

## MIRACLE OR MIRAGE: IS DEVELOPMENT SUSTAINABLE IN THE UNITED ARAB EMIRATES?

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The United Arab Emirates has combined government policy and the brute force of petrodollars to alter its economic landscape. Guided by the single-minded vision of the nation's leaders, the UAE has been transformed from seven small, impoverished desert principalities to a modern state with a high standard of living, an advanced educational system, and a cutting-edge infrastructure. This paper looks at the vision behind this economy, the symbols that it has created, the business model employed, and the social structure on which it is built and considers whether the UAE has a chance for sustainable development.

## **INTRODUCTION**

As the 2002 Arab Human Development Report suggested, the Arabian Peninsula is full of contradictions. On this peninsula, it is the best of times; it is the worst of times; it is the age of wisdom, it is the age of foolishness; it is the spring of hope, it is the winter of despair. It is also a time in which the news coming from the region is written in superlatives. Yet buried beneath the hyperbole is the grim reality—many of these countries face a daunting and uncertain future. Those who do not plan ahead. modernize their economies, reduce subsidies to their citizens, and get their ecological house in order will find the not-so-distant future especially bleak.<sup>1</sup>

Some nations, such as Saudi Arabia, are victims of misspent windfalls and bad public policy. Other nations, such as the United Arab Emirates, appear to have made progress. During the lifetimes of the benevolent, but aging, leaders, the UAE has been transformed

from seven small impoverished desert principalities to a modern state.

To his credit, much of this is due to the simple, clear national priorities set by late President His Highness Shaykh Zayed bin Sultan al-Nahyan, who led the country from its formation in 1971 until his death in November 2004. Under his tutelage, the UAE developed a diversified economy with one of the world's highest mean standards of living. Many of its petrodollars have been used to build infrastructure and to broaden the country's economy.

From the early days, he had a clear sense of what should be done. "The first fundamental change, and the most important," Shaykh Zayed has been quoted as remembering was:

...the availability of drinking water. The bringing of water was ...important. After [water came] everything started changing. Housing became available when there was none before, then infrastructure and

everything else. Our policy was first to concentrate all our efforts to develop this country and to develop its citizens.<sup>2</sup>

From those early days when fundamental choices were made, the United Arab Emirates has transformed utterly. Fifty years ago, when the grandparents of today's college students were young adults, the county had no electrical grid, indoor plumbing, telephone system, public hospital, or modern school. As late as 1950, Dubai was a city of huts and unpaved streets. In 1970, literacy rates hovered just above 20 percent. Only a fraction of the mothers of today's college students graduated from high school, and that fraction is just slightly higher for their fathers. As recently as 1992, Dubai's Shaykh Zayed Road now lined by glass-and-steel towerswas mostly desert as far as the eye could see from the lone skyscraper, the 39-story Dubai World Trade Center.<sup>3</sup> Today, that skyscraper is dwarfed by its near neighbor, the 56-story Emirates Tower. Tomorrow, the Emirates Tower will be dwarfed by the world's tallest building, the Burj Dubai.

Modern high-speed highways now traverse a landscape that a generation ago had only rutted roads. Today, modern ports, including those that house container facilities and dry the coastline. docks, Dubai dot International Airport estimated that about 22 million passengers would pass through its concourses in 2006 and that 60 million will have done so 2010.4 The construction bv Concourse 2 is currently the largest airport development in the world, employing as many as 18,000 people, municipality has begun and the

construction on a new cargo and passenger airport at Jebel Ali. Abu Dhabi's airport is currently undergoing a 25 billion dirham redevelopment, and handle 20 expects to million passengers by 2010.<sup>6</sup> As of September 2005, the mobile telephone penetration rate was more than 95 percent, while the fixed-line penetration rate was just 28 percent.<sup>8</sup> Internet usage jumped from zero users in 1995 to about 1,300,000 in 2005.<sup>9</sup>

Published income figures reflect the fulfillment of Shaykh Zayed's vision. The country ranks in the top portion of the Human Development Index, and the economy had an estimated 2005 purchasing power parity (PPP) per capita of approximately \$40,000. 10 These figures compare favorably to PPP income figures of neighboring countries: Bahrain, \$23,000; Egypt, \$3,900; India, \$3,300; Iraq, \$3,400; Kuwait, \$19,200; Oman, \$13,200; Qatar, \$27,400; Saudi Arabia, 12,800; and Syria, \$3,900. 11

