

## Operational Environment (OE) Quick Guide Yemen



Yemen is a Middle East country bordered by Saudi Arabia, Oman, the Gulf of Aden, the Arabian Sea, and the Red sea at the geographic coordinates of 15 00 N and 48 00 E. North Yemen became independent of the Ottoman Empire in 1918. In 1967 the British withdrew from what became South Yemen. The southern government adopted a Marxist orientation in 1970. The exodus of hundreds of thousands of Yemenis from the south to the north contributed to hostility between the states. The two countries were formally unified as the Republic of Yemen in 1990.

### POLITICAL VARIABLE MANIFESTATIONS IN YEMEN

- Centers of Political Power: Yemen is headed by a president, currently Abd al-Rabuh Mansur Hadi, and assisted by a vice president. The president is the head of state while the Prime Minister is the head of the government and appoints members of the Yemeni Cabinet. The country has a bicameral parliament. The president appoints the 111 members to the Shura Council and the 301 members of the House of Representatives are elected by the people in general elections.<sup>1</sup>
- Type of Government: Yemen has a Representative form of government. The people of Yemen directly elect members of the House of Representative through popular vote; however, the last election held in the country was in 2003. The constitution of Yemen requires that the president is elected through the popular vote for a seven year term. The president has the prerogative to appoint the vice president, the prime minister, and the deputy prime minister.<sup>2</sup>
- Key Governmental Leaders: Ali Abdallah Salih, who was president of north Yemen from 1978 to 1990 and president of the Republic of Yemen from 1990 to 2012, transferred power to Abd

Rabbuh Mansur Al-Hadi on 27 February 2012. Yemen was undergoing building tension and gravitating toward an “Arab Spring” revolution like those that removed former Egyptian president Hosni Mubarak and Tunisian president Ben Ali. The Gulf Cooperation Council (GCC) and the UN Security Council negotiated for the peace pact that calls for a general election in 2014.<sup>3</sup> The 2012 General election produced the following leaders:

- President: Abd al-Rabuh Mansur Hadi
- Vice President: (vacant)
- Prime minister: Muhammad Salim Basindwah
- Deputy Prime minister: (vacant)
- Ambassador to the United Nations: Abdullah al-Said
- Government Effectiveness and Legitimacy: The government formed after the 2012 elections is considered legitimate by the Yemeni people and the international community, having been borne out of the GCC and UN involvement. It has the capacity to redress some of the factors that led to crises in the country. The government was formed as a coalition government with opposition leader Muhammad Basindwa as the Prime minister, as well dividing the cabinet posts with the then ruling General People’s Congress (GPC).<sup>4</sup> The Transition coalition government is also considered legitimate having sought the mandate of the people of Yemen who elected President Abd al-Rabuh Mansur Hadi (he was the only candidate), who appointed the head of government from the opposition as agreed in the 2011 peace deal brokered by the GCC and the UN.
- Domestic Political Issues: The most pressing political issue in Yemen at present is the election scheduled for 2014. The election will be a litmus test for a country that verged on civil war in 2011. The coalition government also must deal with secessionist politics from the South where the country’s major oil resources reside.<sup>5</sup> Another dominant political issue is the restoration of stability in a country with a history of tension between North and South since the two regions united in 1990.<sup>6</sup> Terrorist organizations within Yemen are a concern, drawing attention from the government as well as from other nations. The United States in particular is troubled by al-Qaeda elements in Yemen.
- Attitude toward the U.S.: Yemen is seen as a safe haven for Muslim extremists and terrorists, prompting the U.S. and other key international players to concentrate on formulating strategies to help eradicate terrorism in the country.<sup>7</sup> Many Yemenis consider the presence of U.S. unmanned aerial vehicles and counterterrorism officials to be intrusive; hence a contemptuous attitude toward the U.S. is prevalent.
- Political Parties:
  - General People's Congress (GPC)—main political party in Yemen and led by Abdul-Kader Bajammal
  - Islamic Reform Grouping (Islah)—led by Muhammed Abdallah Al-yadum

