Most residents of high-income countries have access to high levels of water and sanitation service. Yet even in these countries pockets of people—often those who are traditionally discriminated against, vulnerable or marginalized—lack access to similar levels of service. This issue of the Digest highlights three such examples: the Roma in Europe, racial minorities in the United States, and indigenous people in Canada. Our goal is not to suggest that these are the only places where these problems exist but to use these examples to highlight some of the issues and challenges associated with addressing these underserved minority groups. If we are to reach the SDG targets of universal access, it is imperative to reach all, even the most marginalized. These cases reinforce a central message of the SDGs: that all countries, developed and developing alike, have an obligation to take action to meet them, and ensure no one is left behind.

**Roma communities in Europe**

The Roma are a heterogeneous ethnic group originating in Northern India, who migrated to Europe from the 11th century, where they now form the largest ethnic minority (numbering about 11 million, 1.35% of the total population of Europe). Their history has been shaped by discrimination, slavery and persecution, including the internment and murder of hundreds of thousands during the Holocaust (Parekh and Rose, 2011). The Roma population is generally poor, living in crowded and low quality housing in segregated communities on the outskirts of European cities (Koupilová et al., 2001). Housing is dilapidated and often lacks basic physical infrastructure, including adequate water and sanitation (Davis and Ryan, 2017; Filčák et al., 2018).

Many Roma settlements are located near industrial zones, waste disposal sites or agricultural cooperatives (Filčák et al., 2018; Rosa, 2019). The absence of adequate water and sanitation combined with accumulated waste, stray animals, rodents and insects exposes residents to environmental and fecal contamination (Chaudhuri, 2017), especially during the rainy autumn. As a consequence, WaSH-related infectious diseases such as diarrhea, hepatitis, scabies and tuberculosis are more prevalent among the Roma (Koupilová et al., 2001; Parekh and Rose, 2011).

Despite living in countries with high water and sanitation coverage, the Roma are underserved. While over 98% of the population of Slovakia has access to piped water on premises (inside their dwelling, plot or yard) (UNICEF and WHO, 2019), the majority of Roma neighborhoods are not connected to piped water sources, forcing the inhabitants to spend significant amounts of time fetching water from public taps or unsafe sources (Filčák et al., 2018). In France, where 100% of the general population is reported to have piped water on premises (UNICEF and WHO, 2019), 77% of informal Roma settlement sites lack access to potable water—and where piped systems exist, entire settlements may have to share one tap. Water access is typically insufficient for all residents, restricted to a few hours per day and inaccessible during the night (Rosa, 2019). In an informal Roma settlement in Paris, water is accessible only from a fire hydrant 1 km away (Chaudhuri, 2017). Roma cope by using public fountains for personal hygiene and laundry, but such practices are prohibited and create conflicts with authorities (Filčák et al., 2018; Rosa, 2019).

Sanitation facilities are scarce or absent in most Roma settlements (Davis and Ryan, 2017). Open defecation near rivers is considered an alternative where toilets are absent, especially for men (Filčák et al., 2018; Rosa, 2019). In a Roma settlement in Paris, open defecation is reported as a common practice (Chaudhuri, 2017).

### Key Policy and Programmatic Takeaways

- High levels of water supply and sanitation coverage at national level in otherwise wealthy countries can mask significant inequalities among marginalized and vulnerable minority groups.
- Governments must develop specialized approaches to both identify those left unserved and to track progress in reaching them.
- It is important to identify the underlying reasons for marginalization and address these at the same time as increasing coverage.
In Sweden, Roma use public toilets, which may be far away and costly ($1 per use) (Davis and Ryan, 2017). In Italy, Roma use unsafe, cold, dirty and costly public showers ($2 per use) (Rosa, 2019).

Flat rate water charges and unaffordable connection fees have left Roma heavily indebted in Slovakia. If piped networks are damaged, residents must pay for repairs or be disconnected from the supply (Filčák et al., 2018). Illegal connections to supply systems are common in Italy and France (Rosa, 2019).

The responsibility for ensuring access to WaSH in Roma settlements is often unclear or ignored. In fact, municipalities across Europe frequently use poor WaSH conditions to justify evicting Roma communities (Filčák et al., 2018; Parekh and Rose, 2011). For instance, most evictions of Roma from municipal land initiated by municipalities in Sweden between 2013 and 2016 were made on the grounds of sanitation hazards, littering and disease risk. Such evictions violate obligations under European and international human rights law (Davis and Ryan, 2017) and ignore the recommendation of the Council of the European Union (2013) that member states “take effective measures to ensure equal treatment of Roma,” including “access to public utilities.”

