

Core-Periphery Conceptualizations: Examining Sanitation as a Representation of Urban-Rural Disparities in Malaysia and India

Lyla Saxena

Abstract

This article explores urban-rural disparities in water and sanitation in Malaysia and India. Water and sanitation-related practices covered in this article include open defecation and use of basic drinking water services. While both countries have made efforts to improve access to water and sanitation, urban-rural disparities persist. While India has implemented programs that specifically prioritize the provision of water and sanitation to rural communities, Malaysia continues to focus its efforts equally on its entire population. Recently, water and sanitation responses in India appear more organized and focused than in Malaysia, though Malaysia had started much earlier with prioritizing water and sanitation issues. Moving forward, the water and sanitation efforts of Malaysia and India should prioritize the needs of their marginalized communities, which at least in India, are disproportionately concentrated in rural areas.

I. Introduction

Despite impressive improvements in the water and sanitation sector, including greater access to water and better hygiene practices over the past decade, there is much to be done in areas that have seen slower progress.¹ More than 2 billion people, representing over one-fourth of the world's population, do not have access to basic sanitation services, with nine out of ten of these people living in Sub-Saharan Africa, Southeast Asia, and Central and Southern Asia.² By 2030, 40 countries are expected to achieve “nearly universal” access to basic sanitation services, yet progress is slower in rural areas and among the poorest quintile of the population.³ Many people still experience poor sanitation even though improving sanitation and access to basic sanitation services is central in efforts to end extreme poverty.⁴

¹ United Nations Children's Fund (UNICEF) South Asia (2016).

² United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2019, p. 32.

³ United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2019, p. 35.

⁴ United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2019, pp. 14, 24.

This article examines the state of water and sanitation in Malaysia and India, with focusing specifically on how sanitation is different between urban and rural areas. In this article, water and sanitation includes the use of basic sanitation services, practice of open defecation, and the use of basic drinking water services. In South and Southeast Asia, water and sanitation is considered of poorer quality than in Western countries, a characterization that falls under typical development discourse which uses “the West” as a gold-standard for development. For example, with over 600 million people practicing open defecation, South Asia houses the majority of the world’s open defecators and in Southeast Asia, sanitation is rarely prioritized by national governments with tight budgets.⁵ As this article will show, Malaysia has seen greater improvements in sanitation and water access than India. This article argues that water and sanitation represent urban-rural disparities in each Malaysia and India.

Following this introduction (Section I), Section II briefly reviews existing literature about water and sanitation in Malaysia and India. Section III then details the socioeconomic background of each country, in terms of their GDP per capita, life expectancy at birth, and adult literacy rate over time. Section IV analyzes the evolution of water and sanitation in each country using an urban-rural lens and also analyzes related dimensions of water and sanitation. Section V outlines current water and sanitation responses in each country and international agreements on sanitation and water. Additionally, Section V also introduces ethical concepts and frameworks on water and sanitation while applying them to the current efforts of Malaysia and India. Section VI highlights the findings of this article while offering possible next steps for continuing to improve access to water and sanitation.

II. Literature Review

Literature on poor water and sanitation provision and usage in both Malaysia in India has increased over the past two decades following the adoption of the Millennium Development Goals in 2000 and the Sustainable Development Goals in 2015, both of which include basic sanitation and safe drinking water for all. Tiwari (2020), De (2018), and Nagla (2020) focus on India, while Aini, Fakhurul-Razi, Mumtazah and Chen (2007) and Ahmed, Siwar and Begum (2014) focus on Malaysia. In each article, the authors describe the general state of water and sanitation and explore specific dimensions of water sanitation in the country of focus, in addition to providing recommendations for how each country can move forward to solve issues such as open defecation and excessive water use, among others.

- Tiwari (2020) discusses how improved sanitation in India’s urban areas has occurred simultaneously with efforts to promote sustainable development. More specifically, Tiwari (2020) highlights three dimensions of urban sanitation: open defecation, fecal sludge discharge, and wastewater. He argues that improved sanitation, in addition to social and economic development, leads to better health outcomes in developing countries such as India. Moving forward, efforts in urban sanitation by the Government of India’s Ministry of Housing and Urban Affairs must focus on maintaining current sanitation progress through an enabling environment that includes capacity building, private sector participation, and data-driven monitoring.

⁵ United Nations Children’s Fund (UNICEF) South Asia (2016) and Yu (2019).

- De (2018) explores the different economic and non-economic factors that influence sanitation coverage in India. He describes how sanitation coverage in India is notably lower than coverage in other developing countries, which increases India’s global disease burden. Sanitation policy should be focused on improving education and infrastructure and changing social norms so that multiple sanitation types are available to the Indian community and the community begins to accept sanitation as a “normal” practice.
- Nagla (2020) focuses on the link between increased open defecation in rural India and cultural norms, arguing that practices and customs, not resource provision, influence the improvement of sanitation in India. Nagla (2020) uses two case studies to demonstrate cultural norms surrounding sanitation in both urban and rural India. A study by Coffey et al. (2015) which examines sanitation in rural India, reveals that rural Indians find open defecation to symbolize health, longevity, and strength, while viewing affordable latrines as both physically and ritually polluting. Even when latrines are available to rural Indians, they prefer to practice open defecation due to cultural norms around purity and pollution.
- Aini, Fakhrul-Razi, Mumtazah and Chen (2007) examine drinking water practices in Malaysia, exploring both poor water quality and excessive water use, in particular. Water consumption is high among Malaysians—nearly three to five times higher than the international standard for water usage recommended by the United Nations—revealing the issue of unsustainable and wasteful water use. Regarding water quality, Malaysians utilize one of five different technologies: tap water, bottled water, home purification systems, vending machines, and home wells. Because women are responsible for managing household water and hygiene in rural areas of Malaysia, they play an important role in water conservation.
- Ahmed, Siwar and Begum (2014) write about the limited availability of clean water in Malaysia, paying attention to the unequal distribution of water across Malaysia in the face of urbanization, industrialization, population growth, and increased irrigation. Rainwater serves as main source of water for Malaysia, yet over the past few years, rainwater in river basins and streams have become more polluted due to farming, land clearing, and domestic sewage. Further contributing to the unavailability of clean water are legal constraints at the federal and state levels. Water legislation is outdated, ambiguous, and repetitive, and does not account for the unequal distribution of water across the country or the issues that population growth and urbanization pose.