- Nasserite Unionist Party—led by Abd al-Malik al-Makhlafi
- National Arab Socialist Ba’th Party—led by Dr. Qasim Salam
- Yemeni Socialist Party YSP—led by Yasin Said Nu’man
- Other Domestic Influential Groups: Former President Ali Abdallah Salih’s son and nephews dominate the military and security organizations and other relatives and close supporters hold a number of senior political and business positions.<sup>8</sup>
- International Organization and NGOs:<sup>9</sup> Some of the international organizations operating in Yemen include;
  - USAID: The organization has operated in Yemen for decades, closing offices in 1996 but later resuming work in 2003. The organization has worked to redress the volatility and instability in the country as well as redistribution of resources through formulation of sound policies to encourage development at all levels.<sup>10</sup>
  - Humanitarian Aid and Development Organization: This organization, of Sudanese origin, works to improve primary healthcare and facilitates the work of local poverty eradication programs.
  - RADDA BARNEN: This Swedish NGO started working in Yemen in 1963 to educate and sensitize the public on issues affecting children in Yemen.
  - Baptist Mission-Yemen: This U.S.-based NGO has worked in Yemen since 1964 and strives to promote healthcare and the provision of supplementary services alongside the government-provided healthcare services.
  - Islamic Worldwide: This NGO began operating in Yemen in 2004 to promote economic development among local communities.
  - Middle East Relief Cooperation (MERCYEMEN): This NGO focuses on improving healthcare service through training of local healthcare service providers.
  - IDDEALES: A French-supported NGO that aims to redress agricultural and environmental issues. It also partnered with Sana’a University to provide support to genetic research.
  - CHF International: Originating in the USA and operating since 2003 in providing capacity-building support as well as supporting democratization.
  - Friedrich-Ebert Siiftung: Originated in Germany and operating since 1999 to support the training of civil society groups in the country. It was responsible for establishing Sana’a University’s intranet.
  - Millennium: A U.S. group that produced a guidebook for tourists, trains special education teachers, establishes clinics for the financially disabled, and encourages community development.

## MILITARY VARIABLE MANIFESTATIONS IN YEMEN

- **Military Forces:** The number of servicemen in the Yemeni military stood at about 66,700 in 2006. The Yemeni army, a 60,000 man force, is largely a hollow force better suited to internal security purposes than warfare. Yemen has a 1,700-man navy, 3,000-3,500 men in the air force, and 1,500-2,000 in the air defense forces.<sup>11</sup>
  - **Military Service Age and Obligation:**
    - Voluntary military service program authorized in 2011
    - 18 years of age for compulsory and voluntary military service
    - 2-year conscript service obligation
  - **Manpower Available for Military Service:** (2010 estimate)
    - Total, 16-49: 8,173,839
    - Males, 16-49: 4,056,944
    - Females, 16-49: 4,116,895
  - **Personnel:**
    - Army: Approximately 60,000 personnel
      - Division headquarters: 2
      - Infantry brigades: 19
    - Air Force: 5,000, including Air Defense Forces
    - Navy: 1,700 plus 500 marines
    - Equipment and weapons table:<sup>12</sup>

ARMY					
Armored Equipment in Service		Artillery Systems in Service		Anti-Tank Weapons in Service	
T-72 Main Battle Tank	30	155mm M114 Howitzer, towed	10	Dragon Anti-Tank Guided Missile	150
T-72B Main Battle Tank	30	122mm M1938 (M-30) Howitzer, towed	50	BGM-71A TOW Anti-Tank Guided Missile	100
T-55 Main Battle Tank	123	105mm M101A1 Howitzer, towed	25	100mm M1944 Anti-Tank Gun	20
T-55AM2 Main Battle Tank	35	152mm D-20 Gun-Howitzer, towed	10		
T-34/85 Main Battle Tank	50	122mm D-30 Gun-Howitzer, towed	130		
T-54/55 Main Battle Tank	450	130mm M-46 Field Gun, towed	60		
T-62 Main Battle Tank	75	85mm D44 Field Gun, towed	92		
M60A1 Main Battle Tank	50	76mm M1942 Field Gun, towed	70		
AML-90 Armored Car	70	122mm BM21 Multiple Rocket Launcher	145		
AML-60-7 Armored Car	10	220mm Uragan Multiple Rocket Launcher	13		
Panhard M3	48				
BRDM-2 Scout Car	50				

