IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 3, November 2022
Impact Factor: 6.252

Challenges of Solid Waste Management in India

Dr. Babita Yadav
Associate Professor
Nehru College, Chhibramau, Kannauj, Uttar Pradesh, India
drbabitay@gmail.com

Abstract: *The Indian Prime Minister got the prestigious Global Goalkeeper Award for the Swachh Bharat Abhiyan from the Bill & Melinda Gates Foundation. There is no denying that India has improved its sanitation coverage, but the country's biggest shortcoming is its poor waste management infrastructure. Available literature shows that India's informal recycling sector which consists of waste pickers plays a crucial role in segregating and recycling waste, but in most cases, they are not formally trained and at times they burn waste at landfills to keep themselves warm at night and end up setting landfill fires that cause air pollution, and because of inadequate gear, they are also exposed to diseases and injuries. As India continues to rebuild, its citizens should ensure that they avoid reaching the dangerous levels of the average westerner in plastic consumption and waste production because waste reduction is better than any kind of waste management. And India's traditional wisdom of "Aparigraha" which is very relevant even today can play a key role in achieving that.*

Keywords: Waste Management; Waste Management Crises; Pollution; Solid Waste

REFERENCES

[1]. Agnihotri, N. (2018). Effect of Pollution on Human and Environment. Trends in Biosciences 11(25) 3411-3417.

[2]. Agnihotri, N. (2019) Hazards of Chromium Pollution and It's Prevention. Bulletin of Environment Pharmacy & Life Sciences Vol.8(8)1-5.

[3]. Agnihotri, N. (2020). Corona Virus: A New Health Hazard in Processing on National conference on Recent Trend and New Frontiers Biotechnology, Agriculture Science and Environmental, Janome Biotech Publication, Mathura, ISBN:978-81-92-9995-0-2:102-103.

[4]. Agnihotri, N., Sharma, T.K. and Sippy, D. (2020) Population Growth Food Security Biodiversity and Covid-19. The Biobrio, 8(3-4):503-508.

[5]. Agnihotri, N. and Tiwari, A. (2020) Potential of Azolla as Chromium Removal Agent From Tannery Effluents. Studies in Indian Place Names (SIPN), Vol 40; issue 56.

[6]. Agnihotri, N and Jha, A.K.S. (2021). Impact of Lockdown on Environment. Advance Plant Science, 1(12):24-29.

[7]. Agnihotri, N. (2022). Utility Of Self-Grown Medicinal Plants As Traditional Remedy In Farrukhabad District. European Journal of Agricultural and Rural Education (EJARE), Vol. 3 No. 2; 79-86. Available Online at: https://www.scholarzest.com.

[8]. Doaemo, W., Dhiman, S., Borovskis, A., Zhang, W., Bhat, S., Jaipuria, S., & Betasolo, M. (2021). Assessment of municipal solid waste management system in Lae City, Papua New Guinea in the context of sustainable development. Environment, development and sustainability, 23(12), 18509–18539. https://doi.org/10.1007/s10668-021-01465-2.

[9]. Fadhullah, W., Imran, N., Ismail, S., Jaafar, M. H., & Abdullah, H. (2022). Household solid waste management practices and perceptions among residents in the East Coast of Malaysia. BMC public health, 22(1), 1. https://doi.org/10.1186/s12889-021-12274-7.

[10]. Ferronato, N., & Torretta, V. (2019). Waste Mismanagement in Developing Countries: A Review of Global Issues. International journal of environmental research and public health, 16(6), 1060. https://doi.org/10.3390/ijerph16061060.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 3, November 2022
Impact Factor: 6.252

[11]. Goswami, M., Goswami, P. J., Nautiyal, S., & Prakash, S. (2021). Challenges and actions to the environmental management of Bio-Medical Waste during COVID-19 pandemic in India. Heliyon, 7(3), e06313. https://doi.org/10.1016/j.heliyon.2021.e06313.

[12]. Hantoko, D., Li, X., Pariatamby, A., Yoshikawa, K., Horttanainen, M., & Yan, M. (2021). Challenges and practices on waste management and disposal during COVID-19 pandemic. Journal of environmental management, 286, 112140. https://doi.org/10.1016/j.jenvman.2021.112140.

[13]. Hazra, T., & Goel, S. (2009). Solid waste management in Kolkata, India: practices and challenges. Waste management (New York, N.Y.), 29(1), 470–478. https://doi.org/10.1016/j.wasman.2008.01.023.

[14]. Kothari, R., Sahab, S., Singh, H. M., Singh, R. P., Singh, B., Pathania, D., Singh, A., Yadav, S., Allen, T., Singh, S., & Tyagi, V. V. (2021). COVID-19 and waste management in Indian scenario: challenges and possible solutions. Environmental science and pollution research international, 28(38), 52702-52723. https://doi.org/10.1007/s11356-021-15028-5.

[15]. Kulkarni, B. N., & Anantharama, V. (2020). Repercussions of COVID-19 pandemic on municipal solid waste management: Challenges and opportunities. The Science of the total environment, 743, 140693. https://doi.org/10.1016/j.scitotenv.2020.140693.

[16]. Kumar I., Yadav P., Gautam M., and Panwar H. (2022). Impact of Heat on Naturally Present Digestive Enzymes in Food. Int J Food Nutr Diet. 2022;10(2):57–63.

