**DESIGNING THINKING ENTERPRISES TO ENSURE THE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION**

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# 1.0 Introduction

In the discussion on the potential to assume a huge part in guaranteeing that sanitization and water are open practical, and productive. Millions of people all over the world are affected by a lack of access to reliable and safe water and sanitation services. At a particularly in low-income nations. Innovative solutions that are tailored to the requirements of specific communities can be developed by businesses that employ design thinking in order to address this issue. They can utilizing configuration thinking, organizations can concoct long haul arrangements zeroed. In on expanding the accessibility and the board of clean water and disinfection in networks around the world. the issue of ensuring everybody approaches clean water and disinfection. As well as the clever methodologies that plan figuring organizations can take to tackle this issue. It talks about the absence of admittance to protected and solid sanitization in low-paying countries and offers effective fixes that can further develop disinfection availability and upkeep.

# 2.0 Discussion

## 2.1 Identifies the issue relating on Ensure access to water and sanitation

The issues regarding water accessibility and sterilization for SDG 6 Goals are:

**Figure1: Issue Relating on Ensure Access to water and Sanitation**

(Source: Self-created in MS- word)

**Clean, distant water:**

One of the fundamental subjects of SDG 6 is the way that various billion individuals from one side of the world to the other need authorization to got and clean drinking water (Cai  *et al.* 2021). This can adversely affect schooling, monetary development, and generally speaking personal satisfaction, which can prompt the spread of infections sent by water.

**Facilities with unsanitary conditions:**

Many individuals fail to disinfect adequately despite the lack of clean water. This could prompt unfortunate cleanliness and the spread of illness. Additionally, it may jeopardize women's and girls' dignity, privacy, and gender equality.

**Resource distribution in an unfair way:**

SDG 6 additionally addresses the inconsistent dissemination of admittance to clean water and sterilization (Fei *et al.* 2021). Communities with the greatest need frequently lack access to these resources. This could be due to poverty, political unrest.

**Effects of changes in the environment:**

Environmental change can also have an effect on sterilization and access to clean water. Water assets can be unfavorably impacted by increasing temperatures. Therefore the moving examples of precipitation, and extending outrageous climate occasions, making. It challenging for organizations to get clean water. Extreme weather can also pose additional health risks by disrupting sanitation and destroying infrastructure.

**There are no assets:**

Infrastructure, technology, and education all need to be heavily invested in order to provide access to clean water and sanitation (de Lázaro*et al.* 2020). However, a lot of governments and organizations have not given these problems enough money. Consequently, improved access to these resources may be hindered, particularly in low-income nations.

**Gender disparity:**

Orientation imbalance likewise influences admittance to clean water and disinfection. In a lot of communities, women and girls have to go get water and clean the house, which takes a lot of time and keeps them from going to school or working. increase. When women and girls need to use the bathroom or wash their hands in public places, unfortunate sterilization facilities may put them at risk of being the targets of violence and provocations.

## 2.2 Solution for These Risks

It was put in place to deal with the risks and problems that come with making sure everyone has access to clean water and sterilization.

**Interest in the institution:** Investing in infrastructure is one of the most important ways to address for the lack of access to clean water and sanitation. This includes facilities for water treatment, improved water distribution systems, and sanitation facilities. According to the wherever they are needed. States and international organizations can significantly contribute to the funding and support of these initiatives (Herrera, 2019).

**Innovation:** Using technology, it is also possible to make sterilization and access to clean water more accessible. Conveying clean water to remote and underserved areas, for instance, is as of now more clear and more reasonable thanks to new water filtration progresses (Jiménez *et al.* 2019). Basically, new sanitization techniques can work with waste board and stop contamination from spreading. They can address some of the main issues that people face when they don't have access to clean water and sanitation by supporting creative ideas and funding these technologies.

**Figure 2: Solution this risk**

(Source: Self-created in MS- Excel)

**Changes in behavior and training:**The dangers and difficulties associated with clean water and sanitation can also be effectively addressed through education and behavioral modification. Educating communities about the importance of hand washing and other hygiene practices. Therefore instance, can help prevent disease transmission. The promotion of environmentally friendly water use practices. On the other hand, protects water resources and ensures that everyone has access to them (Salvia *et al.* 2019). Education and behavior change programs that are tailored to each community's needs. It can be developed through collaboration between governments, organizations, and communities.

**Combating global warming:** The effects of environmental change on water resources and disinfection should also be taken care of. This integrates attempts to diminish the outpouring of ozone exhausting substances and decline the impact of outrageous environment. It might also include devising strategies for adapting. To the changing climate in order to guarantee that communities have access to sanitary facilities and clean water.