BMP-1 Infantry Fighting Vehicle	45				
BMP-2 Infantry Fighting Vehicle	55				
M113/A1 Armored Personnel Carrier	60				
BTR-40 Armored Personnel Carrier	60				
BTR-60 Armored Personnel Carrier	100				
BTR-152 Armored Personnel Carrier	20				
AML Light Armored Vehicle	15				
<b>AIR FORCE</b>					
<b>Fixed Wing Aircraft in Service</b>		<b>Rotary Wing Aircraft in Service</b>		<b>Air Defense Weapons in Service</b>	
MiG-29SMT Multi Role Fighter	16	Mi-24 'Hind' Attack Helicopter	8	9K32/9K32M Strela-22/M (SA-7) MANPADS	100
MiG-21bis 'Fishbed-L' / MiG-21MF 'Fishbed J' Multi Role Fighter	30	Mi-8 'Hip' Assault Helicopter	10	9K31 Strela-1 (SA-9) Low-altitude Surface-to-Air Missile	12
F-5E Tiger II Multi Role Fighter	8	Mi-171 Assault Helicopter	10	S-75 Dvina (SA-2) Surface-to-Air Missile	20
Su-22M 'Fitter-J' Ground Attack/Strike Fighter	30	UH-1H Huey II Utility Helicopter	4	20mm M167 Vulcan Anti-Aircraft Gun, towed	50
An-12BP 'Cub' Transport	3	206B JetRanger Utility Helicopter	4	20mm M163 Vulcan Anti-Aircraft Gun	20
An-24RV 'Coke' Transport (operated with civil markings)	1	Ka-27 'Helix-A' Utility Helicopter	1	ZSU-23-4 Self-Propelled Anti-Aircraft Gun	30
An-26 'Curl' Transport	8	Ka-28 'Helix-D' Utility Helicopter	1		
Il-76TD 'Candid' Transport (operated with civil markings)	1	204B Utility Helicopter	2		
C-130H Hercules Transport (operated with civil markings)	2	212 Utility Helicopter	6		
F-5B Trainer	2				
L-39C Albatros Trainer	25				
Z 242 L Trainer	10				
MiG-21 'Mongol' Trainer	10				
Su-22UM3 'Fitter-G'	8				
<b>NAVY</b>					
<b>Vessels in Service</b>					
32 meter Halter Marine Broadsword patrol craft	3				
11 meter Sea Spirit patrol craft	13				
Austal Patrol Ships	10				
Patrol craft	43 (includes 4 Kakpa/PB 57 class)				
Baklan Class	6				
Deba Class	3				