III. Socioeconomic Background

Malaysia is located in Southeast Asia and had a population of 31.9 million in 2019.⁶ Its agricultural sector accounted for 7.3 percent of its gross domestic product (GDP) in 2019. Following Malaysia’s independence in 1954, the country has shifted from a mainly agriculture and commodity-based economy to one that prioritizes the manufacturing and service sectors.⁷ Malaysia’s high trade to GDP ratio makes it one of the most open economies in the world.⁸ Currently, Malaysia is characterized as an upper-middle income economy, and if it continues its

⁶ World Bank (2021).

⁷ World Bank (2020).

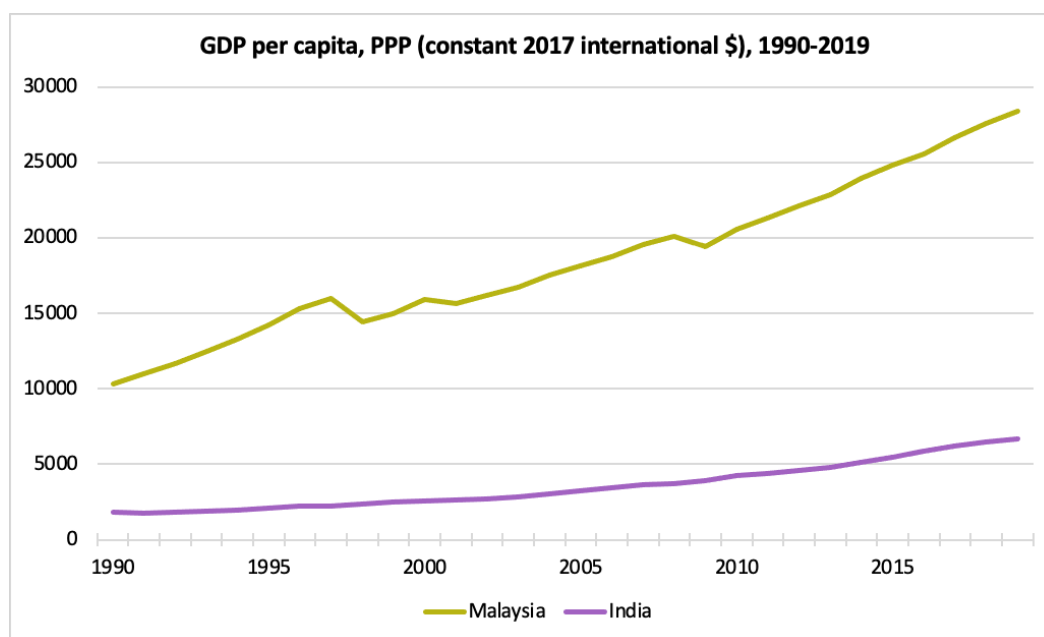
⁸ World Bank (2020).

average yearly growth of 5.4 percent, which it has since 2010, Malaysia will achieve the status of a high-income country by 2024.⁹

India is the most populous country in South Asia with a population of 1.37 billion, more than 42 times of Malaysia's population.¹⁰ India's agricultural sector accounted for 16.0 percent of its GDP in 2019,¹¹ more than twice that of Malaysia. With the election of Prime Minister Narendra Modi in 2014, whose campaign emphasized economic growth, India's GDP has risen steadily.¹² However, economic growth has not improved conditions for most of India's poorest, with only a one percent increase in employment accompanying a seven percent growth in GDP.¹³

As shown in Figure 1, Malaysia's PPP-adjusted GDP per capita (in constant 2017 international dollar) saw a drop between 1997-1998, representing the effects of the Asian financial crisis.¹⁴ Since then, Malaysia has experienced a sharp increase in its PPP-adjusted GDP per capita, reaching \$28,364 in constant 2017 international dollar. India has had a slower but more steady increase in GDP per capita, relative to Malaysia, though its PPP-adjusted GDP per capita is far lower than that of Malaysia, reaching \$6,700 (in constant 2017 international dollars) in 2019.

Figure 1: GDP per capita, PPP (constant 2017 international \$), 1990-2019



Source: Created by author based on World Bank (2021).

Along with an increase in GDP per capita in both Malaysia and India since 1990, life expectancy has also increased since the 1970s, shown in Figure 2. In 1970, Malaysia's life expectancy was

⁹ World Bank (2020).

¹⁰ World Bank (2021).

¹¹ World Bank (2021).

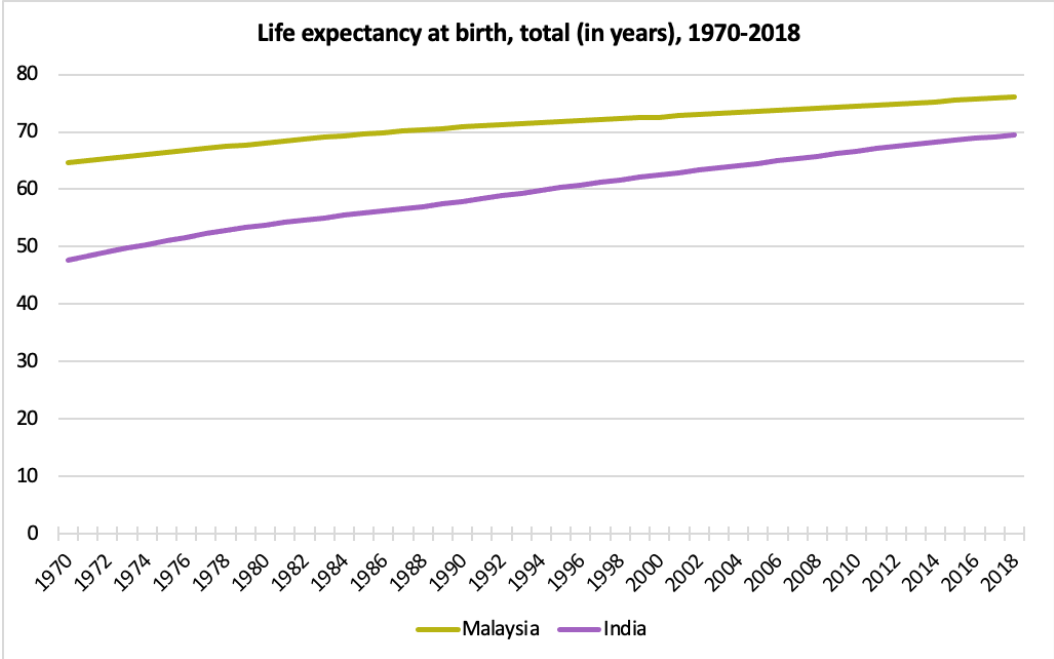
¹² Marlow et al. (2019).

