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The Grim Reality of Manual Scavenging in Uttar Pradesh: Exploring the Dangers and Consequences for Sanitation Workers.

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Abstract: ***Despite being prohibited since 1993, manual scavenging is still practiced in several parts of India. Uttar Pradesh has the highest documented number of cases of manual scavenging, and sanitation personnel are at the forefront of this practice. The purpose of this study article is to investigate the risks and implications of manual scavenging for sanitation workers in Uttar Pradesh. The research is based on an examination of existing literature as well as secondary data acquired from government sources. According to the study's findings, manual scavenging creates considerable health risks for sanitation employees, such as exposure to harmful fumes and diseases. It also has serious social and psychological ramifications, such as discrimination and stigma. The article concludes by emphasizing the necessity for immediate action to abolish manual scavenging and defend sanitation workers' rights. The study will also include statistical information about manual scavenging in Uttar Pradesh.***
Keywords: Manual scavenging, sanitation workers, Uttar Pradesh, health hazards, social consequences.

I. THE GRIM REALITY OF MANUAL SCAVENGING IN UTTAR PRADESH: EXPLORING THE DANGERS AND CONSEQUENCES FOR SANITATION WORKERS

Manual scavenging is a highly degrading practice of manually cleaning, carrying, disposing of, or handling in any manner human excreta, sewage, or other hazardous waste materials. It is an inhumane practice that primarily affects the Dalit community, who are considered to be at the bottom of the caste hierarchy in India. It is considered one of the worst forms of caste-based discrimination and violates the fundamental human rights of the affected individuals. Unfortunately, manual scavenging is still prevalent in many parts of India, including Uttar Pradesh. Uttar Pradesh is the most populous state in India and has the highest number of manual scavengers. According to a survey conducted by the National Commission for Safai Karamcharis in 2018, there were over 29,923 manual scavengers in Uttar Pradesh. However, this number is believed to be a gross underestimation, as many cases of manual scavenging go unreported due to the fear of repercussions. It is crucial to understand that manual scavenging is not only a violation of human rights but also a public health hazard. It is essential to create awareness and work towards the complete eradication of this inhumane practice. It is essential to address the issue of manual scavenging and understand its dangers because it is a gross violation of human rights and dignity. It has a severe impact on the health and well-being of manual scavengers, who are exposed to harmful gases and pathogens, which can cause various respiratory and gastrointestinal diseases, skin infections, and other life-threatening illnesses. Moreover, manual scavenging is an extremely discriminatory and stigmatizing practice, which perpetuates social inequality and reinforces the caste system. The manual scavengers are often denied access to education, employment, and other basic services, and they face social exclusion and discrimination, which further aggravates their poverty and marginalization. Addressing the issue of manual scavenging requires a multi-pronged approach that includes legal, social, and economic interventions.

The objectives of this study are-

1) Addressing the issue of manual scavenging requires a multi-pronged approach that includes legal, social, and economic interventions.
2) To examine the extent of manual scavenging practices in Uttar Pradesh and their impact on the health and wellbeing of sanitation workers.
3) To identify the risks and hazards associated with manual scavenging, such as exposure to sewage, hazardous gases, and infectious diseases.

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4) To investigate the social and economic factors that contribute to the persistence of manual scavenging practices in Uttar Pradesh.
5) To explore the coping strategies used by sanitation workers to deal with the physical, emotional, and psychological stresses of manual scavenging.
6) To assess the effectiveness of existing policies and programs aimed at eradicating manual scavenging practices in Uttar Pradesh and identify potential areas for improvement.
7) To identify the challenges faced by sanitation workers in accessing education, healthcare, and other basic amenities due to the nature of their work.
8) To suggest policy recommendations and strategies to eradicate manual scavenging and improve the working conditions and social status of sanitation workers in Uttar Pradesh.

II. LITERATURE REVIEW

The caste system, which has been a major feature of Indian society for thousands of years, can be traced back to the roots of manual scavenging. The caste system separates people into social groups depending on their birth, with the lowest castes considered "impure" and "untouchable." These people were subjected to the most menial and demeaning jobs, such as manual scavenging.