NS-722 Class	1				
Natya Class	1				
Yevgenya Class	5				

- Government Paramilitary Forces: Yemen has a paramilitary force of 50,000 Ministry of Interior personnel, with a reserve of 20,000 tribal levies available. Their major role is maintenance of law and order within the country.<sup>13</sup>
- Non-State Paramilitary Forces: Various militia and armed factions occupy areas of the capital, Sana'a. A number of insurgent and terrorist groups exist in Yemen, including Gama'a al-Islamiya, Yemeni Islamic Jihad, Aden-Abyan Islamic Army (AAIA), Ansar al-Sharia, Liwa al-Tawhid, and al-Qaeda in the Arabian Peninsula (AQAP).<sup>14</sup>
- Nonmilitary Armed Combatants: Various armed but not necessarily paramilitary groups are present in Yemen. These include the Houthis, a Zaydi Shia group in northern Yemen, and numerous tribal groups led by sheikhs. There are approximately three firearms for every person in Yemen.<sup>15</sup>
- Military Functions:
  - Mission Command: Major General Ahmed Ali Al-Ashwal, army chief of staff, is working in tandem with the transition government to reform the army into a unified command that is controlled professionally in execution of duties during operations.<sup>16</sup> There are factions in the army controlled by Ahmed Ali in the Republican Guard and General Ali Mohsin who controls the First Armored Division.<sup>17</sup> AQAP leadership is frequently evolving. Many AQAP leaders have been killed but there appears to be no shortage of leadership, with new leaders appearing frequently.<sup>18</sup> Abdul Malik al Houthi leads the Houthi.
  - Maneuver: The army has eight armored brigades 16 infantry brigades, 6 mechanized brigades, 2 airborne and commando brigades, 1 Special Forces brigade, and a central guard force. The Yemeni military shows little interest in combined arms and joint warfare training and exercises.<sup>19</sup> Non government armed groups are limited to light infantry capabilities. Details as to the number of personnel available to specific groups are unknown.
  - INFOWAR (Information Warfare): The Yemeni military is not well versed in INFOWAR practices. AQAP, however, demonstrates a robust INFOWAR capability. Shortly after a suicide bombing that killed more than 100 Yemeni soldiers and wounded over 200 more on 22 May 2012, AQAP affiliate Ansar al-Sharia claimed responsibility in a statement posted on jihadist websites.<sup>20</sup>
  - RISTA (Reconnaissance, Intelligence, Surveillance, and Target Acquisition): Yemen's National Security Bureau, run by Saleh's nephew, Ammar, benefits from intelligence sharing with the U.S.<sup>21</sup> The Political Security Organization (PSO) is used for

counterintelligence, counter espionage, and also for gathering intelligence on threats against Yemen's government. Its main purpose is to protect Yemen's political elite.<sup>22</sup> Yemen's RISTA is focused on internal security. The extent of non state actors' RISTA capabilities is unknown but terrorist and opposition groups demonstrate the ability to effectively target government forces.

- Fire Support: The army has three artillery brigades with some 1,153 artillery weapons, mostly towed guns without modern fire control systems, artillery radars, and other support equipment, as of 2006.<sup>23</sup> Non state actors are not known to have fire support capability other than mortars.
- Logistics: Yemen's military has an adequate level of logistical support. Non state actors have limited logistics capabilities and the extent of these capabilities is unknown. Houthi rebels in northern Yemen may receive limited logistical support from Iran, in the form of weapons.<sup>24</sup>

## ECONOMIC VARIABLE MANIFESTATIONS IN YEMEN

Yemen's economy is based in the petroleum industry, accounting for 25% of GDP and 70% of government revenue.<sup>25</sup>

- Unemployment Rate: estimated at 35% as of 2003<sup>26</sup>
- Inflation: estimated at 20% in 2011<sup>27</sup>
- Participation in Global Financial System: Yemen is engaged in multilateral and bilateral trade with other countries. In 2010, Yemen's major export partners were:
 

○ China 34%	○ South Africa 5.7%
○ India 23%	○ Japan 5.3%
○ Thailand 6.6%	○ UAE 4.8% <sup>28</sup>
- In 2010, Yemen's most significant imports were from:
 

○ UAE 13.5%	○ Kuwait 4.7%
○ China 12.2%	○ France 4.3%
○ India 8.9%	○ Brazil 4.1% <sup>29</sup>
○ Saudi Arabia 6.4%	
- Economic Activity: 2011 share of GDP:
 

○ service industry 50.1%,
○ industrial sector at 41.6%
○ agriculture 8.3% <sup>30</sup>
- Economic Diversity: Yemen relies on oil extraction, the service industry, and small scale agriculture.

