



## Innovating to Zero Open Defecation



**18** In JUL 2018

25<sup>th</sup>
JUL 2018

29<sup>th</sup> - 31<sup>st</sup>
JUL 2018 JUL 2018

3 rd AUG 2018



Submission of Case Solutions



Top 3 Finalist shortlisted



Coaching from consultants to enhance case development



Finalists presentation

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### Problem Statement

Open defecation remains an overwhelming challenge in developing nations such as Nepal. According to 2015 World Health Organization estimates, 12% of the global population (or close to 900 million people) practice open defecation. Of that figure, 3 out of every 4 (or ~75%) of these individuals live in just 7 countries, mostly located in South Asia, including Nepal.

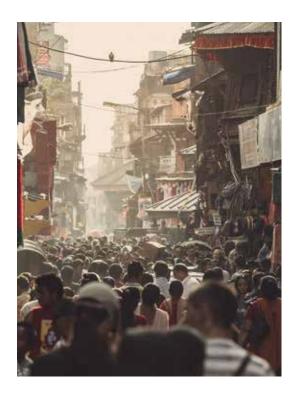
In Nepal, close to 36% of its rural population (compared to 5% in urban areas) practices open defecation. Approximately 38 out of the 75 districts in the country face open defecation problem, while the remaining 37 (declared as open defecation free areas) still experience challenges. Even in urban areas, there is a severe shortage of public toilets. Kathmandu Metropolitan City is the worst with only 16 public toilets for a population of over 1 million people (2011 census).

Besides being highly unhygienic, open defecation is linked to serious public health hazards such as diarrhea and cholera from contaminated water or food. Annually, 30,000 to 40,000 diarrhea-related deaths are reported in Nepal, mostly due to open defecation.

As a member of the United Nations, Nepal is committed to achieving the targets set out in the UN Sustainable Development Goals (SDGs). Eradicating the practice of open defecation is in focus as part of UN SDG 6 to ensure availability and sustainable management of water and sanitation for all. The aim to eliminate the practice of open defecation by 2030 indicates that we need to reduce the number of people defecating in the open by 60 million per year globally over the 15 years (2016 to 2030), as compared to a reduction of just 22 million per year from 2000 to 2015.

As a participant of the Case Challenge, you will need to generate measures to ideate and propose digital solutions that will enable Nepal to achieve its goal to eradicate open defecation in line with the UN SGD. The solution you provide should:

- Accelerate the reduction of open defecation practice compared to current initiatives
- Increase citizen participation in Nepal's achievement of SDGs
- Ensure people do not return to open defecation in the long term



## Understanding Why People Defecate In The Open

To gain better insight into the practice, Frost & Sullivan spoke to several people to find out why they defecate in the open.

"I do not want to defecate in the open. But there is no toilet near my place of work. I am in the construction industry, and my contractor does not provide toilets on site."

- Mr Thapa, 38

"I tried to go to the public toilets near our colony. However, it was very dirty. It is much easier and cleaner for me to defecate in the open." – Ms Kumari, 42

"The feeling of open air and nature around you is good. I do not feel comfortable in closed toilets." - Mr Adhikari, 52

"There is no toilet in my home. I do not have enough money to build one. I am not sureif there is any public toilet near my home as my home is not pukka house." – Mr Khadka, 26

"I think toilets are not hygienic. We go to the open and then use ash to wash our hands. It helps to keep diseases away."— Ms Lama, 48

"We do not have female toilets here. The toilets are used by males and we girls defecate in the open." – Ms Karki, 17

"Being a handicapped person, I find it difficult to use the toilet at home. Open air feels much easier." – Mr Bhandari, 45

Apart from the typical reasons indicated, participants can carry out further research to gain a more in-depth understanding of the motivations for open defecation/ barriers to the use of toilets.

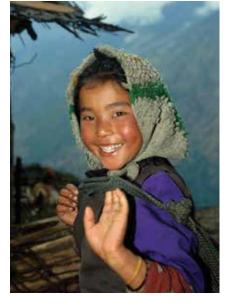
Note: Images and names of respondents have been changed. Any resemblance to actual persons, living or dead, is purely coincidental. Stock images from Getty Images.