A variety of factors contribute to the continued use of manual scavenging in Uttar Pradesh. One of the primary factors is the Dalit community's lack of viable livelihood opportunities. The majority of manual scavengers are Dalits who are forced to work in this occupation due to a lack of education, discrimination, and poverty.

Another reason for the persistence of manual scavenging is the lack of political will to enforce the ban on the practice. Despite the existence of laws prohibiting manual scavenging, there is a lack of implementation, monitoring, and accountability mechanisms to ensure that the ban is enforced effectively.

The purpose of this literature study is to highlight the issues faced by manual scavengers in UP and to identify gaps and loopholes in existing research.

A. Ramanathan and Chaturvedi's "The Plight of Manual Scavengers in Uttar Pradesh" (2006)

This study looked at the socioeconomic situations of manual scavengers in Uttar Pradesh and discovered that the majority of them belonged to the Dalit caste and lived in extreme poverty. The study also discovered health risks connected with manual scavenging, such as respiratory issues, skin infections, and gastrointestinal difficulties. Unfortunately, the report made no recommendations for correcting the issue.

B. "Manual Scavenging in Uttar Pradesh: A Study of Selected Districts" by Kumar et al. (2010)

This study analysed the prevalence of manual scavenging in selected districts of UP and identified the reasons for its persistence. The study found that the lack of alternative livelihood options, social stigma, and the failure of the government to implement laws prohibiting manual scavenging were the main reasons for its continuation. The study recommended the provision of alternative livelihood options, awareness campaigns, and strict enforcement of laws to address the problem.

C. Das and Mohanty's "Manual Scavenging in Uttar Pradesh: A Study of Sanitation Workers" (2014)

This research looked on the working conditions of sanitation employees in UP, particularly manual scavengers. The survey discovered that sanitation personnel, especially manual scavengers, were not provided with protective equipment and were not trained to handle hazardous trash. The study suggested that protective equipment and training be provided to prevent occupational dangers.

D. Shukla and Shukla's "Manual Scavenging in Uttar Pradesh: A Study of Sanitation Workers in Varanasi" (2018)

This study looked at the working conditions and health risks that sanitation employees, particularly manual scavengers, confront in Varanasi, a city in Uttar Pradesh. According to the report, the workers were not equipped with safety equipment and were not given any training on how to handle hazardous material. The study also recognized the social stigma encountered by manual scavengers and suggested that safety gear, training, and awareness campaigns be provided to address the issue.

Despite the existence of these studies, the problem of manual scavenging persists in UP, highlighting the gaps and loopholes in the existing research.

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Some of these gaps include:

1) Lack of focus on the root causes of manual scavenging, such as the caste system, which perpetuates social stigma and discrimination against manual scavengers.
2) Limited attention to the role of the government in perpetuating the problem, including the failure to enforce laws prohibiting manual scavenging.
3) Insufficient recommendations for addressing the problem, particularly in terms of providing alternative livelihood options and addressing the social stigma faced by manual scavengers.
4) The long-term physical and psychological impact of manual scavenging on the health of workers and their families.
5) The potential of technology and innovation to address the issue of manual scavenging and provide alternative livelihood options for affected communities.

III. METHODOLOGY

A. *Research Design*

The purpose of this research is to look into the risks and effects faced by sanitation employees performing manual scavenging in Uttar Pradesh, India. It also intends to evaluate how technology and innovation may be used to address the issue of manual scavenging and provide alternative employment options for afflicted populations.

This project will address the following research question: How can technology and innovation be used to eliminate manual scavenging and provide long-term employment prospects for affected communities?

This research will be founded on a secondary data analysis of existing literature, reports, and studies on manual scavenging in Uttar Pradesh. Government reports, academic research, publications, journals, websites, and media reports will all be used as data sources. Content analysis methodology is used.