- Banking and Finance: The Central Bank of Yemen is an independent body with the objective of conducting monetary policy to control inflation, stabilize the exchange rate of the national currency, and promote investment and economic growth. In 2011, the country's commercial banks average lending rate was 27%. The country had a \$3.599 billion stock of narrow money and a \$9.502 billion stock of broad money as of 31 December 2011.<sup>31</sup>
- Illegal Economic Activity: Political and economic instability contributes to a number of illegal economic activities.
  - Black Market: Terrorism activities and insurgency in Yemen provide an ideal environment for black market activity, especially arms smuggling. Poverty also provides impetus for widespread smuggling of food stuffs into the country.<sup>32</sup>
  - Theft/Looting: The general state of instability leads to widespread theft and contributes to looting when the opportunity arises.
  - Gang/ Organized Crime: Terror groups engage in organized criminal activities including human trafficking as well as weapons trafficking.
  - Trafficking: Yemen is a country of origin as well as a transit and destination country for women and children subjected to forced labor and forced prostitution. Government and NGOs estimate there are hundreds of thousands of children in forced labor in Yemen.<sup>33</sup>
  - Kidnapping: Insurgents and other groups have kidnapped Yemenis and foreigners in the country on numerous occasions.

## SOCIAL VARIABLE MANIFESTATIONS IN YEMEN

- Population: Estimated at 24,771,809 by July 2012<sup>34</sup>
- Population Growth Rate: Estimated at 2.575% in 2012<sup>35</sup>
- Literacy Rate:
  - 50.2% of Yemenis above the age of 15 can read and write
  - Male literacy rate 70.5%
  - Female literacy rate 30%<sup>36</sup>
- Population Movement: The net migration rate for 2012 is estimated at zero.<sup>37</sup>
- Population Distribution: A minority of the population, 32%, resided in urban areas as of 2010.<sup>38</sup>
- Demographic Mix:
  - Under age 14
    - Male 50.9%
    - Female 49.1%
  - Age 15-64
    - Male 50.7%
    - Female 49.3%



- Only 2.6% of the total population is age 65 and above.<sup>39</sup>
- Social Volatility: Social volatility is high. The government is not in control of many areas of the country.<sup>40</sup> Animosity between the north and south is omnipresent. Rivalry between Sunni and Shia factions contributes to social volatility. Poverty, high food prices, and insecurity are additional catalysts for unrest.
- Education Level: basic education net enrollment rates as of 2008—
  - Male 82.3%
  - Females 67.9%<sup>41</sup>
- Ethnic Diversity: The Yemeni population is dominated by Arabs, while smaller ethnic groups include Afro-Arabs, Asians, and some Europeans.
- Religious Diversity: Islam is the major religion with Shaf'i (Sunni) and Zaydi (Shia) denominations, alongside minority religions including Judaism, Christianity, and Hinduism.
- Common Languages: Arabic is the official language. Russian is used on a very small scale in Sana'a and Aden.
- Criminal Activities: The level of criminal activity is high due to poverty, porous borders, and the presence of terrorist groups in the country.
- Human Rights: There are widespread human rights abuses committed by security forces, tribal militias, and terrorist groups in Yemen,. Security forces arbitrarily detained dozens of demonstrators and perceived opponents of former president Ali Abdullah Saleh when anti-government protests began in February 2011.<sup>42</sup>
- Centers of Social Power: The authority of tribal sheiks often outweighs that of state institutions.<sup>43</sup>
- Dress: The majority of the Arab population wears traditional Arabic clothing.
- Social tensions: Tension exists between the South and North, pre-dating their unification in 1990. Persistent insecurity, economic stagnation, and high food prices also contribute to tensions.<sup>44</sup>
- Major diseases:
 