In growing this spending power, the federal government has invested heavily in tourism, airport infrastructure, re-export commerce, recently, telecommunications, making progress in shifting the UAE economy from dependence on oil and gas exploration and refining. In 1975, crude oil was about 68 percent of the total economy. By 1998, the figure for crude oil had fallen to about 22 percent. As oil dependence fell, manufacturing grew, climbing from less than one percent of the economy 1975 to 12.4 percent today. Commerce, restaurants, and hotels went from about nine percent to about 14 percent, and real estate from 2.5 percent to 10.5 percent. 12 Current plans master-planned develop

entertainment and healthcare centers eventually will push crude oil's percentage lower still, despite rising oil prices.

In promoting their achievements, Emiratis have mastered the vocabulary of self-promotion, and hyperbole and superlatives have become a way of life. Ventures are regularly described not in terms of excellence but in P.T. Barnum's vocabulary of the "biggest," "tallest, "or "newest." The term "world-class" has been bandied about so often that it has lost meaning. Master-planned communities sprout up everywhere the royals will allow. During 2004 and 2005, the rapid-fire announcement of Dubailand, Health City, the Dubai International Financial Centre (DIFC), Burj Dubai, and Falcon City waxed lyrical in local newspapers. Today, these have been joined by the world's longest hotel strip—a 31 hotel. USD \$27 billion, 10 km project near Dubai land, labeled Bawadi.

The media have waxed lyrical about them all. Then Dubai Crown Prince General. now ruler. Shavkh Muhammad bin Rashid al-Maktoum was said to have topped "his previous visionary initiatives" with the 18.5 billion dirham Dubailand theme park, "the Middle East answer Disneyland." To be built on two-billion square feet of land, Dubailand has been projected to attract 15 million more people a year to the area. <sup>13</sup> Falcon City in Wonders at Dubailand, which will replicate the "wonders of the world," is described as an ambitious 5.5 billion dirham project. "Shaped like a falcon, the city features structures based on ancient and modern wonders of the world," including the Pyramids, the Hanging Gardens of Babylon, the Eiffel Tower, the Taj Mahal, the Great Wall of China, the Leaning Tower of Pisa, and the Lighthouse at Alexandria in which you can live, shop, and play. Dubai, of course, will do them better. "These structures," according reports, "will be larger than the originals."<sup>14</sup> The 6.7 billion dirham Health City is scheduled to have a 300university hospital. college, nursing school, center for life sciences research, up to 40 clinics and hospitals, and specialized laboratories. It will, the country's leaders say, help make Dubai a leading hub in the global new economy. 15

The purpose behind the Dubai International Financial Center (DIFC) is to position Dubai as a universallyrecognized hub for institutional finance and as the gateway to the region for capital and investment. DIFC expects to rival international financial centers in New York, London, Singapore, Hong Kong, and Tokyo. 16 Finally, EMAAR properties announced plans building the for world's tallest skyscraper in 2004, the 160-story Burj Dubai, touting its "incredible views" of the Arabian Gulf and describing it as one of the "most prestigious" addresses on earth. The management contract has now been let, and the building rose about 50 floors above the landscape by fall of 2006.<sup>17</sup>

Such grandiose projects grand complement previous development zones, including those for technology. The Emirate of Dubai has been particularly active in developing these high tech zones, having already invested billions of dirhams. The great dream is that human capital, nurtured in institutions and industries in the can create income-yielding activities for the future. 18 To facilitate this progress the country has tried to

create IT-friendly public policies. In no small measure, they have been successful in creating laws, government-to-consumer businesses, and infrastructure. According to the World Bank, the UAE has done better in this than its GCC counterparts. <sup>19</sup>

The UAE has also worked hard to develop new media. Launched in November 2000, multi-billion dirham Dubai Media City (DMC) was designed to make Dubai the regional center for media businesses and new technology workers. <sup>20</sup> Rising next to it, on 500 carefully manicured and watered hectares, are Dubai Internet City (DIC) and Dubai Knowledge Village (DKV). <sup>21</sup>

