



# Congressional Testimony

## **YEMEN ON THE BRINK: IMPLICATIONS FOR U.S. POLICY**

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## INTRODUCTION

Chairman Berman, Ranking Member Ros-Lehtinen, and distinguished members of the committee, thank you for inviting me here today. Yemen is beset by a host of challenges that endanger both its domestic stability and regional security. The United States and the international community must act now, before conditions deteriorate further, to help Yemen meet these challenges. While Yemen has survived crises in the past, they have tended to be singular events, while the many problems it now faces are unprecedented in range and scope.

The problems include international terrorism, violent extremism, religious and tribal conflict, separatism, and transnational smuggling. Attempts to build effective national governance are frustrated by porous borders, a heavily armed population, and a historical absence of much central government control. Yemen is strategically located between Saudi Arabia and Somalia—part of two different yet interconnected regions, the Arabian Peninsula and the Horn of Africa. This fact often frustrates policy analyses; Yemen is excluded from the wealthy Gulf Cooperation Council, but is in many ways more resilient than its East African neighbors. More than 3 million barrels of oil pass the country's coast every day, through treacherous waters where Islamist terrorists and Somali pirates have staged several successful maritime attacks, threatening to disrupt international commerce and the flow of vital hydrocarbons.

Interrelated economic, demographic, and domestic security challenges are converging to threaten the stability of Yemen. At the heart of the country's problems is a looming economic crisis. Yemen's oil reserves are fast running out, with few viable options for a sustainable post-oil economy. Moreover, the country's limited water resources are being consumed much faster than they are being replenished. A rapidly expanding and increasingly poorer population places unbearable pressure on the government's ability to provide basic services. Domestic security is endangered by Islamist terrorism, magnified by a resurgent al-Qaeda organization, an armed insurrection in the North, and an increasingly active secessionist movement in the South.

These challenges are compounded by corruption and an absence of central government control in much of the country, as well as by the pending transition in political leadership. President Ali Abdullah Saleh has ruled the Republic of Yemen since the unification of the Yemen Arab Republic in the North and the People's Democratic Republic of Yemen in the South in 1990. The next presidential election is scheduled for 2013. It is unclear whether Saleh will be eligible to stand for reelection for what would be a third term, and he has no obvious successor. The post-Saleh government will be severely strained by a combination of reduced revenue and diminished state capacity.

Yemen is the poorest country in the Arab world, and its population growth rate, which exceeds 3 percent per year, is among the world's highest. The government has been unable to provide adequate educational or other public services for the rapidly expanding population, more than two-thirds of which is under the age of 24, and illiteracy stands at over 50 percent. The faltering economy and poorly prepared workforce have pushed unemployment to 35 percent, on par with the Great Depression in the United States. The country's dire economic circumstances will soon limit the government's ability to delivery

the funds needed to hold the country together. The population is expected to double to 40 million over the next two decades, by which time Yemen will no longer be an oil producer, and its water resources will be severely diminished.

Yemen is frequently discussed by observers as a failing state, and with good reason. Owing to the central government's weak control, the country has often been on the brink of chaos, yet it has always managed to muddle through. One of its crises was precipitated by the Saleh regime's failure to support United Nations Security Council resolutions calling for the use of force to evict Iraqi troops from Kuwait in 1990. U.S., Western, and Gulf Arab aid was cut dramatically in retaliation, and nearly 1 million Yemeni workers were expelled from Saudi Arabia. The unification of North and South Yemen earlier in 1990 and the 1994 civil war in which the South attempted to secede have also presented major challenges for the central government. However, unlike these individual challenges, the problems facing the country today are multiple and interconnected, each one posing serious threats to the future of Yemen, and together potentially overwhelming the state's limited capacity.

Any single event—or more likely a confluence of worst-case events beyond the ability of the Yemeni government to control—could lead to a further erosion of central government authority in Yemen and destabilization of the region. A major humanitarian crisis, triggered perhaps by severe famine or crop failure, could, for instance, result in a large refugee emergency in which the government would be unable to provide even rudimentary relief services. A balance-of-payment crisis in which the regime could no longer afford to placate the urban areas that receive government services would be disastrous. An inability of a post-Saleh president to balance Yemen's competing interests and stakeholders could create a power vacuum, with separate regions possibly growing more autonomous and independent from the central government in Sanaa.

Still, Yemen boasts a relatively resilient society that has already endured much, with little assistance from Sanaa. In some regards, in fact, low expectations for the Yemeni government to deal with future crises may help lessen their potential impact. Because rural *muhafazat*, or governorates, the administrative divisions in Yemen, do not currently rely on Sanaa for goods and services, what happens at the national level in the future may make little difference to much of the population.