## Key Guiding Questions

Note: These questions are meant to guide your thinking as you work on your analysis. They are not intended to serve as an exhaustive sweep of all underlying issues.

How can we accelerate the build-out of toilets in homes and public areas across the country?



Are there policy initiatives the government can initiate to encourage greater private sector involvement in addressing this issue?



Is there a business model innovation that can be applied for the build-out of toilets especially in public areas?



Nepal receives considerable aid money through various global donor organizations. How can the solution be a catalyst in accelerating investment in this area?



Achieving zero open defecation entails behavioral change. What are the steps we can take to educate the population and sustain this change?



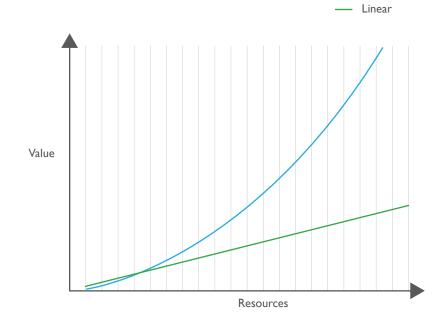
Do we have an accurate understanding of the actual magnitude of the problem? How can we effectively collect data and monitor the progress on near real-time basis?



## The Role of Technology in Solving Unsafe Sanitation Practices

The game-changing technologies of the digital era continue to change the way we live. Companies such as Google, Amazon, Facebook, and Uber have unleashed the power of digital coupled with innovative business models to solve some of the biggest challenges facing humanity. This strategy has enabled them to achieve scale and growth rapidly.

There is tremendous opportunity to apply a similar approach in addressing the pressing challenges facing developing nations. We have to think of innovative ways to solve the problem of open defecation exponentially (see figure below). How can we leverage digital technologies as an enabler to drive improvements and investment in sanitation?



Exponential



### Possible Solutions

The following suggestions are not exhaustive, but intend to provide you with an idea on the possible approaches you can consider in building your case.



### Social Media

Much of the growth of social media such as Facebook, YouTube and WhatsApp are being driven by increasing mobile Internet usage. How can this platform be used to educate, create awareness, and crowd-source collective action to solve this challenge?



### **Private Sector Contribution**

While businesses in Nepal have vast reach across the country, many of their efforts are disconnected as they are planned and executed independently. How can we create a common platform to pool efforts and promote knowledge sharing?



### Data

Accurate, real-time data can be a powerful tool to attract investment and drive behavior change. Information on the availability/accessibility of toilets, maintenance of toilets and build-out of new toilets can help change behavior as well as channel investments effectively.



### Government

Are there policy measures the government can undertake to address this challenge? How can it facilitate an environment that fosters government-NGO-private sector collaboration to tackle this issue?

# Notes for Participants

### Guidance for developing case solution

- A. Your case solution must be presented in Microsoft PowerPoint format and not exceed 10 slides.
- B. You can refer to and quote additional information available in the public domain. You can also make assumptions where necessary.
- C. The solution should be practical and rooted in reality. Out-of-the-box solutions will be given higher ratings during evaluation.
- D. You are encouraged to integrate video, digital dashboards, and other tools into your presentation.

### Judging criteria

- 1. Quality of analysis, clarity of the presentation, and solution flow
- 2. Use of digital technology
- 3. Creativity in developing out-of-the-box solutions
- 4. Actionable recommendations
- 5. Language and completeness of solution

(Equal weightage of 20% each for the five points above)

### Key timelines and benefits for participants

- 1. Submission of entries to Case@frost.com by July 18, 2018.
- 2. Top 3 finalists will be shortlisted by July 25, 2018.
- 3. The top finalists will receive coaching from Frost & Sullivan consultants to enhance their case development in Kathmandu from July 29–31, 2018.
- 4. Top 3 finalists will present at the Digital Nepal Program on August 3, 2018.
- 5. Prize money of US\$1,000, US\$500, and US\$250 will be presented to winning teams at 1st, 2nd and 3rd positions respectively.
- 6. Finalists will get exposure in media, government agencies as well as supporting partners of the Digital Nepal Program.

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