DIC was region's the information technology zone, and Shaykh Muhammad bin Rashid al-Maktoum, ruler of Dubai, views this pet project as a benefit to Dubai's economy. By September 2001, an estimated 95 percent of the DIC area had already been spoken for by leading high tech firms, many of them moving from Europe to Dubai.<sup>22</sup> Today, more than 550 media companies, including global giants such as CNN, Reuters, Sonv Broadcast & Professional. McGraw Hill Publishing, Bertelsmann, and MBC, along with regional companies and new start-ups, call DMC home. IBM, Compaq, Dell, Logica, Siemens. Canon, Ericsson, and Cisco are just a few of the major companies housed at DIC. Together, the companies located in this high tech information corridor employ more than 5,500 well-paid knowledge workers.

Knowledge Village describes itself as a "connected learning community that will develop the region's talent pool and accelerate its move to the knowledge economy."<sup>23</sup> Dubai Knowledge Village (DKV) is located in the Dubai Technology and Media Free Zone with Dubai Internet City and Dubai Media City. By operating closely with its affiliate entities, DKV offers its "partners a huge opportunity to collaborate with the business community, to create a modern, vibrant learning environment."<sup>24</sup> When its doors opened in the fall of 2003, DKV had more than 50 educational and research institutions as partners.

The stated aim of the multi-billion dirham DMC, DIC, and DKV complex is to create a clustered economy comprising educators, incubators, logistic companies, multimedia businesses. telecommunication companies, remote service providers, software developers, and venture capitalists in one place. The publicly articulated hope is to create a critical mass for the new economy. 25 The other unpublished goal is to line the pockets of the ruling families and their friends. Licensing and fees make renting space at these centers more expensive than mid-town Manhattan. The operating model for DKV is less an educational center than it is shopping mall; the concept is based on name-brand anchor institutions drawing in customers, foot traffic, and smaller ventures.

Now rising on the outskirts of Dubai is Dubai Silicon Oasis (DSO), whose website describes as it as:

...the world's premier purposebuilt high-technology park for the microelectronics and the semiconductor industry. DSO is an innovation-driven technology community, housing microelectronics- and optoelectronics-related enterprises, a state-of-the-art Microelectronics Innovation Center (MIC). fabrication plants, research and development centers and specialized academic institutions and residential areas. 26

CERT, the Center of Excellence for Applied Research and Training of the Higher Colleges of Technology (HCT), is part of a multi-college network operated by the Ministry of Higher Education and Scientific Research in the United Arab Emirates. CERT is the continuing education and applied research arm of a system serving more than 10,000 students throughout the UAE. CERT operates two technology parks, one in Abu Dhabi and another in Dubai. These parks are designed to encourage companies to develop educational tools, as well as business models, and to provide a total-solutions orientation to their core business activities through training, products, and consultancy services to improve the application and assimilation of technology in the region.<sup>27</sup>

Although the United Arab Emirates has made great progress compared to its near neighbors like Saudi Arabia, the country ultimately is living on time. **Public** borrowed policy encourages large families, many of which depend upon the governmental largess for their existence. Despite published 100-year figures for oil reserves in the Emirate of Abu Dhabi, governments at all levels cannot sustain the welfare state forever. A digging reveals that. accounting for an annual inflation rate hovering around five percent, the

standard of living has actually declined over the last decade. Worse yet, 2005 figures point to an inflation rate approaching 12 percent and housing costs that jumped 37 percent from 2004 to 2005 in Dubai. Rent-related topics were so hot that *Gulf News* published over 2,016 on the subject between January 1, 2004 and August 31, 2006.

The forward-looking alternative to the public dole is to create a culture fostering the resources of the mind creativity and innovation. Whether this culture can actually develop in the United Arab Emirates remains unclear. Despite a modernizing economy, kinship and marriage still count, and extended family networks enormous power in all aspects of life. This creates a system in the UAE that is antithetical to modern, transparent economies that generally require that the best—not the best connected—rise to the top in the major societal institutions.