If, however, the central government's authority and legitimacy continue to deteriorate, Yemen may slowly devolve into semiautonomous regions and cities. This trajectory has occurred in other countries, such as Somalia and Afghanistan, with disastrous consequences. Such a slow, emerging state of semi-lawlessness in Yemen would provide opportunities for extremists directed or inspired by al-Qaeda to regroup, organize, train, and launch operations against U.S. and allied targets throughout the Gulf region.

No perfect solutions exist for Yemen's problems today, and none of its many pressing challenges can be fully averted. Steps, however, can be taken to lessen their impact. The United States has a stake in helping Yemen deal with its problems; given the country's strategic importance to American national security interests and foreign policy objectives, the cost of inaction would be too great. Furthermore, failure to act now would lead to fewer and even worse options in the future.

## INTERLOCKING CHALLENGES

Yemen's future lies at the intersection of three major interconnected challenges: economic, demographic, and domestic security. This testimony will focus in particular on the economic and human security challenges currently facing Yemen.

### **Economic Challenges**

Vital natural resource depletion, the effects of the global economic downturn, corruption, unemployment, and inflation pose the most significant long-term economic threat to the country. Yemen is the poorest country in the Arab world, and it is getting poorer because of government policies, complicated by rising prices and an inability to absorb a growing population into the domestic labor market.

#### *Resource Depletion: Oil*

Oil exports, which generate more than 75 percent of government revenue, are absolutely critical for the Yemeni economy. The government relies on the hard currency provided by oil sales to fund state expenditures. More importantly, in the absence of mature and enduring state governance institutions, oil revenue helps to maintain extensive patronage networks that balance competing interests among various tribes and other stakeholders.

Rapidly decreasing oil reserves, however, coupled with a dramatic fall in global oil prices have had a severe impact on the Yemeni economy. Production is decreasing in both areas where Yemen's oil reserves are concentrated—the Marib basin in the middle of the country and the Masila basin in the east—as the fields approach the end of their useful cycles. Yemen's oil reserves are divided into 97 onshore and offshore exploration and production blocks, of which only twelve produce oil. The most significant of these are Marib (block 18), Masila (block 14), East Shabwa (block 10), Jannah (block 5), and West Iyad (block 4). British Petroleum has assessed Yemen's proved reserves at 2.8 billion barrels (the Yemeni government maintains that this figure grossly underestimates the reserves, but Sanaa's claims remain unsubstantiated).

Oil exports in Yemen have declined sharply in recent years, from more than 450,000 barrels per day at the peak in 2003 to roughly 280,000 barrels per day in January 2009, according to Amir Salem al-Aidroos, the minister of oil and minerals. Barring any major new discoveries, energy experts generously estimate that Yemen's oil exports will cease in ten years. The World Bank posits that by 2017 the government of Yemen will earn no income from oil. Other assessments suggest that the proved oil reserves will be exhausted in just five years. The true extent of oil production decrease has been masked by recent high prices, which allowed Yemen to earn more money despite selling less crude oil. Since global prices have fallen from their summer 2008 record high, the country has been hit doubly hard—both in revenue per unit and total units sold. While falling reserves account for much of the drop in production, poor maintenance and limited capacity in Yemen's oil sector have exacerbated the problem.

As a result of decreased oil export earnings, the Yemeni government has sharply curtailed income expectations. During July 2008, crude oil was at a record high price of \$147 per

barrel; during the first quarter of 2009, according to the Central Bank of Yemen, it averaged just \$43 per barrel. For much of the latter half of 2009, prices were in the high \$60s.

Further complicating the national budget, which is dependent on oil revenue, is that most of the budget, including government subsidies, salaries, and pensions, has traditionally been politically off-limits. In recognition of the severe budgetary shortfalls, at the beginning of 2009 the Finance Ministry reportedly ordered budget cuts of 50 percent throughout the entire bureaucracy; according to the *Economist Intelligence Unit*, however, cuts of only 4 percent have been implemented. Furthermore, these reductions have not been applied universally across the entire government; the Defense and Interior ministries, among others, will not be affected. In actuality, the financial straits are much more severe than had been predicted. Data released by the Central Bank of Yemen indicate that revenue from oil exports hit a record low in the first quarter of 2009, down 75 percent from the same period in 2008.

Clearly, Yemen's oil resources are running out, and finding new sources of oil reserves is not a feasible solution. Attempts to cut the budget, meanwhile, have not succeeded. It is imperative that the country prepare for a post-oil economy.

