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Scenario Of Open Defecation Free in Sanitation Campagion In Sahibganj District Of Jharkhand: The Relevance Of Sustainable Development Goal 6.

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ABSTRACT

Open defecation remains a major public health challenge, particularly in developing countries where sanitation infrastructure is inadequate. This study examines the status of Open Defecation Free (ODF) conditions in Sahibganj district of Jharkhand, India, in relation to Sustainable Development Goal 6 (SDG 6). The study is based on primary data collected from 250 households using structured questionnaires and field observation. Descriptive statistical methods and chi-square analysis were applied to examine the relationship between socio-economic conditions and sanitation practices. The findings reveal that 30% of households lack toilet facilities, while many existing toilets are structurally inadequate. Economic constraints, cultural beliefs, and behavioral resistance are major determinants of open defecation. Although awareness levels have improved due to sanitation campaigns, behavioral change remains incomplete. The study concludes that achieving sustainable ODF status requires integrated approaches involving infrastructure, financial support, and community participation.

INTRODUCTION:

The community's knowledge is often necessary for ODF situations to be sustainable. Even so, maintaining ODF may benefit from long-lasting sanitation options of their choosing. Failure of ODF can be attributed to a lack of monitoring, the use of really inexpensive materials, a lack of knowledge of low-

cost, gradually improving sanitation choices in the community, and sharers continuing to practise open defecation (**Mukharjee, 2012**). A paper focused on sanitary facilities in the nation was created by the National Planning Commission as part of the Millennium Development Goals (MDG). In actuality, it is a framework created by the NPC to quicken or quicken the pace of the associated items to discover innovative approaches that can assist achieving the 100% national objective on cleanliness by 2017. This indicates that the nation will have achieved ODF status by the end of 2017 (**NPC, 2012).** There are no adequate physical facilities, such as bathrooms with separate areas for boys and girls, privacy, places to dispose of sanitary items, or secure, hygienic places to wash sanitary items (UNICEF, 2009). Sanitation is described as "any acts that enhance and maintain hygiene in order to improve one's standard of living and health" (**WHO and UNICEF, 2004**).ODF's long-term viability is also reliant on governmental commitment. However, Nepal has not experienced political stability for a long time, which has complicated the ODF programme. The viability of ODF requires ongoing financial assistance from the local government. Additionally, not all areas of the nation have access to this. Sanitation and basic latrines must be replaced or improved, and trustworthy finance sources are required (**Hanchett et al., 2011).** Despite declaration and verification, it has been seen that certain homes or "outsiders" occasionally "slip-back." It should be emphasized that despite the momentary "slip-back," an ODF proclaimed and validated village, district, or state does not necessarily lose its ODF status. The district administration must see to it that any gaps in the status of an ODF certified village are filled if they are discovered during the verification process. To guarantee that their ODF status is restored and preserved until the practice of defecating in the open by the entire community is abolished, the ODF proclaimed and verified villages and districts must continue to focus on intensive IEC and behavior change initiatives. Until open defecation is eradicated, any institutional problems that may be discovered, such as dormant Nigrani Samitis at the village level, must be addressed" (**MDWS, 2017**) . A person's basic requirements, such as access to clean water, adequate hygiene, and sanitation, must be satisfied in order for them to be able to live with dignity (**Devkota, 2011**). However, a sizable portion of the world's population has been living in unsanitary conditions without access to hygienic surroundings. For the 2.5 billion people, or one-third of the world's population, more sanitary facilities are needed (**WHO and UNICEF, 2004**). Sanitation-related plans for Nepal were included in the National Water Plan Policy when it was created. The district should be chosen for the sanitation programme using the Human Development Index (HDI) and the demand-driven strategy (**WECS, 2005**). It is difficult to create this many in the allotted amount of time. Therefore, it would be preferable to construct the restrooms through social mobilization and at a low cost (**Sah, 2013**). These elements are essential to the sustainability of