The federal government points to far-ranging educational developments with pride. School is free at all levels. About 317,000 students were enrolled in 2003-2004 in 1500 public and private schools. The country has 33 private universities and a national system composed of United Arab Emirates University in Al-Ain, the 11 branch campuses of the Higher Colleges of Technology, and the Abu Dhabi and Dubai campuses of Zayed University for women.

The glitzy façade masks a radically different educational edifice. Much of primary and secondary schooling has been based on knuckle-thumping rote memorization that does not develop higher-order thinking skills. Acknowledging failure, the authorities

are now overhauling K-12 education. They needed to do so. The perceived divide between public or government schools and private schools is wide and may be widening. The most current data show that those who can afford it send their children to private schools. Between school years 2000-2001 and 2001-2002, enrollment in public schools dropped by about three percent while enrollment in private schools climbed by about ten percent. Parents prefer private schools because they believe that these schools have better facilities and that private school students learn better and develop advanced English language skills.<sup>30</sup> It remains unclear, however, whether the parents actually appreciate the value of education. In today's United Arab Emirates, only about three in ten Nationals above age 24 have had any formal schooling.<sup>31</sup> Thus, the vast majority of the parents understand neither the power of the education their children receive nor the careers for which their children are preparing.

The education of women is another problematic issue in the UAE. Lip service is paid to the power of higher education. because the country's leadership wants to develop the UAE as the high-tech hub of the Middle East. Necessary to this vision are women who are valued, not just as wives and mothers, but as potential leaders in the workplace. If this country is to move forward, then, so too, must its women. Yet will a society based on traditional values let them become truly equal partners modernizing the economy? Even if Emirati women can gain approval from the men in their families for their break with the past, it may be impossible for them to reconcile the conflicting

expectations that they will both rock the cradle and rule the world. This is not surprising. More than three decades after their own "liberation," Western women have not found a happy compromise between home and work.

Although the under-25 generation attends school, many young people lack the motivation either to work hard or to excel. Students learn at an early age how to game the system, expending time and effort haranguing teachers or plagiarizing instead of studying. Males are a particular problem because many see little need for an education. Some, emulating male family members, merely aspire to be silent partners of foreigners who begin businesses in the UAE. Except in some "free zones," such partnerships are required by law. This makes for income without effort for young Emirati men and creates a debilitating anti-entrepreneurial torpor that difficult to overcome.

education Requiring an and instilling the value of meritocracy are difficult in a country seduced by subsidies. Today's Emirati male sees a life of ease stretching out before him. Free education and medical care, highpaying government jobs, short working pensions, hours. lucrative inexpensive housing loans sap the will of many. Despite a program of infusing nationals into the workplace called "Emiratization," few locals actually compete in the open marketplace. Emiratis who constitute about three percent of the total private labor force make up about 15 percent of the country's population. When they choose to work, college graduates tend to join family businesses or the public sector rather than the private sector.<sup>32</sup> None would do the physical labor required of Indian and Pakistani guest workers who dig the ditches or work the high steel; few would fill lowpaying, low-status service jobs in the hospitality industry. Working your way up the corporate ladder does not seem a likely option; Emiratis expect to start at the top and stay there.

Whether the United Arab Emirates has begun an irrevocable journey to a modern, technology-based economy remains unclear. Recent studies demonstrate that members of the current generation do not have the necessary skills to create the intellectual property that the keystone of knowledge-age economy.<sup>33</sup> More disturbing are rough estimates that, between 1998 and 2003, few students graduated with degrees in computer science students). (633 computer engineering (109 students), information technology students).<sup>34</sup> Unfortunately, the typical "tier II" university in the United States has more patents issued to its faculty in a year than do all citizens and residents of the UAE combined. Thus, in the immediate term, the UAE remains dependent upon expatriate professionals to run the intellectual property and information technology economies.

The country will also continue depending upon an army of workers from India and Pakistan to build the infrastructure projects sprouting in the desert. Earning less than \$300 per month, these workers labor long shifts in temperatures hovering around 50 degrees Celsius, erecting the airconditioned shopping malls, apartments, and luxury homes of the favored few. Due to what amounts to indentured labor, building costs are so low that a new mall in Sharjah Emirate

projected an unheard of return-oninvestment of more than 50 percent during its initial year of operation. Labor costs are so low in the airline industry that Emirates Airlines had a break-even load factor of 64.5 percent, compared to U.S. carrier Continental Airlines, which was hemorrhaging red ink with a load factor of 77 percent in 2002.