#### *Resource Depletion: Water*

While Yemen's dwindling oil reserves are a major concern, ultimately more worrisome is the rapidly depleting water supply. Shortages are acute throughout the country, and Sanaa, whose population is growing at 7 percent a year as a result of increased urbanization, may become the first capital city in the world to run out of water. This crisis is the result of several factors, including rising domestic consumption, poor water management, corruption, absence of resource governance, and wasteful irrigation techniques. Until five years ago, there was no Water and Environment Ministry, and today legal oversight remains limited. According to a 2009 UN Food and Agriculture Organization report, Yemen is among the world's most water-scarce nations, with one of the lowest rates of per capita fresh water availability. Because of an absence of any serious or enforceable legal oversight, water is being extracted from underground aquifers faster than it is being replaced. The water basin in Taiz, one of the largest cities, collapsed in 1998. Water extraction rates in Sanaa are now estimated at four times that of replenishment, and the basin there and in Amran are close to collapse, with the Saada basin estimated to follow shortly thereafter. According to one recent analysis, nineteen of the country's 21 aquifers are not being replenished.<sup>i</sup> In some cases, nonrenewable fossil water is now being extracted.

In recent years, the water table in Yemen has fallen about 2 meters, or 6.6 feet, per year, forcing wells to be dug deeper. This affects the quality of the water—the British think tank Chatham House noted in a sobering analysis that it is deteriorating because of increased concentration of minerals.<sup>ii</sup> The falling water table also often necessitates the use of oil drilling rigs. While a legal regime now exists to assure the fair and equitable usage of surface water, there is no such legal regime for groundwater. As a result, anyone who wants water (and can afford to do so) digs a well and draws out as much water as possible. Abdul Rahman al-Iryani, the minister of water and environment, has estimated that 99 percent of all water extraction is unlicensed.

The importation of drill rigs is not subject to any customs duty, licensing process, or taxation. As of January 2009, Water and Environment Ministry officials estimate that more than 800 private drill rigs are operating in the country. In contrast, there are only three in all of Jordan, and India—whose population is more than 50 times that of Yemen—has just 100.

In an attempt to address the country's water crisis, the central government has sought to decentralize water and sanitation services, in essence making the governorates responsible for themselves. This effort fits within a larger government strategy of devolving control to local governorates to circumvent the fact that much of the territory of Yemen lies outside of central government control. According to al-Iryani, the water and environment minister, fifteen local water corporations have been created to manage local resources. Most of the country's major cities have been covered through this project, including Ibb, Taiz, Hodeida, Aden, Mukalla, Amran, Dhamar, and Sanaa city (administratively, the capital is differentiated from the surrounding governorate, also known as Sanaa). This is important because most of the central government's support comes from these urban areas. According to many observers, the Saleh regime prioritizes the delivery of services to urban areas at the expense of rural governorates. The failure to establish local water corporations in several governorates that historically have not received much support or social services from the central government, and where control is exercised largely by tribal authorities, has raised fear that a resurgent al-Qaeda may seek refuge. Local water corporations have not yet been created in Marib, Jouf, Shabwa, Sanaa, Mahra, and Mahwit governorates. The Water and Environment Ministry has also said that it is in the process of establishing a local water corporation in the northern Saada governorate, ostensibly as a means to advance security and stability amid an ongoing civil conflict. The central government has done little reconstruction work or social service provision there, however, and it is unclear how a local water corporation can be created while the military wages a fierce and often indiscriminate campaign against an increasingly resilient guerrilla movement.

In one bright spot on the water front, an underground water basin was discovered near Mukhalla in mid-2009, and estimates suggest that it could supply the region with water for many years. Yemeni officials note that the water was found at depths in excess of 200 meters, or 656 feet, demonstrating the increasingly difficult task of finding freshwater. Much of the water will likely go to the agricultural sector, the biggest consumer in the country. Officials also warn that the new find must be protected from contamination from saltwater, sewage, and the overuse of fertilizers and pesticides.

### *The Impact of Qat*

A large amount of Yemen's water consumption is devoted to the irrigation of qat, a semi-narcotic plant habitually chewed by an estimated 75 percent of Yemeni men. Nearly all social interactions in Yemen, from business to government, revolve around daily afternoon qat chews. While exact figures are difficult to come by, a majority of Yemen's arable land is devoted to qat cultivation.

Qat is an especially hardy plant that grows in areas where other crops such as coffee would not. It is favored by farmers for its ability to generate cash quickly; when they are in need of income, farmers simply turn on the taps to irrigate the fields. After just weeks of irrigation,

qat leaves can be harvested nearly year-round for same-day sales. Furthermore, it is much more profitable than other crops, such as grapes or potatoes.

Because qat is more productive as it is given more water, there are no incentives to conserve water in irrigation. Farmers will therefore often over-irrigate their fields with little consideration given to the environmental aftereffects, including soil degradation caused by exhausting soil nutrients. The greatest expense for qat farmers is diesel to run the pumps to draw groundwater for their fields. In an example of Yemen's interconnected challenges, qat cultivation thus benefits indirectly from the government's diesel subsidies.