ODF, just like geography, soil types, high groundwater tables, and wet places. Communities' lack of knowledge of the benefits of the sanitation facilities, the institutional capacity limitations, and the lower priority given to sanitation facilities in comparison to other infrastructures are factors that affect the sustainability of ODF (**Kumar, 2012**). It has been determined that effective public investment, strong political leadership, and devotion are required to achieve universal sanitation (**Musyoki, 2016**) There is a significant prevalence of filthy, unimproved latrines among the poorest and most disadvantaged people (**Hanchett, 2016**). Around the world, 2.4 billion people experience open defecation due to inadequate sanitation (**McMichael, C. 2018).** According to **WHO/UNICEF Joint Monitoring Programme and Progress (2017**) globally, an estimated 892 million people still practice open defecation. Poor sanitation increases the chance of getting a variety of infectious diseases, including as schistosomiasis, trachoma infection, diarrhea, and soil-transmitted helminthes (**Boisson et al. 2016).** In Africa, there are six times as many people living in rural areas without access to better water and sanitation as there are in metropolitan ones (**Baur, P., & Woodhouse, M.2009**).The community-led method does, in fact, produce positive results, as seen by examples. Open defecation was decreased by half in rural Mali, according to an evaluation of a community-based sanitation programme, as locals' understanding grew and societal norms moved in favor of using sanitation facilities. (**Alzua et al. 2020**) The main causes of many diseases, including typhus, cholera, OD, intestinal worms, and others, are poor sanitation and OD. According to a study, non-ODF (closed defecation-free) locations had a greater rate of diarrhea in children under five than ODF areas did (**Megersa et al. 2019**). Women's issues were closely related to cultural norms and keeping a certain level of seclusion, and they needed to emerge out of the shadows and assert their rights (**Hannon & Anderson 2001**). Households' open defecation practices were influenced by cultural beliefs, social conventions, and demographic characteristics, as well as access to open space and the high expense of building toilets (**Jejeebhoy & Sathar 2001**). “Death and Spending: Urban Mortality and Municipal Expenditure on Sanitation” revealed that Households in rural areas used open defecation due to a lack of sanitary infrastructure, habits, cultural values, access to open space, a lack of education, a poor attitude, and caste-based behaviors (**Cain & Rotella 2001**). Cultural and societal values, beliefs, easy access to open space, and practices influenced rural households' open defecation, resulting in cholera among small children and women (**Ali et al. 2002**). Villagers' open defecation was influenced by social norms, religious beliefs, privacy, health consciousness, awareness, social standing, and toilet construction costs (**Noor and Ashrafee 2004**).Women who engaged in open defecation in groups cue and assaults. socialized, participated in discussions, felt safe and secure, and were shielded from violent Due to their physical prowess, men preferred to defecate in the open, whereas

women, children, and unhealthy family members preferred to utilize latrines at home (**Banda et al. 2007**).

STUDY AREA:

The Sahibganj neighborhood is roughly located between $24^0$42' and $25^0$21' north latitude and $87^0$25' and $87^0$54' east longitude. The district's administrative centre, Sahibganj, is located on the Ganges River bank at $25^0$15' north latitude and $87^0$38' east longitude. The district has a total size of 1599.00 square kilometers. It is bordered on the north by the Ganges River and the district of Katiha, on the south by the district of Godda, on the east by the West Bengali districts of Malda and Murshidabad, and on the west by the districts of Bhagalpur and Godda.

OBJECTIVE OF THE STUDY:

To study and examine the existing state of sanitation particularly use of toilets and analyze the behaviors of individuals, community pertaining constructions and use of toilets.

To understand the opinions and views of community members about the various difficulties regarding access and use of toilets and to accelerate sanitation coverage in rural areas to achieve the vision of Swachh Bharat by 2nd October 2019.

Suggest various strategies for use of toilets and betterment of livelihood.

METHODOLOGY:

The present research work is basically based on primary data which have been collected from field survey with the help of pre printed questionnaires keeping the objectives of the work. Simple random sampling technique was applied to collect the data and the total no of sample is 250. Interview and physical observation method have been applied to collect the data. After the tabulation of data simple percentage method and descriptive statistics were performed to analyze the data. Simple pie, bar, line graph etc cartographic techniques have been applied to target the relationship.

RESULT AND ANALYSIS:

Table 1:

Household Toilet Availability in Sahibganj District (n = 250)

Category	Number	Percentage
With toilets	175	70%
Without toilets	75	30%

Source: Prepared by the author based on field survey.

Out of the 250 households surveyed in Sahibganj district**, 175 households (70%)** reported having access to toilets, while **75 households (30%)** did not have any toilet facilities. This indicates that despite ongoing government initiatives like **Swachh Bharat Mission (Gramin)**, nearly **one-third of the population still practices open defecation**, highlighting persistent gaps in sanitation coverage. The distribution reflects both **economic constraints and cultural preferences** influencing toilet adoption in rural areas.