<ul style="list-style-type: none"> <li>○ Diarrheal diseases</li> <li>○ hepatitis</li> <li>○ dengue fever</li> <li>○ malaria</li> </ul>	<ul style="list-style-type: none"> <li>○ schistosomiasis</li> <li>○ typhoid</li> <li>○ HIV prevalence rate estimated at 0.1% in 2001<sup>45</sup></li> </ul>
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- Hospitals: The hospital and health services are in a dire state, with over 1,000 people for every hospital bed in the country as of 2009. Few Yemenis have access to quality medical care.<sup>46</sup>
- Cultural Do and Don't List: Men are not allowed to associate with females who are not related to them. Guests are not supposed take tea or coffee beyond three cups. Shoes are not worn into a house or mosque.<sup>47</sup>

- Taboos: It is a taboo to use words that refer to private body parts, to blaspheme, discuss politics, to speak the first names of female family members in the presence of a stranger, or to speak of gifts you have given to others.<sup>48</sup>

## INFRASTRUCTURE VARIABLE MANIFESTATIONS IN YEMEN

- Town Construction Pattern: The ancient capital city of Sana'a exhibits densely-packed, random construction with narrow winding streets that in most cases begin from administrative and religious buildings.<sup>49</sup> Yemen's other cities are similar in construction pattern.
- Residential Construction: Homes are characterized by open spaces. There are separate staircases for men and women and room entrances hidden behind partitions. Cushions are placed along the walls for sitting, and sleeping mattresses are put away during the day. Floors are covered with palm leaf matting or rugs. Rather than utilizing cabinets, the walls typically have spaces cut away for storage. Most houses in metropolitan areas and modern suburbs are made from brick or concrete brick.<sup>50</sup>
- Construction Materials: Construction materials vary. In the desert, houses are built from stamped clay and sun-dried mud bricks. Natural stone is used in Mahra and on Socotra. Hewn stone is used in the central mountains while stone, stamped clay, and burned brick are used in the highlands. In northern Tihama, timber and straw are used in villages and shell lime is more common in towns. In southern Tihama, timber and brick are used. Stamped clay and sun-dried mud bricks are used in Hadhramaut, whose multistory "skyscrapers" in Shibam are said to be the tallest mud-brick constructions in the world.<sup>51</sup> Construction in the older areas of Sana'a is predominantly baked bricks and gypsum.<sup>52</sup>
- Urban Zones: Informal settlements in urban areas are characterized by poor access to basic infrastructure and services like water and sewer, garbage collection, and street lighting. Nearly 70% of the total residential built-up area of Taiz is informal settlements.<sup>53</sup> Sana'a was closed to outsiders for two centuries until the end of the Yemeni civil war in 1969. The population increased rapidly and the old city could not support the expansion. As a result, the old city is mostly inhabited by the poor.<sup>54</sup>
- Major Cities:
 

○ Sana'a (capital)	○ Hudaydah
○ Aden	○ Mukalla
○ Taiz	○ Ibb
- Roads: The total road network is about 71,300 km with only 6,200 km paved and the rest being unpaved with most of them being one lane. Rural roads are predominantly dirt with towns having most of the tarmac roads.<sup>55</sup>
- Railroads: Yemen does not have a railroad network.