For all the problems associated with it, however, research has shown that there are also some beneficial aspects to qat cultivation by increasing the availability of local services and generating employment for rural Yemenis from other parts of the country. In an assessment of qat in Yemen, the World Bank noted that the qat trade facilitates regular transfers of money from cities to rural areas. Moreover, the vast majority of income from qat sales remains in the local area, and employment in qat cultivation helps to limit urbanization. Nonetheless, Yemen's qat habit has been identified as one of the primary causes of poverty in the country, decreasing productivity, depleting scarce resources, and consuming an increasing larger portion of household budgets.<sup>iii</sup>

In fact, so much land is devoted to qat cultivation, which comprises a large part of the Yemeni economy, that the country's ability to grow its own food has decreased to the point that it is now a net food importer. Worse, more than 5 million Yemenis go hungry each day, according to the Ministry of Planning and International Cooperation, and the country's childhood malnutrition rates are among the highest in the world. The UN World Food Programme noted last year that 97 percent of Yemeni households surveyed did not have enough money to pay for food and other essentials, leading family members to forgo meals, reduce protein consumption, seek second jobs, and sell personal belongings in an effort to cope. In May 2009, the UN body said many Yemenis were down to just one meal per day. Two months later, it announced an urgent call for donors for food aid for at-risk groups, in particular women and children.

#### *Broader Economic Woes*

Yemen suffers from the effects of the global economic downturn, endemic corruption, and inflation. Individually, each poses difficulties; together, they are a snapshot of an economy in crisis.

The downturn in the global economy has had a dire impact on Yemen. It has been hit hard by decreases in revenue and the dramatic fall in global crude oil prices. Critically, the global recession and economic slowdown in the Gulf have led to decreased remittances from Yemenis working abroad. Foreign investment, particularly from the Arab Gulf countries, is also down.

Corruption has also taken a toll. In recent years, Yemen has taken steps to curb corruption, enacting laws on money laundering, fiscal transparency, and anticorruption. Its Central Organization for Control and Auditing is recognized as an increasingly competent organization, and the establishment of the Supreme National Authority for Combating

Corruption is a positive move, although the organization's impact will be limited until it is granted enforcement capabilities.

Yet despite these efforts, corruption continues to be a serious and continuing problem, and fair and transparent prosecutions are needed. The auditing agency has alleged that nearly 30 percent of government revenue is never deposited in government accounts. The U.S. Agency for International Development noted in its 2006 *Yemen Corruption Assessment* report that corruption in Yemen is a result of weak government institutions. It identified the four main sources of corruption as the national budgetary process; the procurement system; the military-commercial system; and the ruling General People's Congress, or GPC, party apparatus. Allegations of an active black-market trade in refined petroleum products, as well as officially sanctioned or tolerated smuggling, also persist.

The Yemeni economy has suffered from significant inflation for the past several years. Periodic—and often only temporary—decreases in government subsidies have contributed to rising consumer prices. Inflation reached 20 percent last year. It has recently been brought down closer to 12 percent; however, it is expected to go up again because of a cyclical rise in import prices anticipated in the next three years.

## **Demographic and Human Security Challenges**

A second major set of challenges confronting Yemen is demographic. Although the population growth rate has decreased slightly in recent years, it is among the highest in the world at just over 3.4 percent per year. As a result, more than two-thirds of the population is under the age of 24. In the next two decades, Yemeni and Western analysts alike expect Yemen's population to nearly double to more than 40 million people. Poverty is severe, with an annual per capita income of under \$900 per year and nearly half the population earning less than \$2 per day. Infant mortality is a major concern, in part a result of extremely limited pre- and postnatal care. Small programs established by European donors have had some success in combating this problem, but Yemeni children continue to die from preventable childhood illnesses.

The difficult terrain and the geographic dispersion of the population exacerbate the demographic challenges. Yemen's 23 million people are spread throughout roughly 135,000 villages and settlements. Many Yemeni villages are remote, spread across mountainsides and desert wadis, with less than one-third of the population living in urban areas. The central government has been unable to extend either a government presence or more than baseline social services to such a widespread population. As a result, many settlements are forced to be largely self-sufficient, providing their own health care centers, schools, and other social services. In the future, the ability of the central government to effectively exert its control throughout the entire country and provide basic services is in serious doubt, as it struggles to do so now.

### *Education*

An inadequate education system aggravates the demographic challenges. The national literacy rate is about 50 percent, with female illiteracy near 70 percent. Women experience



disproportionate difficulty in accessing education, with enrollment rates dropping off by half from primary to secondary school.