B. *Technological Advancements To Address The Issue Of Manual Scavenging*

Technology and innovation have the ability to ease the problem of manual scavenging while also providing other economic opportunities for affected populations. Some of the technologies are as follows:

1) *Bandicoot*: Bandicoot is a novel machine developed to clean manholes and sewage systems. It is controlled remotely by a human operator using a joystick from a safe distance. The equipment is equipped with a camera as well as a robotic arm that can reach into the manhole and remove the waste. It is quick and efficient, cleaning up to 30 times faster than manual scavenging. This technique has the potential to reduce the need for manual scavenging and provide safer working conditions for sewer and manhole cleaners.
2) *HomoSEP*: A low-cost, decentralized wastewater treatment system capable of treating human waste in individual households. It is a basic system that treats wastewater using natural processes such as gravity, sedimentation, and aerobic digestion. Water that has been treated can be utilized for irrigation or other non-potable uses. By providing safe and sanitary toilets in households, this technology has the ability to remove the need for manual scavenging.
3) *Jalodbust*: Jalodbust is a machine capable of cleaning the insides of sewer lines. It removes garbage with high-pressure water jets and can identify bottlenecks and breaches in sewer lines. This device has the potential to reduce manual scavenging of sewer systems while also providing safer working conditions for those involved.

Overall, these technologies have the potential to address the issue of manual scavenging and provide alternative livelihood options for the affected communities. By adopting these technologies, we can create a more equitable and just society where everyone has access to safe and dignified work.

C. *Lack Of Safety Gears Resulted In Deaths*

The lack of safety gear and protective equipment for manual scavengers is a major issue, as it exposes them to various health hazards, including respiratory diseases, skin infections, and even death due to exposure to toxic gases or drowning in septic tanks.

According to the Ministry of Social Justice and Empowerment's data presented in the Lok Sabha (lower house of the Indian parliament) on 26th July 2022, a total of 30 manual scavengers have died while cleaning sewers and septic tanks in Uttar Pradesh since 2019. Surprisingly, all of the deaths in Uttar Pradesh were reported in 2019, with 2020 and 2021 suddenly having no such deaths, according to the data.

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IV. RESULTS AND DISCUSSION

A. *Overview of the Findings*

Manual scavengers confront several health and safety risks, including as exposure to human waste and hazardous chemicals, poor working conditions, and a lack of protective equipment. These dangers frequently result in bodily injuries, illnesses, and even death. In Uttar Pradesh, several manual scavengers have died as a result of suffocation or drowning while cleaning sewers or septic tanks without sufficient safety equipment.

Besides from the physical risks, manual scavenging has long-term psychological consequences for those participating. The stigma associated with the employment, combined with caste-based discrimination and social marginalization experienced by manual scavengers, frequently leads to feelings of shame, remorse, and inferiority complex. Because of the nature of their employment and the discrimination they endure, they are also at risk of developing mental health issues such as depression, anxiety, and post-traumatic stress disorder (PTSD). The absence of educational and employment possibilities reinforces their cycle of poverty and exploitation. The way society treats manual scavengers is also a huge obstacle. These persons are frequently denied access to essential services and utilities like as clean water, sanitation, and healthcare due to caste-based prejudice and stigmatization. Furthermore, manual scavengers are frequently subjected to verbal and physical abuse, as well as other forms of harassment.

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V. DISCUSSION OF FACTORS CONTRIBUTING TO THE PERSISTENCE OF MANUAL SCAVENGING IN UTTAR PRADESH

Many variables, which are detailed below, contribute to the persistence of this practice in Uttar Pradesh.

1) *Discrimination Based on Caste*: In India, manual scavenging is primarily linked with the lowest castes, particularly the Dalits. Due to the state's caste-based discrimination, Dalits in Uttar Pradesh are frequently forced to engage in manual scavenging. The practice is viewed as a job reserved for lower castes and is frequently forced upon them due to their socioeconomic situation.
2) *Lack of Alternative Livelihood Opportunities*: For many families in Uttar Pradesh, manual scavenging is their main source of income. Because to a lack of alternative livelihood alternatives, particularly for the lower castes, they are forced to continue with this dangerous habit.
3) *Lack of Political Will*: Although being prohibited for several decades, manual scavenging continues due to a lack of political will to enforce the rules and prosecute individuals who hire manual scavengers. The government has failed to give significant assistance to victims of manual scavenging and has taken insufficient steps to eliminate the practice.
4) *Inadequate Sanitation Infrastructure*: In many districts of Uttar Pradesh, a lack of proper sanitation infrastructure compels people to resort to open defecation and other unsanitary behaviours. This necessitates the use of hand scavengers to clear up the waste, resulting in the practice's persistence.
5) *Lack of Awareness*: Many people in Uttar Pradesh are unaware of the dangers of manual scavenging or that it is banned. Because there is a lack of awareness, there is a lack of demand for change, allowing the practice to continue.

