obvious that the profile notion is closely connected to various indicators of national power and national capability. To the extent that a country ranks high on all three master variables then it will be more powerful and more capable than a country that ranks low on all three counts. How does one rank? How do we aggregate people, resources, and technology — proverbial apples and oranges — to achieve a designation appropriate for

comparison? And how, on that basis, can we then ascertain the relative scarcities along each of these dimensions?

RESOURCE SCARCITY IN THE MIDDLE EAST

With respect to the conventional definition of resources, it is clear that the oil-rich countries of the Middle East are remarkably well endowed. Together, they account for over 80 percent of the world's oil reserves. For these countries, the key scarcity is of skills and of population. As the invasion of Kuwait has shown, wealth and assured access to oil can, itself, create its own problems and generate its own insecurities. That message has not been lost on other oil-rich states of the Persian Gulf, which have long appreciated the vulnerabilities of wealth.

The vulnerabilities of wealth have been legion: a few people, with relatively limited skills, controlling vast resources — and with no appreciable means to defend themselves — require a solid insurance policy. That policy has been a de facto alliance with the West. And it is precisely that policy that could threaten the long-term viability of regimes that depend on external support for their survival.

The countries of the region that are less endowed with oil resources, such as Egypt, confront a different set of vulnerabilities and threats to their security. Their dependence on foreign capital for continued exploration and development of reserves places them in a near-hostage position. This dependence, coupled with the realization that, under the best of circumstances, Egyptian reserves are likely to be limited in scope, places the scarcity of resources high up on the list of national concerns.

For countries that are known to be rich in energy resources, such as the Sudan, the threats to security are of a different sort. In the Sudan, the direct challenges to the central government (civil war, famine, drought, etc.) have combined to suspend operations toward the development of oil and related resources. If there are resource scarcities in the Sudan, then they are entirely human-made.

Other countries of the region with limited petroleum resources — Syria and Jordan, for example — are vulnerable on two fronts: first, they need assured access to energy resources; second, they need to find ways of meeting payments for energy imports. Although these vulnerabilities are not conventionally thought of as national security concerns, nonetheless, prospects for interruptions of supplies are not negligible.

In this connection, the transport network for crude oil must in itself be regarded as a form of resource. It meets the definition of "that which has value," and potentials for interruptions of networks constitute a source of insecurity. Oil is transported from the source to the West and to Japan by three primary routes: to the Mediterranean ports and outlets via Turkey, to the Red Sea via the Saudi port of Yanbu' and to Persian Gulf outlets which have included Basra in Iraq.

While world attention has tended to focus on interruptions of supply at the wells, the security of the networks has received relatively little attention. For the countries that tax oil transit, the security of the pipelines is as significant as is the security of the fields to the oil producers. In those terms, the security of the transport network can be defined as a resource. To the extent that pipelines are at risk, then the national security of the host states is affected.

The accounting of resource scarcity with respect to water is considerably more stark. By all accounts, Egypt and Turkey are the only countries with sufficient water supplies within their own borders. Even then, this assessment is shaky at best. And the way in which water has been secured is, in itself, a source of new insecurity. All other countries of the region depend on sources of fresh water that are shared by other countries or on aquifers that are jointly positioned.

The relative security of Egypt's water resources is itself a questionable subject of great controversy. Egyptians see their survival as being dependent upon continued access to the Nile waters. Indeed, the Nile flows through numerous countries before finally reaching Egypt. Relations with the Sudan have therefore been of major importance. Then, too, the major technological solution to water scarcity — the Aswan Dam — has created a host of resource-related problems, some of a serious nature. Further, the government's own pricing policy has done little to alleviate concern or to introduce rational patterns of water use. In sum, the entire package amounts to a vast morass of insecurities.

For Turkey, the other country considered as having relatively secure water resources, that security in itself could very well be an illusion. Turkey controls the source waters of the Tigris and the Euphrates rivers, which are the major sources of water for Iraq. In essence, Turkey holds Iraq hostage. In fact, however, the situation is probably best described as one of mutual hostages. Iraq has expressed concern over Turkey's planned irrigation project and has formally charged the Turkish government with planning to divert too much water. Turkey has responded to this and related overtures by proposing a \$20 billion pipeline to transport water to other, more arid countries. Up to this writing that issue remains unsolved.

Water resources constitute major sources of stress between Israel and Jordan — over and above the normal strains, which are legion. Then, too, the large aquifers in the occupied West Bank, which provide water for both the Palestinians and the Israelis, have emerged as a major source of conflict. The Israelis have been charged by the residents of the West Bank of extensive and illegal drawing from the aquifers. There is no legal recourse for these changes, and superior Israeli technology decides the issue.