According to Minister of Education Abdulsalam al-Joufi, one of Yemen's greatest problems is an insufficient number of qualified teachers. At unification in 1990, more than half of the country's teachers were deemed to be unqualified. For a number of years after unification, the government virtually ceded control of the education system to religious conservatives. The government has since sought to regain control of the education system and introduce modest reforms. As of January 2009, there were 42 programs in place to retrain more than 90,000 teachers. Population growth in the years since 1990 has further strained the education system. There are now only about 16,000 schools for the 135,000 villages and settlements.

Among the efforts to improve the education system, the government has tried consolidating the state schools, independent Islamic schools, and the old socialist school system from the former South Yemen. Another step has been to standardize the curriculum to promote the teaching of a range of core subjects. In May 2009, the *Yemen Observer* reported that a new review would be conducted jointly by the ministries of Education and Religious Endowment and Islamic Affairs to evaluate the curriculum used in the estimated 4,500 religious schools in the country, all of which are ostensibly under some form of government supervision. Details of this oversight, however, remain lacking. Similarly, the discussion of politics in classrooms is officially forbidden by the ministry, and school principals are expected to monitor such activities and reprimand noncompliant teachers. This process, however, has also proven difficult to implement, and it is unclear what measures are available to remove problematic teachers.

Underregulated religious education has been a recurrent problem in Yemen. According to al-Joufi, all "scientific institutes"—a "parallel and separate" Islamist education system, largely funded from Saudi Arabia and focused on religious and Arabic language instruction<sup>iv</sup>—were closed by the government, although several Western analysts doubt this assertion. As part of an effort to reassert the ministry's primacy, the building that previously housed the Sana'a Institute, once the country's largest extra-governmental institute, is now the headquarters of the Education Ministry. Nevertheless, teachers formerly employed at scientific institutes remain in Yemen, and many are still teaching.

The Yemeni government is carrying out a fifteen-year plan to address deficiencies in the education system. Current priorities include efforts to improve the overall quality, unify the curriculum, and increase girls' access to education. Despite limited resources, the Ministry of Education has additional goals to amalgamate and harmonize the national education system into one coherent body, increase supervision throughout schools, and implement a nationwide testing system. Throughout all these programs, the ministry is also seeking to recast the learning process away from rote memorization, the traditional model in Yemen.

### *Employment*

More than 25,000 people enter the labor market each year, and the figure is increasing as Yemen's population rapidly expands. Because of the weak economy and lack of development, unemployment is conservatively estimated at 35 percent. Yemeni officials recognize that the central government is not able to hire all those seeking work and the

private sector is unable to pick up the slack. Ali Mohammed al-Anisi, the director of the Presidential Office and chairman of the National Security Bureau, observes that unemployed youth are exploited by extremist elements, including al-Qaeda and Houthi rebels. The government acknowledges that the country's economic difficulties contribute to its security problems, and some officials recognize that the government's plans for addressing these issues are inadequate.

With Yemen's population set to double by 2030, the increase cannot be absorbed solely into the domestic labor market. Yemen will need to export labor to wealthy Gulf states. Labor remittances already contribute approximately \$1 billion to the economy each year. The typical Yemeni expatriate worker supports up to seven people back home. However, Saudi Arabia and the other Gulf countries are no longer much interested in importing unskilled Yemeni laborers and it is unlikely that Yemeni workers will displace other third country nationals laboring in the Gulf. To be competitive, Yemen will need to export semiskilled workers, trained and certified in specialized areas. Toward this end, several regional states have launched training programs, and in July 2009, Saudi Arabia announced its intention to finance 69 technical training institutes in Yemen.

## **ADDRESSING THE CONVERGENCE OF PROBLEMS**

The interlocking challenges outlined in this testimony have the potential to overwhelm the Yemeni government. At the heart of the problem is the central government's failure to exercise full control and authority throughout the entire national territory. A critical paradox is that expanding the presence of the government throughout the country potentially means delegitimizing the government, because expanding state control has long been synonymous with imposing northern, Sanaa control. This also touches on sensitive issues related to tribal identity. Much of the population outside major highland urban areas associate the Saleh regime with corruption, cronyism, nepotism, and blocked economic and social opportunities; therefore, expanding central government control risks alienating more of the population. This inverse relationship between levels of central government control and regional resistance and resentment has historically frustrated governance efforts in Yemen.

The Yemeni government and major international donors have sought to address Yemen's rapidly converging problems, with varying degrees of success. Sanaa has outlined an ambitious yet vague approach centered on strengthening the government's control through decentralization. Major donors have increased financial assistance and implemented programs designed to reduce the impact of Yemen's problems, although more needs to be done. Ultimately, the interconnected problems facing Yemen will require domestic, regional, and international coordination to resolve.