¹³ Marlow et al. (2019).

¹⁴ World Bank (2020 and 2021).

64.6 years and in 2018, it was 76.0 years, reflecting an about ten-year increase. In 1970, India's life expectancy was 47.7 years and in 2018, it was 69.4 years, reflecting an over twenty-year increase.

Figure 2: Life expectancy at birth (in years), 1970-2018



Source: Created by author based on World Bank (2021).

Figure 3: Adult literacy rates (all available years)



Source: Created by author based on World Bank (2021).

Further, as GDP per capita is far higher in Malaysia than in India, literacy rates are also higher in Malaysia than in India, shown in in Figure 3. While India’s total adult literacy rate has increased since 1981, literacy rates stratified by gender reveal persisting inequality. In 2018, the adult male literacy rate in India was 82.4 percent while the adult female literacy rate was only 66.0 percent. Chandra (2019) writes that high illiteracy rates among Indian women, compared to Indian men, are the result of social economic, and cultural factors. The gap between literacy rates among female youth and male youth is much less stark than the gap between literacy rates among adults in India. As of 2018, male youth had a literacy rate of 93.0 percent and female youth had a literacy rate of 90.2 percent. This signals improved gender parity in the realm of literacy attainment and in education more broadly.¹⁵ Malaysia experiences less gender inequality in terms of literacy rates. The adult female literacy rate in Malaysia was 93.5 percent as of 2018, and the adult male rate was 96.1 percent. Further, female youth had the same literacy rate at 97.0 percent as male youth in 2018 in Malaysia.

IV. Analysis of Facts

The first sub-section of this section focuses on the evolution of sanitation in both Malaysia and India, specifically highlighting this evolution with an urban-rural lens. The second-sub-section of this section reviews three sets of data related to water and sanitation: the practice of open defecation, the use of basic drinking water services, and the mortality rate caused by poor sanitation. Each of the three topics are analyzed using an urban-rural lens.

IV.1. Evolution of Sanitation

IV.1.a. Rural versus Urban Analysis

Figure 4 shows the percentage of rural and urban populations that use at least basic sanitation services in Malaysia and India. The use of basic sanitation services is defined as the use of improved sanitation facilities, including flush/pour flush to piped sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets, or pit latrines with slabs.¹⁶ This indicator also accounts for people using both basic sanitation services and safely managed sanitation services.¹⁷

Figure 4 shows that differences in the percentage of urban and rural populations who use at least basic sanitation services are much larger in India than in Malaysia. The percentage of Malaysia’s rural population that used at least basic sanitation services (98.7 percent) in 2017 is closely approaching the percentage of Malaysia’s urban population that used at least basic sanitation services (99.9 percent), represented by the near convergence of purple lines in 2017 in Figure 4. India’s rural and urban numbers are much farther apart than Malaysia’s, yet the percentage of India’s rural population who use at least basic sanitation services has increased rapidly over the past 17 years (a 49.4 percentage points increase overall) and is on its way toward meeting the percentage of India’s urban population with only a 19.8 percentage points difference in 2017, compared to a difference of 45.5 percentage points in 2000. Additionally, in Malaysia, the percentage of either the rural or urban population who use at least basic sanitation services has remained relatively constant since 2000 with the largest increase for either rural or urban areas

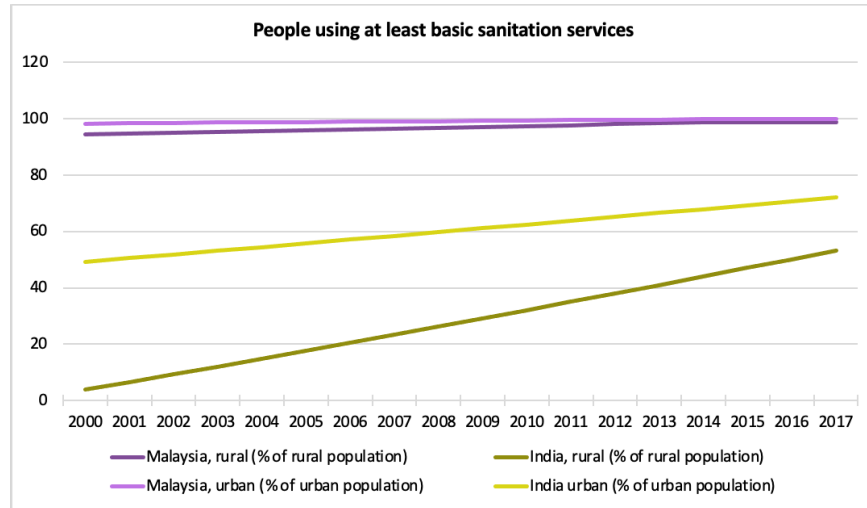
¹⁵ Chandra (2019).

¹⁶ World Bank (2021).

¹⁷ World Bank (2021).

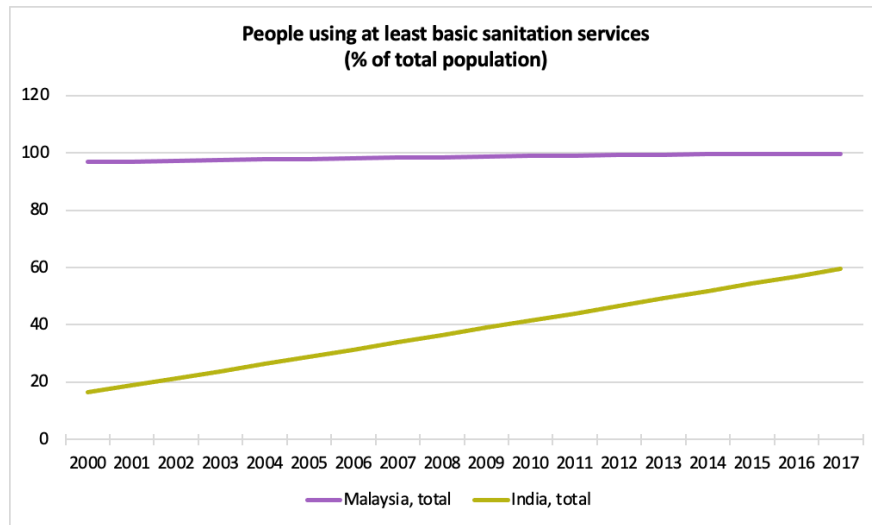
over the years being only 4.3 percentage points, compared to India’s largest increase of 49.4 percentage points since 2000.