- Airports:
  - Paved Runways total: 17
    - over 3,047 meters: 4
    - 2,438 to 3,047 meters: 9
    - 1,524 to 2,437 meters: 3
    - 914 to 1,523 meters: 1 (2010)
  - Unpaved runways total: 38
    - over 3,047 meters: 3
    - 2,438 to 3,047 meters: 5
    - 1,524 to 2,437 meters: 6
    - 914 to 1,523 meters: 14
    - under 914 meters: 10 (2010)<sup>56</sup>
- Telecommunication Architecture: Yemen's telephone landlines connect about 1.046 million people while its mobile network connects about 11.085 million people. The national network consists of microwave radio relay, cable, tropospheric scatter, GSM and CDMA mobile-cellular telephone systems. The international telephone code is 967. It is linked to the international submarine cable Fiber-Optic Link Around the Globe (FLAG). Yemen has 3 Intelsat (2 Indian Ocean and 1 Atlantic Ocean), 1 Intersputnik (Atlantic Ocean region), and 2 Arabsat satellite earth stations and has microwave radio relay to Saudi Arabia and Djibouti.<sup>57</sup>
- Utilities: In urban areas, 72% of the population enjoys access to improved drinking water sources and 94% have access to improved sanitation facilities. In rural areas, 57% of the population has access to improved drinking water sources while a mere 33% have access to improved sanitation facilities.<sup>58</sup> The entire Yemeni power grid has an electrical generation capacity of only 900MW. An estimated 30-40% of the population is connected to the grid. Assuming that 40% of the population is connected, the Yemeni power grid can provide only 4.2MWhr of electricity to each household annually, which is less than half of amount used in any region of the United States. The power grid is severely strained as this limited capacity must meet not only residential needs, but also the demands of the commercial, industrial, and agricultural sectors.<sup>59</sup>
- Key Industries: Oil production is Yemen's key industry, contributing about 25% to the country's GDP and 70% of government revenue. Additional industry includes:
  - small-scale production of cotton textiles and leather goods
  - food processing
  - handicrafts
  - small aluminum products manufacturing
  - cement
  - commercial ship repair
  - natural gas production<sup>60</sup>
- Environmental Concerns: Water is the most pressing of Yemen's environmental needs. Some models predict Sana'a will run out of water within 20 years. As much as 90% of Yemen's annual freshwater use is for agricultural purposes. Thus, a shortage of water results in a shortage of food. Pollution is a significant problem as well.<sup>61</sup>

- Ports:
  - Aden
  - Al Hudaydah
  - Al Mukalla<sup>62</sup>
- Agriculture: Yemen has less than 3% arable land.<sup>63</sup> Most Yemeni farmers raise some poultry and livestock, typically chickens, goats, sheep, or cattle. Yemen imports much of its livestock and dairy and poultry products.<sup>64</sup> The most common crops are:
 

○ millet	○ papayas
○ corn (maize)	○ citrus
○ wheat	○ pears
○ barley	○ peaches
○ sorghum	○ apples
○ mangoes	○ grapes
○ plantains	○ coffee and khat in northern highlands
○ bananas	
○ melons	
- Pollution: Yemen suffers from air pollution attributed motor vehicle exhaust, electrical power stations, stones crushers and cutters, red bricks bakeries, and the burning of garbage.<sup>65</sup>

## INFORMATION VARIABLE MANIFESTATIONS IN YEMEN

- Internet Service Providers: Yemen is serviced by two ISPs: YemenNet, a service of the government's Public Telecommunication Corporation (PTC), and TeleYemen's Y.Net, that is part of the government's PTC but is managed by FranceTelecom.<sup>66</sup>
- Flow of Information across Information Environment: The Arab Advisors Group's 2008 annual report rated Yemen as one of the Arab world's lowest adopters of telecommunication services.<sup>67</sup> Television and radio are state controlled. Word of mouth is the most prevalent means of conveying information.
- Newspapers: The state funds some newspapers, such as Al-Thawra and Al-Jomhoriya.<sup>68</sup> Private newspapers are shut down if perceived as subversive.
- TV Stations: There are 2 national, state-run television stations. The law does not permit private broadcasting within Yemen but there are ten private stations competing for Yemeni viewers.<sup>69</sup>
- Radio Stations: State-run Republic of Yemen Radio broadcasts in all major cities.<sup>70</sup>
- Internet Access: Only 1.8% of the population had Internet access as of July 2010.<sup>71</sup>
- Telecommunications:
  - landlines 1.046 million
  - mobile network 11.085 million<sup>72</sup>