Epidemiological studies of Roma suffer from poor methodology (absence of control groups, unrepresentative samples) combined with logistical obstacles to data collection; keeping ethnically segregated records is prohibited in many countries (Davis and Ryan, 2017). Conducting research on a population that is culturally different from the majority, with strongly held and distinctive beliefs, can be challenging (Koupilová et al., 2001; Rosa, 2019), and the difficulties are compounded by the Roma’s social history of distrust toward authorities. These factors have led to a relative paucity of data, published literature and understanding of the needs of Roma, which impedes research, interventions and advocacy (Chaudhuri, 2017; Parekh and Rose, 2011).

Despite these challenges, several European countries are undertaking initiatives to equip Roma settlements with chemical toilets, shower blocks and mobile health care services, or to repurpose existing water connections to serve informal settlements (Rosa, 2019). However, these measures provide temporary rather than permanent solutions. Koupilová et al. (2001) point out that an improved understanding will be obtained only with great sensitivity and only if purely “top-down” approaches are abandoned. The success of interventions depends on buy-in from decision makers and good relations between natural leaders of Roma communities and “outsiders” (Chaudhuri, 2017). Any activity will critically depend on the involvement, support, commitment and participation of the Roma community (Davis and Ryan, 2017).

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Racial minorities in the United States

As of 2017, more than 99 percent of U.S. residents used a source of water that was free from contamination and located on their premises (UNICEF and WHO, 2019). A recent Infrastructure Report Card from the American Society of Civil Engineers (2017) reflects a prevailing view in the United States: “Drinking water quality in the United States remains the safest in the world.” Yet the literature shows that minority neighborhoods in peri-urban pockets around the country still lack reliable access to clean water, despite being surrounded by modern municipal infrastructure. In an article for the UCLA Law Review, Anderson (2008) writes: “On patches of unincorporated land at the municipal fringe, low-wage workers live without water or sewage lines, sidewalks or paved roads, drainage or flood control… communities rely on rural–character services in urbanized areas built on environmentally damaged or disaster-vulnerable land.” These communities are referred to by the author as “racially obvious;” she writes that “every community I found that qualified as an unincorporated urban area was predominantly African American or Latino.”

For instance, in Zanesville, Ohio, a municipal water system built in 1954 excluded the adjoining Coal Run African American neighborhood (Joyner et al., 2013). The water line stopped at the last house occupied by a white family. Families in the Coal Run neighborhood had to haul water and collect rainwater to meet their needs. Relying on well water was not possible because the underlying aquifer was heavily contaminated by acid mine drainage. In the half-century after the municipal system was installed, water lines were extended into white communities well beyond Coal Run, but Coal Run remained unserved despite numerous requests to be connected to the city system. City water service was extended only when the Ohio Civil Rights Commission filed a lawsuit on the community’s behalf in 2008. Another example is Tooleville, a community of Latino farm-workers in California’s Central Valley excluded from water and sewer service available in the adjacent town of Exeter. Water is supplied by two wells contaminated with nitrates and arsenic from agricultural runoff and with bacteria from failing septic systems (Brown, 2012; Ranganathan and Balazs, 2015). Residents have petitioned for connections to Exeter’s water and sewer systems for years without success, even as Exeter has extended services to newer suburbs, bypassing Tooleville.

In a constellation of historically African American communities scattered throughout Wake County, North Carolina, residents rely on backyard wells and septic systems despite being encircled by municipal utility lines (MacDonald Gibson et al., 2014). Wake is the wealthiest county in the state, with a median household income in 2017 of $74,000 (U.S. Census Bureau, 2019), and home to the state capital. A high prevalence of bacterial contaminants and lead has been documented in the tap water in households in peri-urban African American neighborhoods lacking connections to municipal water lines. Sixty-five percent of homes tested for water quality contained at least one bacterial indicator organism (total coliforms, *E. coli* and/or enterococci) (Stillo and MacDonald Gibson, 2017), and 28% contained lead concentrations that exceeded the U.S. Environmental Protection Agency’s 15–ppb action level (Stillo and MacDonald Gibson, 2018). African American communities in peri-urban Wake County are significantly less likely than majority white communities to receive municipal water.
service. “In some cases, municipal boundaries bypass African American neighborhoods at the edge of town, extending to more distant communities that are not adjacent to town borders” (MacDonald Gibson et al., 2014). In some of these communities, wells are running dry, and residents lack enough water for daily activities such as taking showers and doing laundry.

In all these cases, communities were excluded from municipal services during an era in which their neighbors received the benefit of major federal and state investments in water infrastructure. However, bylaws of municipal utilities typically preclude them from connecting new customers by increasing the rates of current customers, and instead, the new customers are expected to bear the costs, essentially penalizing them for being the victims of prior discriminatory zoning practices (Anderson, 2010; Aiken, 1987).

