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Introduction

- Overview of the project :
- Objective :

Problem Identification

- Problem statement :
- Significance of the problem :
- Relevant SDGs :

Data Collection

- Sources of Data :
- Data Description :
- Data Collection Methods :

Data Preprocessing

- Data Cleaning Methods :

- **Handling Missing Values :**
- **Data Transformation techniques :**

Data Analysis

- **Analytical Tools and Methods Used :**
- **Key Findings :**
- **Insights Derived :**

Hypothesis Development

- **Formulated Hypothesis :**
- **Rationale behind the hypothesis :**
- **Method for Testing the hypothesis :**

Solution Design

- **Proposed Solution :**
- **Implementation Plan :**

- **Alignment with SDGs :**

Visualization

- **Data Visualization Techniques used :**
- **Charts , Graphs, Maps , etc. :**
- **Key visual insights :**

Conclusion

- **Summary of findings :**
- **Impact of proposed solution :**
- **Future Work :**

References

- **Data sources :**
- **Tools and Software used :**
- **Additional References :**

Here is a summary of the key facts and figures from the document "(Progress on household drinking water, sanitation and hygiene 2000-2020- Five years into the SDGs)":

Introduction

- **Objective:** The report aims to provide internationally comparable estimates of progress on drinking water, sanitation, and hygiene (WASH) as monitored by the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene (JMP). It assesses the progress towards the Sustainable Development Goals (SDGs) targets 6.1 and 6.2 from 2000 to 2020.

Highlights

- **Global Coverage (2015-2020):**
 - **Drinking Water:**
 - 74% of the global population had access to safely managed drinking water services.
 - Achieving universal access by 2030 requires quadrupling current progress rates.
 - **Sanitation:**
 - 54% had access to safely managed sanitation services.
 - A 4x increase in progress rates is needed to achieve universal coverage by 2030.
 - **Hygiene:**
 - 71% had basic handwashing facilities with soap and water at home.
 - 2.3 billion people lacked basic services, including 670 million with no handwashing facilities at all.
 - Universal access requires a 4x increase in progress rates.

Problem Identification

- **Problem Statement:** The world is not on track to achieve SDG targets 6.1 and 6.2 by 2030. Significant acceleration in progress is required, especially in least

developed countries (LDCs) and fragile contexts.

- **Significance of the Problem:**

- LDCs and fragile contexts face the greatest challenges in achieving WASH targets.
- Extending services to rural areas and vulnerable populations is particularly difficult.

Data Collection

- **Sources of Data:** The data is collected and monitored by the WHO/UNICEF JMP, which includes surveys and assessments from various countries.

Data Analysis

- **Key Findings:**
 - **Drinking Water:** 47% of the global population had access to safely managed drinking water services in 2020, up from 28% in 2000.
 - **Sanitation:** 54% of the global population had access to safely managed sanitation services in 2020, up from 28% in 2000.
 - **Hygiene:** 71% had basic handwashing facilities in 2020, but significant disparities exist, particularly in LDCs and fragile contexts.

Solution Design

- **Proposed Solutions:** Accelerating progress through increased investment, targeted policies, and innovative solutions tailored to local contexts.
- **Implementation Plan:** Focus on improving infrastructure, increasing funding, and enhancing community engagement.
- **Alignment with SDGs:** Directly addresses SDG 6 targets, contributing to overall health, education, and economic outcomes.

Visualization

- **Data Visualization Techniques:** Use of charts, graphs, and maps to illustrate progress and disparities.
- **Key Visual Insights:** Highlighting regions with the most significant gaps and the progress needed to achieve universal coverage.

Conclusion

- **Summary of Findings:** Significant progress has been made in WASH services, but the current rate is insufficient to meet SDG targets by 2030.
- **Impact of Proposed Solutions:** Accelerating progress can ensure sustainable and equitable access to WASH services, improving overall health and well-being.
- **Future Work:** Continued monitoring, increased investment, and adaptive strategies to address emerging challenges and disparities.

References

- **Data Sources:** WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene (JMP).
- **Tools and Software Used:** Data analysis and visualization tools as used by the JMP.
- **Additional References:** Publications and data from national surveys and international assessments.

This summary includes the major points, highlights, and data from the report, which can be used to create a comprehensive presentation for your data analysis project.

To create a compact summary report from the PDF titled "CleanWaterAndSanitationAnalysis2.pdf," here's the key information extracted:

Summary Report: Clean Water and Sanitation Analysis

Introduction:

This report analyzes drinking water and sanitation data to identify key challenges and propose actionable solutions aligned with SDG Goal 6: "Clean Water and Sanitation." The analysis includes data on drinking water, sanitation, and hygiene from 2000 to 2022 across different global regions.

Key Findings:

1. Service Levels:

- **Basic Service:** Drinking water from an improved source within a 30-minute round trip.
- **Limited Service:** Drinking water from an improved source exceeding a 30-minute round trip.
- **Safely Managed Service:** Improved water source on premises, available when needed, and free from contamination.
- **Unimproved Service:** Water from an unimproved source.
- **Surface Water:** Drinking water from rivers, lakes, ponds, etc.
- **Open Defecation:** Defecating in open areas.

2. Regional Analysis:

- Regions include Australia and New Zealand, Central and Southern Asia, Eastern and South-Eastern Asia, Europe and Northern America, Latin America and the Caribbean, Northern Africa and Western Asia, Oceania, and Sub-Saharan Africa.
- Analysis covers 23 years (2000-2022).

3. Challenges Identified:

- High correlation between limited water access and use of unimproved sanitation facilities.
- Significant association between limited sanitation facilities and poor hygiene practices.
- High prevalence of open defecation in regions with limited hygiene.

- Strong link between use of surface water and unimproved sanitation facilities.
- Lack of proper handwashing facilities in areas with poor sanitation.

4. **Statistical Correlations:**

- Limited Water & Limited Sanitation: 0.89
- Limited Sanitation & Limited Hygiene: 0.85
- Limited Hygiene & Open Defecation: 0.87
- Surface Water & Unimproved Sanitation: 0.90
- Unimproved Sanitation & No Handwashing Facility: 0.80

Data Visualization:

- **Progress Over the Years:** Trends in surface water usage, basic services, limited services, unimproved services, and safely managed services from 2000-2022 by region.
- **Comparative Analysis:** Means and medians of different water services by year.
- **Sanitation and Hygiene Practices:** Analysis and visualization of sanitation and hygiene practices.

Conclusion:

- Identifying and addressing the challenges related to water and sanitation services can significantly improve public health and hygiene practices.
- Focused efforts are required to improve water quality, reduce the time to collect water, and enhance sanitation facilities to meet SDG 6 by 2030.

Future Work:

- Further analysis on the impact of improved water and sanitation services on health outcomes.
- Implementation of targeted interventions in regions with the poorest services.

References:

- Data sources include the WHO and UNICEF Joint Monitoring Programme, various censuses, household surveys, and administrative data collected from multiple regions over 23 years.

This summary provides an overview of the key findings and insights from the data analysis project, offering a clear and concise report suitable for presentation purposes.