Figure 4: People using at least basic sanitation services (rural vs. urban population), 2000-2017



Source: Created by author based on World Bank (2021).

Figure 5: People using at least basic sanitation services (total population), 2000-2017



Source: Created by author based on World Bank (2021).

IV.1.b. Total Population Analysis

Figure 5 shows total use of at least basic sanitation services in Malaysia and India using the same indicator as in Figure 4 and defined previously. Overall, a far higher percentage of people in Malaysia use at least basic sanitation services than in India. Similar to Figure 4 and its analysis,

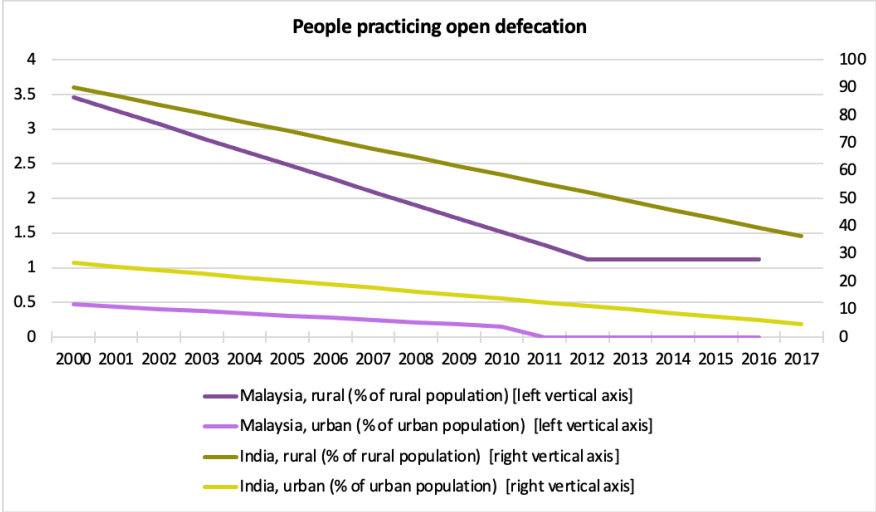
this section finds that the percentage of Malaysia’s total population that uses at least basic sanitation services is relatively more constant than India’s, with only a 2.6 percentage points increase since 2000 compared to India’s 39.6 percentage points increase since 2000. Important to note is that in 2000, Malaysia started with nearly full usage of at least basic sanitation services among the total population, at 96.8 percent, while India started at only 16.4 percent in 2000; this is the reason for Malaysia’s minimal increase in usage over the years compared to India’s large increase.

IV.2. Dimensions of Sanitation

IV.2.a. Sanitation-Related Practices

Figure 6 shows the percentage of rural and urban populations that practice open defecation in Malaysia and India. The practice of open defecation is defined as defecating in open areas, such as in fields, forests, bushes, open bodies of water, on beaches, in other open spaces, or disposed of with solid waste.¹⁸ Figure 6 uses two vertical axes because the percentage values for Malaysia are much lower than the percentage values for India. Overall, the percentages of rural and urban populations that practice open defecation in Malaysia and India have declined since 2000.

Figure 6: People practicing open defecation, 2000-2017



Source: Created by author based on World Bank (2021).

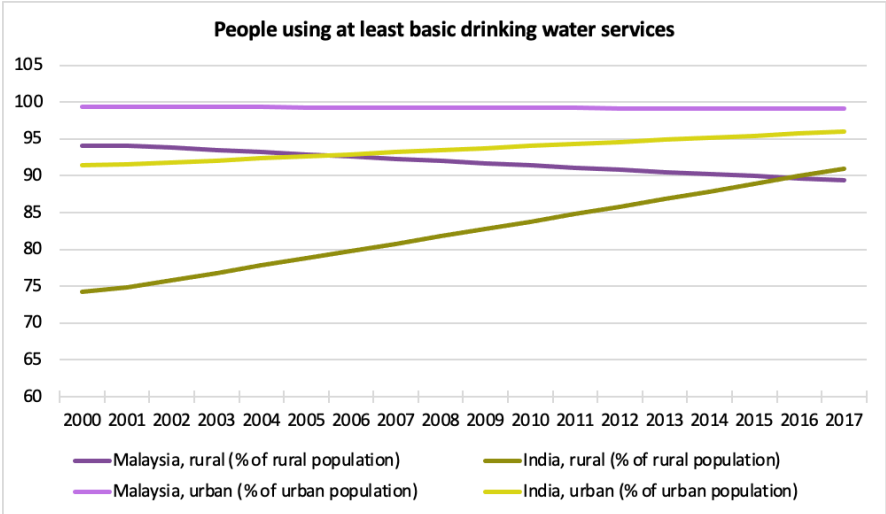
Malaysia’s rural population saw a steep decline in its practice of open defecation from 2000 to 2012. Since 2012, the percentage has been stagnant at 1.12 percent. Malaysia’s urban population saw a shallower decline in its practice of open defecation since 2011, since which the percentage has been zero. There is no value provided for the year 2016 for both Malaysia’s rural and urban populations. India’s decline in the practice of open defecation has been much greater in absolute terms than in Malaysia: the percentage of rural Indians who openly defecate decreased 53.9 percentage points since 2000 and the percentage of urban Indians who openly defecate decreased 22 percentage points since 2000. Unlike Malaysia, India has not seen a leveling off of values for

¹⁸ World Bank (2021).

the past nine to ten years for either rural or urban populations. Because India’s values for both rural and urban populations have not leveled off, it might be predicted that the percentage of people practicing open defecation will continue to decrease in years to come until the values hit zero, like the value has for Malaysia’s urban population and almost has for its rural population.