### **The Government of Yemen's Efforts to Date**

Despite facing severe financial limitations, the Yemeni government has identified several broad focus areas, including efforts to boost the economy and to expand government control. For instance, the Ministry of Planning and International Cooperation wants to increase the Social Welfare Fund and expand the number of beneficiaries of government assistance. The planning minister, Abdulkarim al-Arhabi, also advocates incentivizing government assistance programs by offering temporary assistance based in part on certain

conditions, such as keeping children in school or successfully completing adult skill training courses.

While addressing the economy merits urgent attention, little is known about how the government plans to go about this. Broad goals have been set, although it is not clear how any of them would be implemented. According to several senior officials, Yemen's strategic plans for dealing with the economy are made up of seven interconnected goals: integrating Yemen in the Gulf Cooperation Council; encouraging oil and gas exploration; promoting non-hydrocarbon foreign investment; increasing aid and development assistance; reforming the business environment; addressing population growth; and expanding education opportunities. These ambitious objectives seek to address many of the issues discussed above, although specific measures to advance these goals have not yet been enumerated.

In the near term, the Yemeni government will need to address the economic status quo, the rise of under-governed spaces, and the looming water crisis.

#### *A Post-Oil Economy?*

Yemeni officials have done little serious planning to prepare for a viable post-oil economy. Options being discussed include mineral exploitation, tourism, and maritime shipping and trade services. The mining of gold, silver, zinc, granite, and marble are under consideration by the Ministry of Oil and Minerals as potential projects, although infrastructure concerns have been noted about all such mining. The *Economist Intelligence Unit* reports that a major zinc project began in February 2009, with exports scheduled for 2010. It estimates that the twelve-year project will contribute \$600 million to the national economy and employ more than 350 Yemeni nationals. Commercial fishing also has potential, although according to senior Yemeni officials, marine resources would require judicious management to prevent over fishing and depletion.

Senior officials have also proposed tourism, noting Yemen's rich cultural heritage. Such plans would be subject to security considerations, because several recent incidents of terrorist attacks have been directed against foreign tourists visiting historical sites. Eight Spaniards were killed in a July 2007 bombing at Bilqis Temple in Marib, and two Belgians and four South Koreans were killed in separate attacks in Hadramout in January 2008 and March 2009, respectively.

With more than 2,200 kilometers, or 1,367 miles, of coastline alongside one of the world's busiest shipping lanes, on paper Yemen would seem to be perfectly positioned to offer shipping and related services. The port of Aden is one of the world's greatest natural deepwater harbors and currently includes a container terminal, oil harbor, and other facilities. Originally used as a coaling station for the British Royal Navy, it could potentially service commercial and other traffic. Plans to develop the port suffered a major setback following an attack on the USS *Cole* during a refueling stop in October 2000 that killed 17 U.S. sailors. (An attempted attack a few months earlier against another American warship refueling at Aden, USS *The Sullivans*, failed when the small boat carrying the explosives sank under its own weight.) Security concerns were again highlighted after the October 2002 attack on the MV *Limburg* that killed one crew member and spilled 90,000 barrels of oil. After the *Limburg* attack, insurance premiums for ships using the Port of Aden soared, traffic dropped off, and

the foreign operator, Port of Singapore Authority, ended its contract. It has been suggested recently that Aden could host cruise ships, but security concerns and exorbitant insurance premiums make this an extremely unlikely prospect.

The most promising source of near-term potential revenue appears to be sales of liquefied natural gas. An ambitious and large-scale natural gas liquefaction project has been under way in Yemen since the mid-1990s. After numerous false starts and other obstacles, it was scheduled to begin operation in mid-2009. Experts have raised several concerns about the Total S.A.–led project, ranging from human capacity and technical issues to doubts about physical infrastructure security and market viability. According to a report by the World Bank, the government of Yemen would earn about \$10.8 billion in royalties, bonuses, and taxes from the project over a twenty-year period through 2028.<sup>v</sup> Several billion dollars in other income from dividends and operating fees are also likely during that period. To be sure, this is revenue that Sanaa badly needs. But even in a best-case scenario, income from exports of liquefied natural gas would only offset the drop in revenue from oil exports and not replace oil income. This is because, among other reasons, global liquefied natural gas prices have dropped and there are no guaranteed customers. Furthermore, it is very likely that the Yemeni government will experience a period of curtailed revenue between the end of oil exports and the onset of new income from the sale of liquefied natural gas during which Yemen's other crises will worsen. In the end, even Yemen's natural gas reserves are limited, and they, too, will eventually run out. Revenue derived from liquefied natural gas thus will only postpone the inevitable—shifting to a post-hydrocarbon economy.