**Accountability and equality:** If everyone are to have access to clean water and sanitation, inequality based on gender and resources needs to be addressed as well. This may necessitate either prioritizing those who have the greatest need for community resources or addressing systemic disparities that restrict certain groups' access to them (Fonseca *et al.* 2020). ensuring that women and young women are remembered for the water and sterilization dynamic cycle in addition to meeting their needs.

**Subsidizing and investing:** Finally, in order to address the dangers and difficulties associated with clean water and sanitation, funding and investment are absolutely necessary. Water and sanitation projects can greatly benefit from funding and support from governments and international organizations. Private sector investment can support innovation and the development of novel approaches to these problems.

## 2.3 Potential beneficiaries for ensuring access to water and sanitation in the interview

Individuals, communities, and society as a whole can all gain from providing clean water and sanitation to all. Some of the potential recipients of efforts to guarantee access to sterilization and clean water are listed below.

**Individual:** People are the most receptive recipients of efforts to ensure access to clean water and sterilization. People can deal with their prosperity and lower their bet of water-borne ailments expecting they approach clean water. Both the burden of disease and the quality of life can be improved by doing this. In a similar vein, having access to clean water can assist in promoting hygiene and preventing. The spread of disease, particularly among populations that are more susceptible to infection, such as children and the elderly.

**Figure 3: Potential beneficiaries**

(Source: Self-created in MS- words)

**Municipality:** Networks may also gain from disinfection and access to clean water initiatives for instance, access to clean water can support economic growth, improve food security, and improve rural efficiency. As a result, getting close to clean water can help prevent the spread of infection and improve overall health.

**Companies:**Endeavours to guarantee that everybody approaches sterile and clean water are useful to society all in all. Better overall prosperity results have the potential to ease the burden placed on prosperity systems and encourage financial innovation (Abanyie *et al.* 2019). Communities can manage their water resources sustainably and lessen disputes over resources if they have access to clean water.

**Ladies and Young ladies:** Access to unsafe drinking water and sanitation facilities has a disproportionate impact on girls and women. Women and young women in various organizations are required to purchase water, which consumes a significant portion of their day and prevents. It is pursuing educational opportunities and other avenues. Women's health and hygiene can also suffer from a lack of access to sanitation facilities. Providing women and young women with access to disinfection and clean water leads to improved health outcomes and expanded opportunities.

**Child:** Children are especially susceptible to the negative effects of poor sanitation and water quality. Children's prosperity and neatness can be hurt by a shortfall of permission to sanitization workplaces, and water-borne sicknesses can be especially dangerous for them.

## 2.4 Statistics for the Claims

The following actions were taken in accordance with the requirements outlined in Gathered Nations' Sensible Progression Objective 6: Sanitation and access to clean water were ensured.

* By 2020, the WHO and UNICEF Joint Checking System predict that 4.2 billion people will seek safe sterilization services. Therefore the 2.2 billion people will not seek safe drinking water.
* The rise in illness rates, particularly in low- and middle-income countries is largely attributable. To a lack of access to disinfection and clean water to the World Health Organization (WHO). According to the unclean water is one of the main causes of death among children under the age of five.
* The situation is particularly dire in sub-Saharan Africa. There where 44% of the population lacks access to basic sanitation. Productivity, hygiene, and health may all suffer as a result. Both agribusiness and food security depend on clean water (Dosu *et al.* 2022). The Food and Agriculture Organization (FAO) states that irrigation accounts for 70%. They all freshwater withdrawals globally consequently, improved water management in agriculture has the potential to increase food production and enhance livelihoods.
* When they do not have access to disinfectant and clean water, girls and young women are especially affected. Girls and women around the world spend 200 million hours a day bringing water it can be according to UNICEF.

## 2.5 Principal of 5W&H to produce an engagement to ensure access to water and Sanitation

The 5W&H principle is an effective framework for developing an engagement strategy to guarantee access to clean water and sanitation. It is possible to develop a comprehensive strategy that attracts partners and drives activity, as stated in the 5W&H guideline (Chams *et al.* 2019). One way to use the 5W&H rule to ensure that everyone has access to potable, clean water is as follows:

In an effort to guarantee access to clean water and sterilization for an examples of this include individuals whose lives are impacted by a lack of access to sanitary and clean water. It is leaders of community organizations, and government officials.

To accomplish by carrying out our responsibilities (Setty *et al.* 2020). Making individuals mindful of the fact that it is so critical to approach clean water and sterilization, supporting for strategy changes that would make it more straightforward to get, or setting projects in motion that would make it simpler to get perfect water and disinfection specifically networks are instances of this.



**Figure 4: Goals 6 sustainability**

(Source: https://opendevelopmentmekong.net)

## 2.6 Factors affecting people of sustainability or management of water and Sanitation

There are various elements that affect the supportability or the board of water and disinfection, as expressed in UN Manageable Advancement Objective 6.