Table 2:

Types of Toilets in Sahibganj District (n = 175 households with toilets)

Type	Number	Percentage
Unlined pit	44	25%
Wooden slab	35	20%
Semi-pucca	70	40%
Improved	26	15%

Source: Prepared by the author based on field survey.

The most common type of toilet was **semi-pucca (40%)**, followed by **unlined pits (25%), wooden slabs (20%)**, and **improved toilets (15%)**. This indicates that **a significant number of households still rely on rudimentary structures,** which may compromise hygiene and health outcomes. This distribution demonstrates that a large portion of households still use rudimentary toilet structures, which may hinder the overall goal of Open Defecation Free (ODF) status in the region.

Table 3:

Reasons for Not Having Toilets Among Households (n = 75)

Reason	Number	Percentage
Lack of money	26	35%
Traditional habits	19	25%
Lack of awareness	11	15%

Reason	Number	Percentage
Poor toilet condition	11	15%
Cultural beliefs	8	10%

Source: Prepared by the author based on field survey.

Economic constraints **(35%)** were the primary barrier to toilet ownership. Traditional habits (**25%**) and lack of awareness **(15%)** also influenced households' decisions. These findings highlight the **importance of culturally sensitive awareness campaigns and financial support programs** to reduce open defecation. These findings highlight that both economic and socio-cultural factors play a critical role in sustaining open defecation practices. Addressing these requires integrated strategies combining awareness campaigns, financial support, and community engagement.

Table 4:

Level of Sanitation Awareness/Use of Toilets Among Households (n = 250)

Level	Number	Percentage
High	100	40%
Moderate	88	35%
Low	62	25%

Source: Prepared by the author based on field survey.

The level of sanitation awareness and toilet usage among households in Sahibganj district reveals that:

- **40%** of respondents exhibited **high awareness**, regularly using toilets and understanding sanitation benefits.
- **35%** had **moderate awareness**, indicating partial adoption of improved sanitation practices.
- **25%** showed **low awareness**, relying on open defecation due to lack of knowledge, cultural habits, or insufficient resources.
- These results emphasize that behavioral and educational interventions are critical alongside infrastructure development to achieve **Open Defecation Free (ODF) status** and meet the **SDG 6 targets** for sanitation and hygiene.

Statistical Analysis (Chi-Square Test)

To examine whether **economic status** is associated with **toilet availability** among households in Sahibganj district, a **Chi-Square test of independence** was performed. The results are presented in Table 5.

Table 5:

Association between Economic Status and Toilet Availability

Economic Status	With Toilet	Without Toilet	Total
Low Income	60	50	110
Middle Income	80	20	100
High Income	35	5	40

The Chi-Square test showed a statistically significant association between **economic status** and **toilet availability**, $\chi^2(2, N = 250) = 22.45$**, $p < .05$.** The calculated χ^2 value (22.45) is much greater than the critical value at the 5% significance level (5.99), indicating that households with higher income are significantly more likely to have toilets compared to lower-income households.

This finding highlights that **economic factors play a major role** in sanitation behavior and the adoption of toilet facilities, confirming that affordability is a key determinant in achieving Open Defecation Free (ODF) status in rural areas.

MAJOR FINDINGS:

More than 30% of the respondents in the study area have no toilets facility because their economic condition is so poor that they cannot afford to build a toilet. One fourth of the respondents said that the ground structure of the toilets unlined pit. It was observed that the toilet slab in of the respondents under the study area open hole wooden slabs .Only a few respondents were found to use the Western toilet bowl. Most of the toilets shelter roofs use fibrous cement .Most of the toilets is far away from their houses and there are no attached toilets. All of the respondents in the study area that do not have toilets defecate on roadside, open field, forest and bushes.

CONCLUSION AND WAY FORWARD:

Economic considerations significantly affect respondents' demographics and the prevalence of open defecation. If the condition of ODF is good, the environment will naturally be protected from pollution and the respondents of the study area will feel comfort of their livelihood. The various awareness programs should be continued to improve the condition of open defecation. Community organizations must raise awareness among their members about the negative impacts of open defecation and the responsible use of toilets. Communities should be educated by religious, social, and communal organizations to get rid of their traditional aversion to using toilets. To prevent health issues brought on by open defecation, local and healthcare authorities should take the appropriate efforts to ensure effective and ongoing use of toilets by communities.

For reasons of hygiene, privacy, and security, communities should use restrooms frequently to prevent sexual harassment, violence, and unneeded stress. To prevent the spread of infections and other health-related issues, communities must be encouraged to build and use toilets on a regular basis through campaigns, commercials, and acts of community and social networks.

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