### *Planned Decentralization*

One potentially critical policy being developed by the Yemeni government is to transfer control from the central government to regional governorates. This decentralization strategy seeks to recognize the de facto autonomy that exists in several areas of the country. By granting more responsibility to such areas, Sanaa asserts that local governments will in turn perform more professionally. This is a gradual and ongoing process, and Yemeni officials have noted that not all governorates are up to the task. According to officials, large national functions such as enacting legislation and setting and monitoring strategic goals would be retained by the central government, while localities would be responsible for building roads, schools, and health care centers. This is to be financed through a combination of local resources, such as unspecified fees collected by local authorities and central resources that the regime would distribute to local authorities.

In essence, this strategy institutionalizes the informal patronage systems that have served in lieu of durable national governance bodies, and it encourages the further development of regionalism at the expense of the central government. It is also a tacit recognition that outlying regions operate outside of central government control. Government officials argue that the capital will be able to manage the governorate through such tools as the ruling General People's Congress party apparatus, thereby enabling Sanaa a say in who leads local governorates. The state also plans to use the party apparatus to combat what it has identified as the biggest challenges to decentralization: poverty, illiteracy, and tribalism.

Ultimately, it appears that such a policy would involve the central government's selecting a local leader who would then be granted limited autonomy in exchange for certain levels of

governance and provisions of social services. This is to be controlled through local council elections and the eventual elections of regional governors, in processes largely guided by the ruling party.

Official government-directed decentralization merely grants the state's imprimatur on the status quo throughout much of the country. It is unclear how localities would fund social services when the central government is unable to do so now. Given that the primary objective vis-à-vis state stability in Yemen is to instill some control over what are now under-governed territories and to prevent the emergence of other under-governed territories, officially limiting the central government's role is counterproductive at best. Building robust institutions able to deliver social services and safeguard local populations is essential.

### *The Pending Water Crisis*

The rapidly decreasing availability of water also demands immediate attention. The urgency of the pending crisis is obscured by the fact that water resource depletion is a gradual process that will occur throughout the country at different times. The immediate onset of Yemen's water crisis may therefore go unnoticed by the regime and by international policy makers as outlying regions and governorates experience chronic shortages and high prices for water before other, more central, urban population areas.

Despite government recognition of the problem, the issue is not a priority for Sanaa. Al-Iryani, the water and environment minister, has observed that until the state elevates water conservation to be a national concern—as was done in 2007 to ban weapons in Sanaa—little movement will be made. Addressing the issue of water will require broad coordination among ministries, as well as tackling a number of sensitive subjects such as corruption, government priorities, budgetary subsidies, and societal norms.

There are no easy solutions. Other Gulf states have resorted to the desalinization of seawater; that is unfeasible in Yemen, however, because fuel costs are so high (Yemen's hydrocarbon reserves are far more modest than elsewhere and are already slated for export) and because the desalinated water would have to be pumped up more than 7,000 feet to reach the capital and other major population centers in the highlands.

More feasible for Yemen would be the reintroduction and modernization of traditional methods of agriculture and irrigation. Curbing government subsidies and purchases of qat for official functions could also be effective. Encouraging the importation of qat from East Africa and helping farmers transition to growing cereals and foodstuffs would also help curtail water usage, though admittedly that would prove difficult because growing qat is far more profitable for farmers. Enacting a legal regime to govern the use and distribution of groundwater is also an imperative. If such measures are not taken in the near term, more dramatic steps will be required in the future, such as stopping rural populations from moving to overcrowded cities, and, more drastically, relocating population centers from the center of the country to the coasts.

## WAYS TO HELP

It is essential that Washington take a holistic approach to Yemen. Although the major U.S. foreign policy concern with regard to Yemen since 2001 has been security and counterterrorism, the country's deteriorating security is a result of problems unrelated to security. As such, in many cases development assistance, education and technical cooperation, capacity building, institution strengthening, and direct financial assistance can better address the interconnected challenges facing Yemen than can military and security aid.

Framing the U.S.–Yemeni relationship as based solely on security and counterterrorism issues, to the near exclusion of all other issues, has meant that movement on all other issues has been subject to Washington's perception of progress and cooperation from Sanaa on counterterrorism issues. As a result, a lack of movement of counterterrorism issues has stalled all other interactions (and the fact that Yemen is slated to receive more U.S. military and security assistance funding than development assistance in fiscal 2010 demonstrates a continued misallocation of priorities). The United States has ongoing foreign policy and national security interests with regard to Yemen that extend beyond counterterrorism issues, and so it is in Washington's interests to engage Yemen on other issues that will contribute indirectly to improving domestic security.