[17]. Kumar, I. & Gautam M. (2022). Determinants of Dietary Diversity Score for the Rural Households of Uttar Pradesh State. Int J Food Nutr Diet. 2022; 10(1):9–16. DOI: http://dx.doi.org/10.21088/ijfnd.2322.0775.10122.1.

[18]. Kumar, I. and Gautam, M. (2022). Enhance the Nutritive Value of Diet through Dietary Diversity in the Rural area of Uttar Pradesh: an intervention-based study. Indian Research Journal of Extension Education. 22 (2). https://doi.org/10.54986/irjee/2022/apr_jun/29-33

[19]. Kumar, I., Gautam, M., Srivastava, D., Yadav, R. (2019). Assess the Diet Diversity Score along with the availability of food variety for a rural household in the Banda and Kannauj districts of Uttar Pradesh. American International Journal of Research in Formal, Applied & Natural Sciences, 25 (1), pp. 14-18. Retrieved from http://iasir.net/AIJRFANSpapers/AIJRFANS19-106.pdf.

[20]. Kumar I. & Gautam M. (2021). Correlation between Individual Dietary Diversity Score and Nutrients Adequacy Ratio in the Rural Community. SPR,1(4):258–263. https://doi.org/10.52152/spr/2021.143.

[21]. Kumar I. & Gautam M. (2022). Excessive intake of micronutrients in rural population of Uttar Pradesh state. Science Progress and Research. Volume 2, issue 2, Page No.: 515-519. DOI: https://doi.org/10.52152/spr/2021.174.

[22]. Kumar, I., Yadav P., Gautam M., Panwar H. (2022) Impact of Heat on Naturally Present Digestive Enzymes in Food. International Journal of Food, Nutrition and Dietetics**.** 10(2):57–63.

[23]. Kumar, S., Smith, S. R., Fowler, G., Velis, C., Kumar, S. J., Arya, S., Rena, Kumar, R., & Cheeseman, C. (2017). Challenges and opportunities associated with waste management in India. Royal Society open science, 4(3), 160764. https://doi.org/10.1098/rsos.160764.

[24]. Monika, & Kishore, J. (2010). E-waste management: as a challenge to public health in India. Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine, 35(3), 382–385. https://doi.org/10.4103/0970-0218.69251.

[25]. Puri, A., Kumar, M., & Johal, E. (2008). Solid-waste management in Jalandhar city and its impact on community health. Indian journal of occupational and environmental medicine, 12(2), 76–81. https://doi.org/10.4103/0019-5278.43265.

[26]. Ram, N., Ram, L., Verma, S.K., Agnihotri, N., Choudhary, M., Chamoli, M., Sharma J., Maheshwari, R.K. (2022) To study physicochemical parameters of potable water sources of Agra city (Uttar Pradesh) India. International Journal of Multidisciplinary Research and Development. Volume 9, Issue 3, 2022, Page No. 1-7.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 2, Issue 3, November 2022
Impact Factor: 6.252

[27]. Sarkodie, S. A., & Owusu, P. A. (2021). Impact of COVID-19 pandemic on waste management. Environment, development and sustainability, 23(5), 7951–7960. https://doi.org/10.1007/s10668-020-00956-y.

[28]. Sharholy, M., Ahmad, K., Mahmood, G., & Trivedi, R. C. (2008). Municipal solid waste management in Indian cities - A review. Waste management (New York, N.Y.), 28(2), 459–467. https://doi.org/10.1016/j.wasman.2007.02.008.

[29]. Sharma, H. B., Vanapalli, K. R., Cheela, V. S., Ranjan, V. P., Jaglan, A. K., Dubey, B., Goel, S., & Bhattacharya, J. (2020). Challenges, opportunities, and innovations for effective solid waste management during and post COVID-19 pandemic. Resources, conservation, and recycling, 162, 105052. https://doi.org/10.1016/j.resconrec.2020.105052.

[30]. Singh, E., Kumar, A., Mishra, R., & Kumar, S. (2022). Solid waste management during COVID-19 pandemic: Recovery techniques and responses. Chemosphere, 288(Pt 1), 132451. https://doi.org/10.1016/j.chemosphere.2021.132451.

[31]. Tripathi, A., Tyagi, V. K., Vivekanand, V., Bose, P., & Suthar, S. (2020). Challenges, opportunities, and progress in solid waste management during the COVID-19 pandemic. Case Studies in Chemical and Environmental Engineering, 2, 100060. https://doi.org/10.1016/j.cscee.2020.100060.

[32]. Yousefi, M., Oskoei, V., Jonidi Jafari, A., Farzadkia, M., Hasham Firooz, M., Abdollahinejad, B., & Torkashvand, J. (2021). Municipal solid waste management during COVID-19 pandemic: effects and repercussions. Environmental science and pollution research international, 28(25), 32200–32209. Advance online publication. https://doi.org/10.1007/s11356-021-14214-9.

[33]. Yukalang, N., Clarke, B., & Ross, K. (2017). Barriers to Effective Municipal Solid Waste Management in a Rapidly Urbanizing Area in Thailand. International journal of environmental research and public health, 14(9), 1013. https://doi.org/10.3390/ijerph14091013.

[34]. Yukalang, N., Clarke, B., & Ross, K. (2018). Solid Waste Management Solutions for a Rapidly Urbanizing Area in Thailand: Recommendations Based on Stakeholder Input. International journal of environmental research and public health, 15(7), 1302. https://doi.org/10.3390/ijerph15071302.