- Postal Service: Yemen has a postal network serving both urban and rural areas.
- INFOWAR
  - Electronic Warfare: The Yemeni military's electronic warfare capabilities are obsolete.<sup>73</sup>
  - Computer Attack: Yemen's information infrastructure is largely susceptible to cyber attacks. AQAP likely has the ability to conduct cyber attacks.
  - Information Attack: In 2011 the hacker group Anonymous attacked Yemen's computer network and downloaded information.<sup>74</sup> AQAP likely has the ability to conduct information attacks.
  - Deception: Yemen lacks sophistication in the area of deception operations.
  - Physical Destruction: Yemen lacks skill in synchronizing kinetic operations with information operations. AQAP is adept at synchronizing kinetic and information operations. Responsibility for attacks is claimed by AQAP very shortly after they occur.
  - Protection and Security Measures: Security forces conduct constant surveillance of perceived threats to the government.
- Intelligence:
  - HUMINT (Human Intelligence): It is presumed that Yemen conducts human intelligence operations but details are not available. AQAP is presumed to conduct HUMINT operations but details regarding the effectiveness and extent of their capabilities are not available. Other actors in Yemen would likely emphasize HUMINT collection as they lack the capability in other intelligence disciplines, with the exception of OSINT.
  - OSINT (Open Source Intelligence): Security forces monitor open source information for potential intelligence. AQAP and other groups are presumed to exploit OSINT.
  - SIGINT (Signals Intelligence): Details on Yemen's signals intelligence capabilities are not available. Given the country's dearth of modern military technology, Yemen's SIGINT capabilities are likely to be minimal. The SIGINT capabilities of non-state actors in Yemen are likely to be limited to such unsophisticated means as interception of un-encoded radio transmissions.
  - IMINT (Imagery Intelligence): Yemen's IMINT collection capabilities are limited. Non state actors do not possess IMINT collection assets but may utilize publicly available resources such as Google earth.
  - MASINT (Measures and Signals Intelligence): Yemen is lacking in measures and signature intelligence collection capabilities. Non state actors likewise do not possess MASINT collection platforms.

## PHYSICAL ENVIRONMENT VARIABLE MANIFESTATIONS IN YEMEN

- Boundaries: Yemen is bordered by Saudi Arabia to the north, Oman to the East, the Gulf of Aden to the southwest, and Arabian Sea to the southeast. There are islands near the Saudi-Yemen border and coastal plains in the southeast.
- Border Disputes: Yemen and Saudi Arabia have disputed their border for decades. There are on and off clashes along the border between Sunnis and Shiites.
- Bodies of water: Major bodies of water surrounding Yemen include:
  - Gulf of Aden
  - Arabian Sea
  - Red Sea
- Terrain: Narrow coastal plain backed by flat-topped hills and rugged mountains; dissected upland desert plains in the center slope into the desert interior of the Arabian Peninsula
- Climate: Yemen is predominantly hot and dry throughout the year but humid along the southwestern coasts.
- Rivers: Yemen has no permanent rivers.
- Natural Disasters: Yemen is subject to sandstorms, flooding, and a limited exposure to volcanic activities.
- Natural Resources: Yemen has—
  - large deposits of oil in the south
  - considerable quantities of rock, salt, and marble
  - small quantities of gold, lead, and nickel

## TIME VARIABLE MANIFESTATIONS IN YEMEN

- View of Time: The Yemeni culture is unconcerned with adherence to strict time schedules. In the urban areas, people are more likely to understand the Western emphasis on time.
- Work Day Length: Work day hours vary by profession. The official work week is seven hours per day, Sunday-Thursday.
- Key Holidays: 2013—

**1 Jan** New Year's Day

**24 Jan** Milad un Nabi (Birth of the Prophet Muhammad)

**30 Apr** Labor Day

**21 May** Unity Day

**7 Aug** Eid al-Fitr (End of Ramadan)

**25 Sep** September Revolution Day

**13 Oct** Revolution Day

**14 Oct** Eid al-Adha (Feast of the Sacrifice)

**4 Nov** Islamic New Year

**30 Nov** Independence Day

- <sup>1</sup> The World Factbook, "[Introduction: Yemen](#)," CIA, 26 April 2012 (accessed 08 May 2012).
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