#### **IBM SKILLUP PROJECT**

#### PROJECT TITLE

#### **Presented By:**

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#### **OUTLINE**

- Problem Statement (Should not include solution)
- Proposed System/Solution
- System Development Approach (Technology Used)
- Algorithm & Deployment
- Result (Output Image)
- Conclusion
- Future Scope
- References



## PROBLEM STATEMENT

**Example:** The core problem is a lack of access to consistently safe and reliable drinking water sources, despite the existence of technologies and infrastructure improvements. While "improved" water sources like piped water, boreholes, and protected wells are more likely to be free from contamination, they don't guarantee water safety. Furthermore, even with improved sources, factors like accessibility, availability, and potential for contamination during distribution or storage can still compromise water quality and pose health risks.



### PROPOSED SOLUTION

Improved sources of drinking water are those that are protected from contamination, primarily from fecal matter. These include piped water (into dwellings, yards, or public taps), boreholes, protected dug wells, protected springs, and rainwater collection. Unimproved sources, on the other hand, include unprotected wells, springs, surface water, and bottled water (if not accompanied by an improved source).



# SYSTEM APPROACH

An improved source of drinking water system approach focuses on providing access to water sources that are less susceptible to contamination compared to unimproved sources. These sources include piped water into the dwelling, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collection. Improved sources aim to reduce the risk of waterborne diseases by minimizing exposure to fecal matter and other contaminants.



## **ALGORITHM & DEPLOYMENT**

• Improved sources of drinking water are those that are protected from contamination, particularly fecal matter. These sources include piped water connections, public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection. The deployment of these sources often involves community engagement, infrastructure development, and ongoing monitoring to ensure sustainability and effectiveness.



### RESULT

Improved sources of drinking water, such as household connections, public standpipes, and protected wells, significantly reduce the risk of waterborne diseases and improve overall health outcomes. Access to these improved sources can lead to economic benefits by reducing time spent collecting water and healthcare costs associated with waterborne illnesses. Children, in particular, benefit from improved water sources through better health, leading to increased school attendance and positive long-term consequences.



## CONCLUSION

Improved sources of drinking water, such as piped connections and protected wells, lead to significant public health, social, and economic benefits. These benefits include reduced incidence of waterborne illnesses, increased productivity due to time savings in water collection, and positive impacts on education and overall well-being.



#### **FUTURE SCOPE**

Improved drinking water sources, like piped water and protected wells, are crucial for public health and sustainable development. Future scope involves expanding access to these improved sources, particularly in underserved areas, and ensuring water quality through comprehensive risk management approaches like Water Safety Plans. This includes addressing challenges like water scarcity, pollution, and the impacts of climate change, while also promoting innovation, private sector participation, and behavior change.



### REFERENCES

Improved sources of drinking water are those designed and constructed to be protected from outside contamination, especially from fecal matter. These sources include piped water (into a dwelling, yard, or plot), public tap/standpipe, tube well/borehole, protected dug well, protected spring, and rainwater collection. Essentially, they are designed to deliver safe water by their nature.



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Learning hours: 20 mins



#### **THANK YOU**