VI. INITIATIVES BY THE GOVERNMENT FOR MANUAL SCAVENGERS

The Uttar Pradesh government has devised numerous programmes to help manual scavengers get back on their feet. Among these schemes are:

1) *Self-Employment Program for Manual Scavenger Rehabilitation*: This scheme intends to provide financial support and training to manual scavengers in order for them to create their own enterprises or pursue alternative careers. One identified manual scavenger from each family is given a one-time cash support of Rs. 40,000.
2) *Manual Scavengers Special Central Assistance Scheme*: This scheme provides financial help to manual scavengers for education, skill development, and other rehabilitation activities.
3) *Scholarship Scheme for Children of Manual Scavengers*: This scheme provides financial assistance to children of manual scavengers in order for them to further their education.
4) *Swachh Bharat Mission (Gramin)*: The Uttar Pradesh government is working on building toilets in rural areas, which will reduce the need for manual scavenging.
5) *Awaas Yojana*: This scheme provides financial assistance for the construction of houses for manual scavengers and their families.

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These schemes aim to provide alternative livelihood opportunities to manual scavengers and their families and improve their socio-economic conditions. However, it is important to note that the eradication of manual scavenging requires a multi-pronged approach, which includes strict enforcement of the law, awareness campaigns, and the provision of adequate sanitation facilities.

VII. CONCLUSION

This research discusses the continuation of manual scavenging in Uttar Pradesh and the growing number of people who engage in this unlawful behaviour. The article discusses the health dangers of hand scavenging, such as exposure to harmful gases and toxins found in septic tanks. Poverty, insufficient legal enforcement, a lack of safety equipment, and societal discrimination against those from lower castes all contribute to the problem of manual scavenging.

The article recommends numerous solutions to this problem, such as tougher enforcement of current regulations, financial assistance for impacted persons, training and education programs, support for self-help organizations, the promotion of alternative employment options, and improved public awareness. Technology advances can also be used to lessen the need for manual labour. The government can also transfer migrant workers to places where they won't face prejudice.

To handle the issue of manual scavenging efficiently, the government must identify and aid all affected individuals, as well as correctly determine the number of manual scavengers in the country. The most crucial measure, however, is to educate society on the significance of treating manual scavengers with dignity and equality.

The government must address this issue by offering other livelihood opportunities for manual scavengers as well as removing the social stigma connected with this work.

The government might support entrepreneurial and skill development initiatives for manual scavengers as one approach. These programs should be developed to train participants in alternative occupations such as tailoring, plumbing, and electrician work. Participants in these programs may also be eligible for financial aid and incentives from the government, such as subsidized loans or grants. This will aid in the creation of new prospects for these employees and their families, reducing their reliance on manual scavenging and securing a long-term source of income.

Technology and innovation can help to solve the problem of manual scavenging. For example, the government may investigate the use of automated cleaning and other technical options to replace manual scavenging. There may also be projects to construct environmentally friendly toilets and waste management systems that lessen the need for manual scavenging. Also, the government can encourage the use of mobile applications and other digital platforms to connect manual scavengers with other work prospects.

Also, the long-term physical and psychological effects of manual scavenging on employees and their families must be considered. Workers who have been affected by this practice may be eligible for medical aid and rehabilitation services from the government.

There may be programs to assist workers and their families with counselling and mental health care, as they may suffer from depression, anxiety, and other psychological problems. It is critical to raise public knowledge about the dangers of manual scavenging and to remove the social stigma associated with this labour.