In the Persian Gulf region, scarcities of water resources are closely connected with reliance on foreign technology. The entire west coast of Saudi Arabia is dotted with desalinization plants — from Haj in the north to Shuqaiq in the south. That coast is relatively secure, in that threats from the Sudan or from Egypt are of low probability. It is the plants in the east that are at risk. These were seriously threatened during the recent military action in the gulf. And there is no reason to believe that the end of the war means the end of insecurity.

The bulk of Kuwait's desalinization capability has been damaged by the Iraqi invasion and the war, and oil slicks and spills have also affected intakes of the Saudi Arabian plants. To date the damage has been relatively limited, but the vulnerability of water resources has been underscored by the ease with which they can be damaged and the difficulty of mounting a viable defense against "water terrorism."

In this connection, the exchange of oil for fresh water — through imports of technology, enabling desalinization — has created new forms of threats to the security of these nations. The condition of dependance was always there. What is new is the extent of the vulnerability and the prospects of environmental degradation affecting the quality of drinking water.

The third type of resource considered in this chapter pertains to knowledge and skills — namely, human resources. In this respect as well, the countries of the Middle East vary extensively. Some are highly skilled (Israel); others have a preponderance of low skills (Yemen). Some have a solid educational infrastructure; others have the most rudimentary of educational systems.

Because level of education is a key element in a nation's technological capability, the number of skilled people is an important factor in national power. Therefore, when related to immigration and immigration policy, the distribution of skills (of both immigrants and host communities) could have implications for national security. In the case of Israel, for example, the fact that Soviet immigrants are highly skilled can be regarded by the Palestinian population as an added source of stress. Stated differently, when viewed in

terms of embodied technology, the distribution of human resources in a society can bear upon its national security.

If Israel is one case in point, then Kuwait must surely be another. There, it is citizens that are the scarce element and when the majority of the population is noncitizen, then the number of nationals in itself becomes a matter of national security, as is the extent of their embodied technology. It is in this connection that the Palestinian population residing in Kuwait has been and continues to be regarded by the Kuwaiti citizens as a threat to their own national security.

The viability of natural environments is, in itself, a crucial resource. In the Middle East, environmental degradation has seldom been considered a priority for public policy. The Gulf War has had the crucial effect of rendering environmental matters highly visible. The conjunction of environmental degradation due to "normal" development, the degradation due to preparations for war, and the environmental dislocations engendered by the war itself have all interacted to produce one of the most severe instances of environmental deterioration ever witnessed in the region.

In the context of this chapter, environmental matters might appear peripheral. However, they will surely interject new uncertainties in the region and provide new parameters for political contention. The cleanup operations in the gulf are still at an early stage, and it is entirely unclear how long it would take to restore the region's natural environment to its prewar balances. In addition, the health hazards of environmental degradation due to the war have not yet been addressed. Neither the effects on Iraq nor those on Kuwait are yet fully understood. The issues have not, as yet, assumed the degree of salience required to marshal national or international attention.

MANAGING RESOURCE SCARCITIES

There is almost no reasonable scenario under which one could postulate peaceful resolution of resource scarcities in the region. The dynamics of population growth (natural increase plus immigration), coupled with economic growth and technological advancement, create a process of continued demand for resources and continued concern for access to those valued assets for which a country may be in deficit. By approaching resource scarcity in terms of valued assets rather than particular minerals or fuels, the broader connections to national security become more apparent.

However trite it might be, the fact remains that the management of resource scarcities in the region is intimately connected to prospects for peace there. In this context we must view mutual credibility and mutual confidence as a resource; it is surely one of the most scare assets in the area. Strategies for confidence building might go a long way in enabling effective bargaining and negotiation over access to resources. Fears of supply interruption that are so compelling in the context of oil and energy resources are no less salient with respect to other resources — water, human capital, and advanced technology.

None of the governments of the region regards the resources of the area in regional terms. The notion of security is regarded in strictly national terms, which impedes the development of conceptions of regional security. Without such conceptions, management of resource scarcities will continue to be obstructed. Prospects for peaceful resolution of the major conflicts in the region have never been as good as they are at this writing. The possibility of convening a peace conference between Arabs and Israelis, coupled with the international community's continued stance against Iraq, creates the beginning of peace-setting processes. In this context, it is entirely reasonable to consider resource management as one of the implicit, if not explicit, elements of a peacemaking agenda. To the extent that the United States, the other industrial powers, the U.N. system, and the countries of the region begin to appreciate the possibilities of pursuing viable strategies for resource management in the area, the most deleterious effects of resource imbalances — of all sorts and along all resource dimensions — could be reduced.

One important by-product of the Gulf War may well be the impetus for the development of an international code of environmental conduct during war. Though the damage may still be viewed as local in nature — or localized in its effects — the fact remains that the environmental consequences of the united action against Iraq were far greater than initially expected. The fact also remains that environment has not been considered as a serious element in design of the strategy for war. The consequences of the war have been extensive, the costs of cleanup are uncertain, and the duration of the efforts remains unclear. All of this is surely interjecting yet another element in the international community's calculations for peace in the Middle East.