Figure 7 shows the percentage of people in rural and urban populations who use at least basic drinking water services in Malaysia and India. Basic drinking water services are defined as drinking water from an improved source, such as piped water, boreholes or tubewells, protected dug wells, protected springs, and packaged or delivered water, and collection time must not exceed 30 minutes for a round trip.¹⁹ Contrary to expectations, the percentage of rural Malaysians who use at least basic drinking water services has decreased 4.8 percentage points since 2000. The percentage of urban Malaysians who use at least basic drinking water services has also slightly decreased (0.3 percentage points) since 2000.

Figure 7: People using at least basic drinking water services, 2000-2017



Source: Created by author based on World Bank (2021).

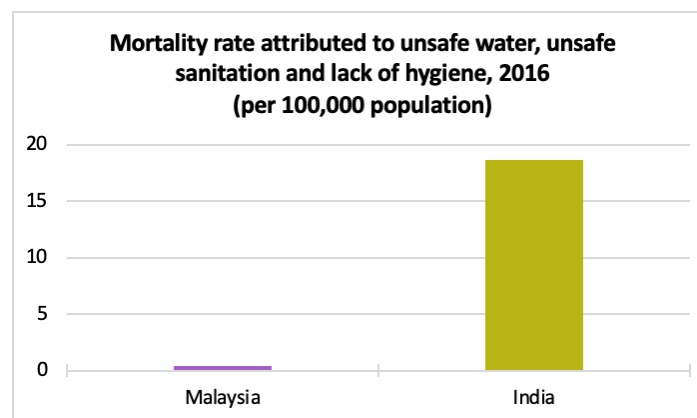
Contrastingly, the percentages of rural and urban Indians who use at least basic drinking water services have increased since 2000, with a 16.7 percentage points increase overall for rural Indians and a 5 percentage points increase for urban Indians. In 2017, the percentage of India’s rural population (91.0 percent) and the percentage of India’s urban population (96.0 percent) who use at least basic drinking water services were higher than the percentage of Malaysia’s rural population that use at least basic drinking water services (89.3 percent). The percentage of Malaysia’s urban population that use at least basic drinking water services in 2017 (99.1 percent) was higher than all other percentages in 2017, even though this percentage slightly decreased from its value in 2000.

¹⁹ World Bank (2021).

IV.2.b Impacts of Sanitation-Related Practices and Sanitation Itself

Figure 8 shows the mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene in Malaysia and India in 2016. This indicator focuses on inadequate water, sanitation, and hygiene (WASH) services that cause death from diarrheal diseases, intestinal nematode infections, and protein-energy malnutrition.²⁰ Both Malaysia and India do not have a value for any other year besides 2016. Per 100,000 people, India had a mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene of 18.6 in 2016, while Malaysia had a mortality rate of only 0.4 in 2016. India's far higher mortality rate reflects stark differences in sanitation maintenance, notably in the areas of water and hygiene, and in the ability of each country to help their population recover from deadly, sanitation-inflicted diseases and infections.

Figure 8: Mortality rate due to sanitation-related practices and sanitation itself, 2016



Source: Created by author based on World Bank (2021).

V. Ethical Analysis

The first sub-section of this section introduces sanitation responses, at both the global and regional levels, examining responses in each Malaysia and India. In the second sub-section, Risse's (2014) ethical framework of the human right to water is reviewed, alongside the Markkula Center for Applied Ethics' sources of ethical standards. Additionally, the second sub-section critically analyzes the sanitation responses of Malaysia and India through an application of the previously introduced ethical framework and concepts.

V.1. Global and Regional Sanitation Responses

V.1.a. International Agreements on Sanitation and Water

Affecting both Malaysia and India, the first intergovernmental conference focused only on water, the Mar del Plata United Nations Conference on Water, which was held in 1977.²¹ The objective of this Conference was "to promote a level of preparedness, nationally and internationally, which would help the world to avoid a water crisis of global dimensions by the end of the present

²⁰ World Bank (2021).

²¹ Biswas (2004), p. 82.

century.”²² Many conferences on water followed the Mar del Plata Conference on Water, but on July 28, 2010, the United Nations General Assembly finally recognized that access to both clean drinking water and sanitation is “an integral component of the realization of all human rights.”²³ Both Malaysia and India voted in favor of the draft resolution on the human right to water and sanitation adopted by the United Nations General Assembly (2010). Recognizing access to water and sanitation as a human right brought ethics into a conversation previously void of justice concerns, but rather focused on infrastructural matters.

V.1.b. Existing Ethical Structures: Sanitation Response in Malaysia

Immediately following the country’s independence in 1957, Malaysia prioritized its sanitation sector.²⁴ Because Malaysia has been ruled by the same party since its independence, concentrating and wielding power in sanitation programming is relatively easy for the national government.²⁵ To obtain maximum sanitation coverage, the country adopted an approach of uniform strategy, regulation, and service delivery, what is also termed a “top-down strategy” by Kelkar (2018). This involved the management of centralized, community, and on-site sanitation systems.²⁶ Further, Malaysia utilized strong regulatory frameworks and included the private sector in its sanitation management.²⁷ While Malaysia’s sanitation infrastructure was aging in the 1990s, particularly in the state of Penang, whose infrastructure experienced frequent collapses and overflows, the economic drivers of industrialization, urbanization, and the booming tourism industry catalyzed renovation of Malaysia’s sanitation system and continue to support its maintenance.²⁸

No single agency is responsible for water management in Malaysia and conflicts in such management are addressed through inter-agency coordination. Additionally, Malaysia lacks a comprehensive water law as sector-based water laws at both the federal and state levels are enforced by various water-related government agencies. Such laws are dated, redundant, vague, and focus on limited aspects of water management, making difficult the ability to enforce water law in Malaysia. The National Water Resources Council, however, exists at the federal level to promote effective water management through the implementation of interstate water transfers.²⁹

V.1.c. Existing Ethical Structures: Sanitation Response in India

In October 2014, the Department of Drinking Water & Sanitation of India’s Ministry of Jal Shakti (which translates to “water power”) launched a clean water campaign, called “Swachh Bharat Mission” that focused on universal sanitation and hygiene. By adopting this campaign, India achieved the goal of becoming open-defecation-free in 2019 through the construction of over 109 million household and community toilets in 603,174 villages in 706 districts across the country. Concerning open defecation, this campaign induced behavioral transformation in India. While the Swachh Bharat Mission prioritizes the provision of toilets to all, the campaign focuses specifically on the construction of separate toilets for girls and women across the country, which has resulted

²² Biswas (2004), p. 82.

