

C.K. Prahalad Grand Challenge - 2022

Prompt

Our prompt for this year focuses on solid waste management. Being the second most populated country in the world, India generates 12% of global municipal solid waste, and by 2048, India is expected to become the world's largest waste contributor. India's current waste management practice involves collecting waste from sources through a community collective bin system. After which, it gets transported to a low-lying landfill system with intermediate processing of Municipal Solid Waste (MSW). The open dumping practice leads to various problems like pollution, health hazards and affects the surface and groundwater; in fact, groundwater is in a critical state. Issues could be at any level in the value chain - policy, collection, treatment, ethics etc. In 2014, Prime Minister Modi's government launched the "[Swachh Bharat Mission](#)" (Clean India Mission) to encourage proper waste disposal in India, starting with the goal of eliminating open defecation in phase 1.

For the C.K. Prahalad Grand Challenge 2022, we want you to build a sustainable business model that would improve the Solid Waste Management situation in India. Consider improvements across all or some of these stages: Waste Generation, Collection, Transportation and Storage, Treatment and Disposal.

Please feel free to review the below articles & videos for reference/context on this subject:

https://www.nswai.org/knowledge_reports.php

<https://www.youtube.com/watch?v=MC7a-FkHQMA>

<https://www.youtube.com/watch?v=yUY7wwdZCvg>

<https://www.orfonline.org/research/solid-waste-management-in-urban-india-imperatives-for-improvement-77129/>

Be innovative and think beyond the bounds of "traditional" business practices to push the frontier further. We are open to your definition of the problem, but we will use the criteria below to evaluate your business plans.

Evaluation Criteria:

How will we judge your business plan?

- Economic feasibility
- Logistical feasibility
- Level of positive impact
- Scalability
- Quality of submission

Directions

- Deliverables:
 - Presentation - maximum 10 slides (excluding appendix) in pdf
 - One page executive summary in pdf (single-spaced; 12 pt font)
 - Video of team members presenting the deck - maximum 5 minutes in mp4 or any other video format (no restriction on how many are presenting)
- Submission deadline: March 11th, 2022, 11:59 PM EST
- Please present sources for all your facts and data.
- Email your presentation as an attachment to: saictm@umich.edu
- Email subject: “Grand Challenge 2022 Submission_<team member last names>_<school name>.”
- If the submission is too big for an email attachment, please upload your items into a drive folder and email the link with the necessary access enabled.

To help guide you in your process, think about the following design criteria as necessary:

- Project description
- Scope
- Constraints
- Target users
- Expected outcomes
- Potential challenges/risks