Laborers' lives are one of the dirty little secrets of the shining economy. Kept out of view, many live in poorly equipped labor camps. Some live in shanty towns connected to the building projects. Others sleep by night in the basements of the apartments they service by day. Even their meager wages are often withheld for weeks. Standard operating practice among infamous local builders is to withhold pay for periods that sometimes stretch to months. If workers complain to the authorities, they are told, under threat of summary deportation, to mind their manners. Newspaper stories about labor abuses often do not identify employers. They do not do so because the stories might, as one reporter has said, embarrass the company and prevent it from doing business in the future. 35

In the November 10, 2003 issue of the *Gulf News*, the headline, "350 workers troop into labor ministry to get unpaid wages" and accompanying story, summarized the problem. "A crowd of 350 workers gathered at the Ministry of Labour and Social Affairs yesterday for a nine-hour vigil," the lead began. "The labourers," the story continued, "are working for a major contracting company involved in industrial pipelines said their sponsor had not paid around 1,000 employees for the last eight months..." They also

complained about sanitation, food, and electricity in their labor camp. The best that they could do was secure the promise that they would be paid two months of wages before EID, and gradual payment of the rest over time.<sup>36</sup> If local newspapers are to be believed, this problem has grown over time, with workers becoming more aggressive and the government less tolerant. In 2005, the Gulf News printed 131 separate articles on unpaid workers. Titles included, "120 unpaid workers protest," "Unpaid stage workers survive dates," on "Construction company workers seek unpaid salaries and benefits," and "Workers troop into Labour Ministry over unpaid wages." The drumbeat continued in 2006, with 607 articles dealing with the same topic appearing the Gulf News from January 1 to the end of August.

Even highly paid intellectualworkers exploited. property are written Contracts are in two languages—usually English and Arabic. At times, contract terms vary; the English says one thing, the Arabic another. As Arabic is the language of enforcement, what it says on that side of the paper is what counts. Jet-lagged and tired, foreign workers are hustled into signing contracts without having a chance to solicit an opinion from an Arabic-speaking lawyer. So expatriates often unwittingly lose days of vacation, end-of-service pay, or other benefits. Stories about this kind of treatment do not make the news, but they circulate through the international business community, frightening knowledge workers who otherwise might be attracted to opportunities offered by employment in the UAE.

The unevenness of income distribution throughout the population exists not only between the wages of laborers and Nationals, but between the nation's citizens as well. While mean per capita income is high in the UAE, income distribution is skewed towards Abu Dhabi and Dubai. The latest available figures, which date from 2002, show that Abu Dhabi had a per capita GDP of \$23,929 and Dubai's was \$16,094; Sharjah's was \$9,838; Ras al-Khaimah's was \$8,076; Ajman's was \$6,047; Fujairah's was \$7,955; and Umm al-Ouwain's was \$7,154.<sup>37</sup> Dubai and Abu Dhabi may have slick residential areas and modern structures, but outlying Emirates, such Ras al-Khaimah. have cows wandering in the not-so-modern downtown. The tale of economic development in the UAE is also the tale of its richest citizens. It has been said that fewer than two-tenths of one percent of the population controls 90 percent of the nation's wealth.<sup>38</sup>

Although the UAE has few official taxes, indirect forms of taxation support the benevolent **National** lifestyle. These include high prices for telephone service and airline tickets, with profits funneled into high-paying, short-hour jobs for its citizens. While there will be a second telephone company named Du, that company effectively will be a licensee of government the current Etisalat, telecommunications monopoly provider. There will also be no competition on price between them.<sup>39</sup> Housing is needlessly expensive and the rents are kept artificially high; it is standard for one year's rent to be collected up front. Money laundered from India and CIS has helped push up the price of newly created fee-simple housing for foreigners, as have hordes of local speculators who gobble up blocks of properties hoping to flip them to the next buyer. Some now wonder aloud if old developments will become slums as residents choose newer, more fashionable housing. Others wonder why foreigners would purchase properties that have no title insurance or proper deed records in an environment in which speculation is encouraged. 41

If this weren't sufficiently ominous, there are signs that the overheated housing market may be slowing down. Although local newspapers practice shameless growthoriented boosterism, some experienced observers have been warning of what will happen when the fragile bubble bursts. 42 They also wonder if local government, which has let the good times roll for years, can manage a soft landing when the downturn comes.