²³ United Nations General Assembly (2010), p. 2.

²⁴ Kelkar (2018).

²⁵ Voice of America (2020).

²⁶ Kelkar (2018).

²⁷ Kelkar (2018).

²⁸ Kelkar (2018).

²⁹ This paragraph is based on Food and Agriculture Organization of the United Nations (FAO) United Nations Economic and Social Commission for Asia and the Pacific UNECAP (2001).

in increased school enrollment, higher retention of girls in primary school, and improved safety for women.³⁰

As documented in NITI Aayog (2020, p. 65), the Government of India is “committed to providing safe and adequate drinking water in all habitations by 2022” and in May 2019, the Government created the Ministry of Jal Shakti to “ensure effective water governance and comprehensively address water management challenges”. Under the recently launched Jal Jeevan Mission (which translates to Water as Life Mission), India intends to supply all rural households with piped water, specifically at a rate of 55 liters of drinking water per capita, by 2024. This mission will help address and mitigate rural-urban disparities in water access and will also significantly reduce the burden on women who travel long distances to get water.

A second recently launched campaign, Jal Shakti Abhiyan, works to optimize India’s water conservation, rainwater harvesting, watershed development, renovation of traditional and other water bodies, and reuse of water and recharging structures through community mobilization and participation. The goal of this campaign is to achieve a “water -secure future” for India. So far, this campaign has taken 350,000 water conservation steps in 256 districts of India, with community participation at 26.4 million people.³¹

V.2. Ethical Frameworks and Ethical Analysis of Sanitation Responses

V.2.a. Ethical Concepts and Frameworks in Sanitation

One ethical framework in water and sanitation discourse is Mathias Risse’s (2014) human right to water framework. Risse (2014, pp. 178, 195-196) argues that there is a human right to water because water is essential to all life forms and because the existence of water is not the result of any human accomplishments. This right is discussed in two forms: a right to safe drinking water and a right to sanitation.³² Both safe drinking water and sanitation are elaborated on because both involve the same water system, meaning both entities involve water as a medium. Water is essential for the metabolic cycles that involve both the drinking of water and the disposal of urine and feces. While sanitation might seem to be less important to be distinguished as a human right, sanitation concerns human’s high vulnerability to water-borne diseases that stem from dirty water, insufficient water access, organisms living in water, and animals living near water.³³

Common ownership, the idea that “each individual must have the opportunity to satisfy basic needs, to the extent that this turns on natural resources and spaces of the earth,” is emphasized in this framework.³⁴ States, however, might use their power to deprive individuals of the ability to meet their basic needs, and conversely, other states can refuse entry to individuals who cannot satisfy basic needs.³⁵ Both instances deny individuals the opportunity to satisfy their basic needs at the expense of prioritizing state power and political and economic motives.³⁶ To mitigate this issue, not only is it argued that the power of states must be limited, but further, Risse (2014, p. 193) argued that states must give individuals the opportunity to “lead a life at subsistence level.” Such a requirement acknowledges individuals’ rights to food, clothing, and housing, however,

³⁰ This paragraph is based on NITI Aayog (2020), p. 4 and p. 67.

³¹ This paragraph is based on NITI Aayog (2020), p. 65.

³² Risse (2014) p. 178.

³³ Unless otherwise stated, this paragraph is based on Risse (2014) p. 180.

³⁴ Risse (2014) p. 195.

³⁵ Risse (2014) pp. 190-191.

³⁶ Risse (2014) pp. 190-191.

because water is essential for human survival, a right to food must also include a right to safe drinking water.³⁷

In other words, while a state system can only exist if it allows individuals to use earth's resources to satisfy their basic needs, the responsibility to ensure that all individuals have access to water "to which the co-owners of the earth are entitled" is global.³⁸ Under this human right to water framework, regional arrangements that regulate water resource use among certain countries are not necessary, as there is ultimately global, not regional, responsibility for ensuring access to safe drinking water and basic sanitation.³⁹

Risse's (2014) human right to water framework combines elements of the fairness or justice approach and the rights approach, both outlined by the Markkula Center for Applied Ethics. The fairness or justice approach is visible in the human right to water framework as it centers the idea of common ownership wherein all co-owners have an equal opportunity to satisfy their basic needs "to the extent that this turns on obtaining collectively owned resources."⁴⁰ The provision of equal opportunity to satisfy basic needs echoes the ideas of Aristotle and other Greek philosophers who argued that "all equals should be treated equally" or if unequally, then fairly based on logical and defensible standards.⁴¹

Under the rights approach, humans have dignity based on being human or based on their ability to choose freely how to live.⁴² Further, humans have a right to be treated as ends and not only as means to other ends, based on their dignity.⁴³ As discussed above, individuals have a right to water, and states must not use their power to hinder individuals from using resources to satisfy their basic needs. The human right to water framework argues similarly to the rights approach but reverses the order of conditions: the framework argues that because humans have value and dignity, they should be able to freely make decisions about their lives without state interference while the rights approach argues that because humans are able to freely make decisions about their life, they have value and dignity.⁴⁴

V.2.b. Ethical Analysis of Sanitation Responses in Malaysia and India

Risse (2014) argues that there is a global responsibility for ensuring access to safe drinking water and basic sanitation, denying the need for regional agreements on water resource use and management, yet Malaysia and India have implemented their own, regional-level sanitation responses. For example, Malaysia has prioritized its own water and sanitation since its independence and India has created many different initiatives such as the Swachh Bharat Mission, Ministry of Jal Shakti, and Jal Shakti Abhiyan. Of note, however, is that Malaysia's regional-level sanitation response has not occurred through a formal program, as is the case in India through its Swachh Bharat Mission. Based on Risse's (2014) argument, there is no need for these regional-level responses in Malaysia and India, and both countries could simply follow global water and sanitation regulations, yet the absence of a global governing body makes the implementation and assessment of such regulations difficult.

³⁷ Risse (2014) p. 193.

³⁸ Risse (2014) p. 195.

³⁹ Risse (2014) p. 196.

⁴⁰ Risse (2014) p. 189.

⁴¹ The Markkula Center for Applied Ethics (2009).