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### Indigenous people in Canada

In 1763, a Royal Proclamation issued by King George III of England ordered that indigenous people in what is now Canada were not to be “molested or disturbed” on their lands, which were to be acquired only by fair dealing via treaty or purchase by the Crown. But the British North America Act of 1867, Canada’s constitution until 1982, made these lands subject to government regulation. The Indian Act of 1876 established reserves as tracts of land to which the “Crown”—now the Canadian federal government—has legal title and which are set apart for the collective use and benefit of a group of indigenous people. However, the people the Act applied to did not actively choose where their reserve communities were located. “Sometimes, they were set up near waterways and included fertile lands, but often this was not the case. Aboriginal peoples found themselves in poor land areas that were widely unsustainable… Reserves were designed to protect Aboriginal people and preserve their ways, but operated instead to isolate and impoverish them” (Royal Commission on Aboriginal Peoples, 1996). Many indigenous people ended up on land with poor water supply after settlers took better locations (White et al., 2012).

This history has given rise to significant inequality in access to safe water between indigenous Canadians living on reserves and remote settlements and the rest of the Canadian population. At the time of the 2016 Canadian census, more than 1.5 million people, almost 5% of the Canadian population, identified as indigenous and 300,000 lived on a reserve (Statistics Canada, 2017). For all others in the country, water and wastewater are the responsibility of provincial and territorial governments, services are delivered by municipalities, and drinking water quality is strictly governed by provincial and territorial laws and regulations. On reserves, however, the federal government has considerable authority over water and wastewater, as it funds all capital costs and a portion of operation and maintenance costs. In theory, chiefs and councils are responsible for providing services on reserves. “Their power to govern, however, is significantly limited by the far-reaching role of the federal government instituted by the antiquated and discriminatory Indian Act” (Human Rights Watch, 2016). White et al. (2016) conclude that “given reserve locations and the lack of human and physical capital… communities face difficulties raising the funds to support the operation and maintenance of their water systems. They are also much more likely to find little depth of expertise in terms of managing water safety systems.”

While 98% of the Canadian population used safely-managed drinking water in 2017 (UNICEF and WHO, 2019), access is significantly lower on reserves. The metric most often used to assess this situation is the presence and duration of “drinking water advisories” on reserves. These are public health protection notifications about real or potential health risks related to drinking water, issued by the local band council that governs a reserve, on the advice of public health officials. The Government of Canada reports that as of November 2015, 105 drinking water advisories for public water systems on reserves had been in place for more than a year (Indigenous Services Canada, 2019). Many of these advisories had been in place for more than a decade. Human Rights Watch (2016) reports that of the 90 drinking water advisories in place in 2015 in indigenous communities in the Canadian province of Ontario, 68% had been in place for more than five years and 36% percent more than 10 years. “The daily hardship of living under a water advisory for years means that some people become frustrated and drink it without boiling or otherwise treating it—risking exposure to contaminants. Others use tainted water for bathing or for household tasks, such as washing dishes or clothes. Some avoid the water at all costs, but do not have sufficient safe water to meet their daily needs” (Human Rights Watch, 2016).

Research among communities of indigenous Inuk Canadians in Labrador reveals that many residents fetch drinking water from dispensing units some distance from their homes and store water in containers; this water is often contaminated (Wright et al., 2018) and also represents a burden in terms of collection. Residents suffer back and shoulder injuries from carrying buckets of water and mental stress due to water insecurity (Sarkar et al., 2015; Hanrahan and Mercer, 2019). These studies also reveal a higher level of water-related disease, including acute gastrointestinal illness as well as skin diseases (Wright et al., 2018).

In 2016, the Government of Canada committed to end all long-term drinking water advisories on public systems on reserves by March 2021 and allocated over $2.5 billion to achieve this. As of October 2019, the number of long-term drinking water advisories had dropped to 57 and was projected to reach 42 by the end of the year. The government has set up a public website to track progress (Indigenous Services Canada, 2019).

However, indigenous leaders have raised consistent concerns about the lack of consultation (Human Rights Watch, 2016). The Assembly of First Nations, an advocacy organization, indicates that “the lack of adequate capital resources, need for training and development of management capacity… the shortfall in operating funding, and the lack of adequate on-going consultation at the local, regional, and national level…” must be
addressed (White et al., 2012). Human Rights Watch concludes “Canada has an obligation to act to eliminate discrimination in law and fact, and ensure adequate safe drinking water and sanitation on reserves. While there is no dispute that the government has invested money to address this issue… the federal government has failed to address factors that contribute to this crisis” (Human Rights Watch, 2016).

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References