The period of unrivaled growth during the last three decades has not come without a price tag. As air pollution has increased dramatically, the United Arab Emirates has become one of the biggest per capita air polluters on earth. 43 As the number of visitors and citizens has increased, strains have been placed on water resources and demands for energy have risen. Traffic jams and accidents regularly cause terrible congestion on the highways. The roadways already are clogged at peak hours, with legions of frustrated motorists grinding slowly from development to development along the crowded E11 highway corridor. Efficient public transportation remains but a distant hope on a far away horizon, perhaps two or three years away in circumstances.<sup>44</sup> the best

Just a generation or so removed from their frugal Bedouin traditions, Emiratis now are listed in the top five per capita on several unflattering lists. They have joined four other nations in per capita fossil fuel consumption and carbon dioxide emissions. They are the world's largest per capita water consumer and the second largest producer of expensive desalinated water after Saudi Arabia. Water consumption is so high that it exceeds 378 liters per day, compared to an international standard of 189 to 265 liters per day.

Ground water levels have been dropping at the rate of one meter every year from the past 30 years. <sup>47</sup> This will only get worse. Governmental agencies predict that water consumption will increase by 44 percent by 2025. Others say that the growth rate is really along the lines of eight to ten percent annually. <sup>48</sup>

If the environmental damage done by poor management of water weren't enough, there is growing evidence that the unregulated growth is now causing extensive damage. A public volley environmentalists between Nakheel, the government-controlled development in Dubai, agency produced charges that poor management of offshore developments is destroying the marine ecosystem, rerouting natural currents, destroying nesting areas of endangered turtles. Though having done environmental impact study, the developer argues that it is planning to build an artificial island and that the coral reefs there were not worthy of protecting anyway. 49

Recently, the municipality of Sharjah blamed Nakheel's ongoing construction of The Palm, an artificial island development, for the tens of thousands of dead fish fouling the waters of Qanat al-Qasba, a canal bisecting the city of Sharjah. Sayid Abdul Aziz al-Midfa, Sharjah's director-general of environment and protected areas says, "the fish died because of construction work on sea where they are building Palm Islands." 50

Eight years ago, the per capita waste generation was 725 kg; today that figure is 1,250 kg, making the UAE one of the highest per capita generators of trash in the world. Its energy consumption per capita is also among the highest in the world and is exploding.<sup>51</sup> This growing need has begun to have consequences such as occasional power failures.<sup>52</sup> More will be on the horizon unless governments build at an even more frantic pace.

The county has few of the cultural amenities—symphony, art museums, and walking neighborhoods—typical of the great cities of the world. Though a MOU has been signed to build Guggenheim Abu Dhabi. exhibitions now are often mere mall attractions. On the drawing board for Dubailand is a "world-class" sports city, with a multi-purpose stadium with a capacity of 25,000, an 18-hole golf course, a 10,000-seat hockey stadium, a cricket academy, and a riding club.<sup>53</sup> The planned 500-seat theater will be in the "ginormous Mall of the Emirates, nestling next to the ski center, shops galore, and who knows what else."54 That mall, which had a soft opening in September 2005, helped give the United Arab Emirates the most per capita square footage of mall space in the entire Middle East and the second most in the world. Battuta Shopping Mall is a "uniquely themed retail

destination with five distinct shopping zones inspired by the travels of Ibn Battuta."<sup>55</sup> Named after the 14<sup>th</sup> century Arabian explorer, the "architecture within the mall's six courts reflects the most influential places Ibn Battuta traveled during his time, providing mall visitors an invaluable glimpse into the past."<sup>56</sup> The six courts are named Andalusian, North African, Egyptian, Persian, Indian, and Chinese.