⁴² The Markkula Center for Applied Ethics (2009).

⁴³ The Markkula Center for Applied Ethics (2009).

⁴⁴ The Markkula Center for Applied Ethics (2009).

Though both Malaysia and India were actively participating in the previously mentioned Mar del Plata United Nations Conference on Water, there is limited information on the actions each country took after the global United Nations Conference on Water took place. Similarly, both Malaysia and India voted in favor of recognizing clean drinking water and basic sanitation as a human right in July of 2010, but there is limited information on the specific actions each country took afterwards in promoting this right. In sum, due to limited information on the actions that each country took after two major global conferences on water and sanitation, it is unclear whether the regional-level sanitation responses of Malaysia and India represent efforts to implement global goals on water and sanitation or if they rather represent only regional efforts at such.

Malaysia's uniform strategy, regulation, and service delivery approach echoes the fairness or justice approach as defined by the Markkula Center for Applied Ethics. By treating all equals, Malaysians in this case, equally by adopting a uniform, or equal, approach to sanitation response, Malaysia's actions are considered fair. The fairness or justice approach and a uniform strategy, regulation, and service delivery approach, however, do not consider questions of equity and how the equal provision of services to all equals ignores the heightened needs of marginalized and historically underserved communities. This point relates to recent debate within the fairness or justice approach regarding the influence of power imbalances in determining fairness and justice.⁴⁵

India's Jal Jeevan Mission addresses the need of providing increased resources to marginalized communities that Malaysia's sanitation response fails to recognize. Because the Jal Jeevan Mission prioritizes the provision of piped water to rural households, who experience greater difficulty than their urban counterparts in accessing water, and to women, who experience a greater burden than men when traveling to access water, this program bolsters the idea of equity and acknowledges how historical power imbalances have caused unequal water access. In other words, the Jal Jeevan Mission prioritizes rural Indians and Indian women in order to level the playing field, or equalize, access to water that urban Indians and Indian men have long had access to.

VI. Conclusion

Through examining the socioeconomic histories, evolution of sanitation, and sanitation responses in Malaysia and India, this article shows how Malaysia and India have improved their sanitation sectors, yet at different paces. While Malaysia has seen rapid improvement of its water and sanitation sector with the prioritization of sanitation immediately following its independence in 1954, India has seen slower progress and subsequently a greater urban-rural divide.

Moving forward, both Malaysia and India need to include the needs of marginalized communities, notably persons with disabilities, undocumented/stateless persons, gender non-conforming people, and members of low castes, in their sanitation improvement efforts. In a report for the United Nations General Assembly, the UN Special Rapporteur on the Human Rights to Safe Drinking Water and Sanitation, Leo Heller, found that in Malaysia, access to safe drinking water and sanitation is limited or nonexistent for indigenous communities, people living in informal settlements, refugees and asylum seekers (many of them Rohingya people from Myanmar), and LGBTQIA+ people.⁴⁶

⁴⁵ The Markkula Center for Applied Ethics (2009).

⁴⁶ International Institute of Sustainable Development (IISD), SDG Knowledge Hub (2018).

Heller also shared his disappointment with Malaysia's decision to not ratify the International Convention on the Elimination of All Forms of Racial Discrimination, stating that discriminatory patterns cause limited access to water and sanitation services.⁴⁷ Inclusive efforts are less publicized in Malaysia than in India, yet Malaysia can follow the example set in the Orang Asli community in Kampung Binjal. In this case study, the Orang Asli community, who comprises 0.7 percent of the peninsular Malaysian population and 60 percent of the population in East Malaysia and who has long experienced poorer health than the rest of the Malaysian population, received a filtration system to reduce travel distance to water.⁴⁸

In India, persons with disabilities are disproportionately concentrated in rural areas, further magnifying urban-rural disparities and the effects of existing suboptimal provision of basic services.⁴⁹ Further, members of the Dalit community, the lowest caste of India's former, yet still influential, caste system, are subjugated to the job of manually cleaning human excrement from private and public dry toilets in rural areas.⁵⁰ While India's new campaign, called Swachh Bharat Mission, provides a "Handbook on Accessible Household Sanitation for Persons with Disabilities (PwDs)," the campaign ignores manual scavenging and at times, has reinforced such caste-based discrimination.⁵¹ India should continue the efforts of WaterAid India to build inclusive toilets for persons with disabilities and of the recently launched Safaimitra Suraksha Challenge, which aims to prevent hazardous cleaning of sewers and septic tanks.⁵² These marginalized communities should have been prioritized like all other citizens were at the outset of these sanitation response programs.

Malaysia and more recently India have made progress with increasing access to safe water and sanitation, but they are not done yet. Malaysia and India must now proceed with more inclusive programming to give all people access to sanitation and water services—a human right, of which too many people have been denied.

References

- Ahmed, Ferdoushi; Chamhuri Siwar; and Rawshan Ara Begum (2014). Water Resources in Malaysia: Issues and challenges. *Journal of Food, Agriculture and Environment*, Vol. 12, No. 2, pp. 1100–1104.
- Aini, M.S.; A. Fakhrul-Razi; O. Mumtazah; and J.C. Meow Chen (2007). Malaysian Households' Drinking Water Practices: A Case Study. *International Journal of Sustainable Development & World Ecology*, Vol. 14, No. 5, pp. 503–510.
- Bajora, Jayshree (2018). Swachh Bharat should also Eliminate caste discrimination. *The Wire*, Internet Resource (Opinion) of September 26, 2018; available at: <https://thewire.in/caste/swachh-bharat-manual-scavenging-caste-discrimination>.
- Bhanja, Bishakha (2017). A Journey Towards Making Inclusive Toilets for Persons with Disabilities a Reality. WaterAid, Internet Resource of December 1, 2017, available at:

⁴⁷ International Institute of Sustainable Development (IISD), SDG Knowledge Hub (2018).

⁴⁸ Rhule and Thoo (2018).

⁴⁹ NITI Aayog (2020) p. 145.

⁵⁰ Bajora (2018).

⁵¹ Bajora (2018) and Ministry of Drinking Water and Sanitation (2015).

⁵² Bhanja (2017) and Press Information Bureau Delhi (2020).