This study has some limitations, including the use of secondary data that might not give a complete picture of the problem. Also, the data used may be limited in terms of accuracy and reliability.

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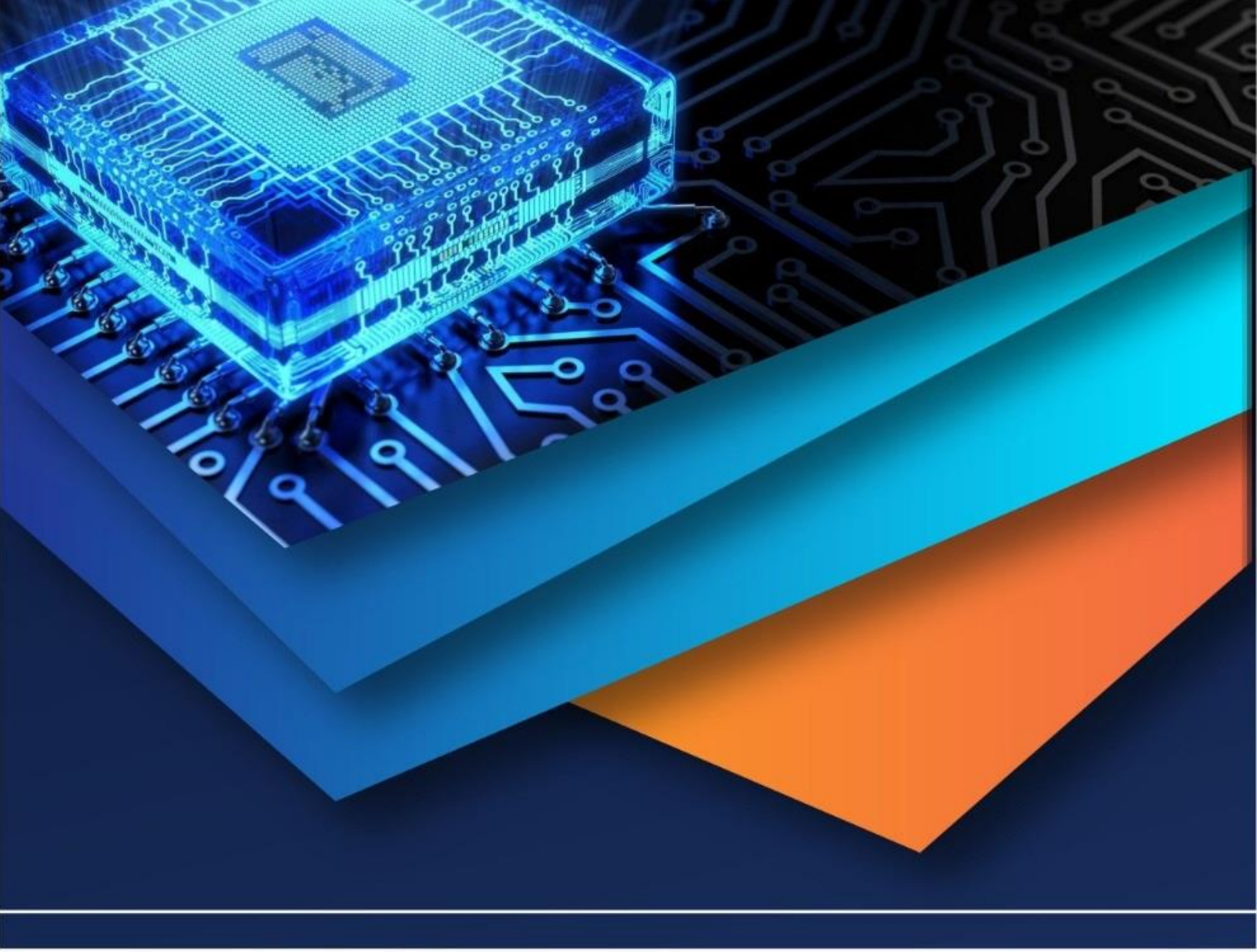
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