Yemen should be viewed as part of the Horn of Africa *and* the Arabian Peninsula. While geographically part of the Arabian Peninsula, Yemen in fact has little else in common with the Gulf Cooperation Council states. To be sure, there are many deep connections between Yemeni and Saudi society, but the income disparity and differences in public service provision between Yemen and the Gulf Cooperation Council states clearly point to their differing problems, challenges, and capabilities. In many respects, Yemen's problems more closely approximate those of neighboring East Africa. Yemen's deep ties with the Horn of Africa and role in a greater East Africa smuggling and security complex further underscore the need to view Yemen with a broader lens.

Looking forward, there will be a greater need to improve donor coordination and assistance programs—all the more so because the ongoing global financial crisis will further strain international assistance programs. The Yemeni government currently does a poor job of managing international assistance, and international donors need better synchronization to maximize their impact.

Increased financial assistance to Yemen, such as that currently proposed for fiscal 2011, is required. Assistance can be used to support and offset the difficult economic choices that will need to be made in Yemen, such as curbing government subsidies on diesel and introducing agricultural diversification. Local capacity-building efforts, such as English language instruction, teacher training courses, micro-finance enterprises, and exchange programs for judges, members of parliament, journalists, government workers, and academics can help fill voids left by reduced state capacity.

On security issues, strengthening border guard units so that the central government can better secure its own national borders is a first-order priority. This must be done in coordination with other regional neighbors including Saudi Arabia and Oman. Since 2001, the United States has taken steps toward this objective by supporting the establishment of

the Yemeni coast guard and conducting needs assessments of the border guard units. However, senior Yemeni officers report that there has been little follow-through, and both the coast guard and border guards are in desperate need of equipment and training—something the bulk of U.S. security assistance for fiscal 2010 is intended to provide. Increased military-to-military training and exchanges with both the United States and other regional partners should also take place.

Yemen's ability to combat terrorism must be bolstered through efforts to build local capacity in law enforcement and in the legal and judicial systems. Enacting counterterrorism legislation and terror finance laws would help build state resilience. Greater policing training and programs to professionalize the prison service can help staunch one of the greatest concerns held by Western counterterrorism officials. In areas where it is not feasible or desirable to partner with the United States, such efforts can utilize the unique assets of European nations and other regional states.

Ultimately, a regional approach is needed to help improve stability in Yemen. The threats posed to Yemeni security and stability will jeopardize interests well beyond Yemen's borders, and as such there is not solely a U.S., European, or regional solution to Yemen's many challenges. The only way to mitigate the impact of these problems is through the active involvement of all stakeholders. Saudi Arabia and other Gulf Cooperation Council states need to be encouraged to take greater action because failure to address Yemen's looming challenges would hit the regional states first and hardest. Washington should encourage the Gulf states to hold out membership in the Gulf Cooperation Council for Yemen in exchange for tough steps, including progress on curbing government subsidies, addressing corruption, and enacting measures to curtail security concerns. The council should also open trade with Yemen and formalize labor movements to help create a viable and durable future for the country. Yemen should establish high coordination commissions (like the one that exists with Saudi Arabia) with other Gulf states. The international community will also need to help mediate the southern secessionist issue, support a ceasefire in Saada, and begin reconstruction and development assistance to these regions.

## **CONCLUSION**

Senior Yemeni officials have acknowledged that the country's economic challenges complicate and worsen its security concerns. Development plans, poverty limitation efforts, employment schemes, and public service provision have all been adversely affected by the linkages between the economy and security. Furthermore, domestic unrest and Islamist terrorism have done much to damage the reputation of Yemen as a foreign investment location.

The challenges and problems facing Yemen are not unique in the region. Throughout the Middle East, an increasing number of countries face similar problems of deteriorating state capacity and rising economic and demographic instability. However, in Yemen these challenges threaten to disrupt not just local stability, but also regional and international stability, including the flow of vital hydrocarbons. If left unaddressed, Yemen's problems could potentially destabilize Saudi Arabia and the other Gulf states. The inability of the Yemeni central government to fully control its territory will create space for violent extremists to regroup and launch attacks against domestic and international targets. The

international community must be realistic about the limitations of intervention in Yemen. In the near term, however, inaction is not an option.

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<sup>i</sup> Eurasia Group, “Yemen Outlook,” December 9, 2008, p. 3.

<sup>ii</sup> Ginny Hill, “Yemen: Fear of Failure,” Chatham House briefing paper, November 2008, p. 10.

<sup>iii</sup> World Bank, “Yemen: Towards Qat Demand Reduction,” June 2007, p. 2.

<sup>iv</sup> Bernard Haykel, “Rebellion, Migration or Consultative Democracy? The Zaydis and their Detractors in Yemen,” in R. Leveau, F. Mermier, and U. Steinbach, eds., *Le Yémen Contemporain* (Paris: Karthala, 1999), p. 196.

<sup>v</sup> World Bank, “Republic of Yemen: A Natural Gas Incentive Framework,” June 2007, p. 5.