- <https://washmatters.wateraid.org/blog/a-journey-towards-making-inclusive-toilets-for-persons-with-disabilities-a-reality>.
- Biswas, Asit K. (2004). From Mar del Plata to Kyoto: An Analysis of Global Water Policy Dialogue. *Global Environmental Change*, Vol. 14, pp. 81–88.
- Chandra, Tanushree (2019). Literacy in India: The Gender and Age Dimension. Observer Research Foundation (ORF), *ORF Issue Brief*, Issue No. 322 (October); available at: https://www.orfonline.org/wp-content/uploads/2019/10/ORF_IssueBrief_322_Literacy-Gender-Age.pdf.
- De, Indranil (2018). Determinants of Rural Sanitation in India and Implications for Public Policy. *Journal of Water, Sanitation and Hygiene for Development*, Vol. 8, No. 4, pp. 650–659.
- Food and Agriculture Organization of the United Nations (FAO) and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (2001). Malaysia’s Water Vision: The Way Forward - The Malaysian Water Partnership. Rome, Italy: Food and Agriculture Organization of the United Nations (FAO) (October); available at: <http://www.fao.org/3/ab776e/ab776e02.htm>.
- International Institute of Sustainable Development (IISD), SDG Knowledge Hub (2018). Special Rapporteur on Water and Sanitation Urges Malaysia to Focus on “Off Radar” Groups. International Institute of Sustainable Development (IISD) SDG Knowledge Hub, Internet Resource of December 4, 2018; available at: <https://sdg.iisd.org/news/special-rapporteur-on-water-and-sanitation-urges-malaysia-to-focus-on-off-radar-groups/>.
- Kelkar, Vedanti (2018). What Korea, Malaysia Can Teach Us about Sanitation’s Impact on Economic Growth. Manila, The Philippines: Asian Development Bank, Asian Development Blog of February 14, 2018; available at: <https://blogs.adb.org/blog/what-korea-malaysia-can-teach-us-about-sanitations-impact-economic-growth>.
- Marlow, Iain; Vrishti Beniwal; Adrian Leung; and Hannah Dormido (2019). *Bloomberg News*, News Story of April 10, 2019; available at: <https://www.bloomberg.com/graphics/2019-modi-election-metrics/>.
- Ministry of Drinking Water and Sanitation (2015, December). *Handbook on Accessible Household Sanitation for Persons with Disabilities (PwDs)* (New Delhi, India: Government of India, Ministry of Drinking Water and Sanitation, Swachh Bharat Mission (Gramin), December); available at: <https://swachhbharatmission.gov.in/sbmcms/writereaddata/images/pdf/technical-notes-manuals/PWD-Guidelines.pdf>.
- Nagla, B. K. (2020). Problems of Sanitation in India: Does Culture Matter? *Sociological Bulletin*, Vol. 69, No. 2, pp. 252–269.
- NITI Aayog (2020). *Decade of Action: Taking SDGs from Global to Local. India Voluntary National Review 2020* (New Delhi, India: NITI Aayog), available at: https://sustainabledevelopment.un.org/content/documents/26279VNR_2020_India_Report.pdf.
- Press Information Bureau Delhi (2020). Shri Hardeep Singh Puri launches Safaimitra Suraksha Challenge across 243 Cities. New Delhi, India: Press Information Bureau Delhi, Internet

- Resource of November 19, 2020; available at:
<https://pib.gov.in/PressReleasePage.aspx?PRID=1674015>.
- Rhule, Emma and Ashley Thoo (2018). Clean Water for All: A Case Study of Malaysia's Orang Asli. Tokyo, Japan: United Nations University, Internet Resource of August 29, 2018; available at: <https://ourworld.unu.edu/en/clean-water-for-all-case-study-of-orang-asli>.
- Risse, Matthias (2014). The Human Right to Water and Common Ownership of the Earth. *Journal of Political Philosophy*, Vol. 22, No. 2, pp. 178–203.
- The Markkula Center for Applied Ethics (2009). A Framework for Ethical Decision Making. Santa Clara, CA: University of Santa Clara, The Markkula Center for Applied Ethics, May); available at: <https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/a-framework-for-ethical-decision-making/>.
- Tiwari, Rajesh Prasa (2020). Sanitation in India: Sustainable Development. *International Journal of Research and Analytical Reviews*, Vol. 7, No. 1, pp. 194–198; available at: <https://www.ijrar.org/papers/IJRAR2001300.pdf>.
- United Nations Children’s Fund (UNICEF) and World Health Organization (WHO) (2019). Progress on Household Drinking Water, Sanitation and Hygiene 2000-2017: Special Focus on Inequalities. WHO, Internet Resource; available at: https://www.who.int/water_sanitation_health/publications/jmp-report-2019/en/.
- United Nations General Assembly (2010). Resolution Adopted by the General Assembly on 28 July 2010. New York, NY: United Nations General Assembly, Internet Resource of August 3, 2010; available at: https://www.un.org/ga/search/viewm_doc.asp?symbol=A%2FRes%2F64%2F292.
- United Nations Children’s Fund (UNICEF) South Asia (2016). Water, Sanitation and Hygiene (WASH). Kathmandu, Nepal: UNICEF South Asia, UNICEF Program Description, Internet Resource; available at: <https://www.unicef.org/rosa/water-sanitation-and-hygiene-wash>.
- Voice of America (2020). Malaysia’s Rise, From Buckets and Hanging Toilets, to Universal Sanitation. *Voice of America*, News Item of January 7, 2020; available at: <https://www.voanews.com/east-asia-pacific/malaysias-rise-buckets-and-hanging-toilets-universal-sanitation>.
- World Bank (2020). *The World Bank in Malaysia*. Washington, DC: World Bank, Internet Resource; available at: <https://www.worldbank.org/en/country/malaysia/overview>.
- World Bank (2021). *World Development Indicators Database* (Washington, DC: The World Bank); as posted on the World Bank website: <https://datacatalog.worldbank.org/> (downloaded on January 6, 2021).
- Yu, Kiera (2019). 10 Facts about Sanitation in Southeast Asia. Tacoma, WA, The United States: The Borgen Project, Blog of December 21, 2019; available at: <https://borgenproject.org/10-facts-about-sanitation-in-southeast-asia/#:~:text=Approximately%2080.8%20percent%20of%20people,piped%20sewer%20systems%20in%202018.&text=This%20percentage%20has%20dropped%202.3,world%20average%20of%201.38%20percent>.