Few places exist where local handicrafts can be seen or local musicians heard, as the country's culture and sense of history pride have begun to disappear into Westernized popular culture and the pornography of excess. Though the Emirates may have been "greened" with plants, cultural environment remains desertlike. For many, the highlights of the season are not Mozart. Beethoven, or Bach but Summer of Surprises, Global Village, and Dubai Shopping Festival—all opportunities to spend serious money.<sup>57</sup> It seems that the United Arab Emirates risks becoming, to paraphrase one acerbic architectural magazine, a country without a soul.<sup>58</sup>

## **CONCLUSION**

The government of the United Arab Emirates desperately desires that this federation of seven tiny emirates evolve into a knowledge-age hub. To advance its mission it has used a combination of "big" ideas, technology and media infrastructures, and public relations propaganda. While measurably better off than several neighboring Arab nations, the UAE suffers from critical flaws that could prevent it from ever becoming a knowledge-age country. Among those

deficiencies are an education system focusing on training, rather than developing intellectual content or thinking skills, infrastructure schemes more concerned with selling real estate than developing a pleasing and convenient life style, an economic system that warehouses the "really serious" money offshore, and a country in which fantasy, sometimes rather accomplishment, than actual admired and rewarded. Add to that a social structure that sometimes discourages young women from making an economic contribution and an economic structure that discourages young men from making a contribution to society, and there are problems that money—even the huge amounts available to the rulers of the UAEmay not be able to solve. Even diet and health have become problems as the population has become sedentary, developed a smoking habit, and become a nation of overeating couch potatoes. 59

In the United Arab Emirates, some growth has resulted from smart leadership; some has resulted from a of competition. Yet competitive playing field is about to change. Looking forward, leaders in Bahrain, and Kuwait are Oatar. development pushing and concentrating upon education. Loaded with its LNG billions, Qatar has hired universities, such as Cornell and Texas A & M, to run programs at Education City; Kuwait has hired Dartmouth College to build a world-class facility in Kuwait City. Bahrain is developing progressive educational facilities, such as Royal Bahrain University, an innovative educational institution meant for the traditionally underserved female population.

Capitalizing on the current forward momentum will become more difficult in the UAE because of growing competition both from within and without. Outlying Emirates such as Ras al-Khaimah (RAK) have hopped onboard the economy bandwagon, challenging front-runners Dubai and Abu Dhabi. The RAK government has announced plans for several mega projects, including the Cove. The Cove is scheduled to comprise more than 50 acres of beachfront property, including 134 Nubian-style furnished residences; and a new highway to Dubai, which is under construction, will connect this and other projects to major metropolitan areas.

Having seen the future through the kaleidoscope, countries from across the region have begun imitating the UAE's business model. Qatar, which has deeper pockets than the UAE, has invested billions of dollars development, reworking the Doha airport and transforming the Doha bay. Construction work has officially begun the new \$5.5 billion Doha International Airport, which, when fully developed in 2015, is expected to handle up to 50 million passengers and two million tons of cargo a year. Added to that is the \$2.5 billion Pearl-Oatar project, a string of artificial offshore islands with two circular harbors mirroring the famous Doha harbor's natural shape. There will be 8,000 residential units in total, ranging from 20-story towers to individual villas on substantial plots. Oman is developing master-planned residential communities. Oman's Port Shalala is undergoing a \$262 million port development, and an estimated \$700million beachfront tourism residential real estate project is being

developed on a long stretch of beachfront near the Muscat International Airport.

Buffeted by the winds of change all across the region, the United Arab Emirates needs to make some profound choices. If the country is to move forward sensibly from where it stands today, serious thought must be given to making the social order more inclusive and favoring a culture in which character counts more than the content of the pocketbook. It also will mean a serious examination and reconciliation of the religious and secular spheres so that neither loses and both benefit.

In the end, the pathway to the future requires blending the best of the old and the best of the new. Such balance is admittedly difficult to create and sustain, especially in the Middle East where tribe and tradition have such a hold on society, and the pull of glitzy development and immediate gratification are stronger than that of measured growth. Yet if the shimmering glass-and-steel spires of the Emirati skylines are to be miracles, not mirages, the once and future leaders of the UAE must be wise, thoughtful, and circumspect. While the precious hours of the oil boom tick away, her leaders must put aside their glamorous playthings and plan for a future in which the UAE's people, not its petroleum, lubricate the economy.

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## NOTES

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