**Alterations to the climate:** Droughts, floods, and other extreme weather conditions may result from climate change, making it more difficult to obtain clean water and sanitation supplies.

**The quantity of individuals:** As the total populace keeps on rising, the current framework and assets will be put under strain because of the popularity for water and disinfection administrations.

**Urbanization:** Quick urbanization can overwhelm the water and disinfection framework of metropolitan regions, particularly in low-and centre pay nations where admittance to fundamental administrations might be confined right now.

**Tainting of water:** Water sources can be contaminated by modern activities, spills from agriculture, and untreated sewage, making them unsafe for human use and affecting access to clean water and disinfection.

**Political unsteadiness and struggle:** Struggle and political precariousness, especially in struggle zones where foundation can be harmed or obliterated, can disturb water and disinfection administrations.

**There are no rumours:** Unfortunate help quality and restricted admittance can result from an absence of interest in water and disinfection framework and administrations, especially in countries with low and centre salaries.

**Awful initiative:** Unfortunate administration, which can likewise confine access, can bring about debasement, an absence of responsibility, and lacking guidelines with respect to water and sterilization (Saikia *et al.* 2020).

It is essential to address these variables in order to guarantee the manageability and board of water and sterilization for UN Sustainable Goals 6. This necessitates a multifaceted strategy that takes into account framework hypotheses, environmental change-addressing activities, compelling administration and guidelines, community commitment and strengthening, and environmental change.

## 2.7 Opportunities to be considered as an aspect of sustainability in depth for 5W&H

These opportunities will help promote access to clean water and sanitation for all while promoting sustainable development and environmental stewardship. Here are some important options to consider:

**What**

1. **Including funding:** Access to finance for individuals and communities to invest in water and sanitation infrastructure helps promote sustainable development and ensure equitable access to these essential services. This may include innovative funding mechanisms such as microfinance and crowd funding that promote community ownership and engagement.
2. **Education and Awareness:** Promoting education and awareness about the importance of clean water and sanitation can help support sustainable development initiatives and drive behavioural change. This includes targeted campaigns that address specific water and sanitation challenges, and efforts to promote environmental protection and broader sustainable practices.

**Where**

1. **Neighborhood cooperation:** Transboundary water management issues can be addressed and equitable and sustainable use of shared water resources can be promoted through regional cooperation (World Health Organization, 2020).
2. **Centered interventions:** It can be beneficial to target interventions that have the greatest impact on improving access by concentrating on particular communities or locations where access to clean water and sanitation is particularly restricted.

**Who**

1. **Duty to the region:** Participating in community efforts to make it easier for people to access clean water and sanitation can encourage ownership of these projects and support sustainable development.
2. **Partnerships with Organizations in the Private Sector:** Working together with private organizations to transport water and sterilize can boost development, increase funding, and improve efficiency.

**When**

1. **Legislative alternatives:** Planning engagement activities around significant political events like elections and policy debates at the national or international level can simplify campaigning for policy changes that make it easier for people to access clean water and sanitation.
2. **How to deal with disasters:** Trust is built and long-term economic improvement projects are supported when emergency water and sanitation services are provided in response to disasters like floods and dry seasons (Nižetić *et al.* 2020).

**Why**

1. **Benefits to Health:** Backing can be acquired by extending admittance to clean water and sterilization and advancing maintainable turn of events.
2. **Economic benefits:** it can be highlighting the financial benefits of having sanitary and clean water. Higher efficiency and lower costs for medical services reinforce support among policymakers and the confidential sector.

**How**

* **Limit extension:** Building people's and institutions' capacity to oversee and maintain water and disinfection systems ensures the results of these efforts and improves their long-term viability.
* **A strategy based on data:** Utilizing information to go with choices can work on the sufficiency and reasonability of water and disinfection drives, decrease waste and advance reasonableness (World Health Organization, 2021).

Environmental stewardship, ensuring that everyone has access to clean water and sanitation, and promoting sustainable development. It can all be accomplished by incorporating these opportunities into an engagement strategy for UN Sustainable Development Goal 6.

# 3.0 Conclusion

A basicall;y for water and disinfection in Joined Nations looks at GSuistablegolas of a Stakeholders can effectively collaborate. To accomplish this significant objective by considering the 5W&H principle and concentrating on these opportunities. This necessitates a diverse strategy that takes into account concepts of the framework, strategies for dealing with environmental change, efficient management and guidance, community commitment and strengthening, and other factors. As a result, people groups and individuals all over the world may have easier access to disinfection and clean water while also influencing strategy shifts. By and large, approaching clean water and disinfection benefits people, networks, and social orders overall. Efforts to ensure access to clean water and sanitation can contribute to a better, more prosperous, and more equitable world by reducing disorder, advancing monetary development, and further creating legitimacy.

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