

Session 21, 5/1/07

How did the IDEAS judging go?

- It was hard to tell who the judges were or how many there were
- There were lots of questions to answer
- There are two 7,500 dollar prizes, two 5,000 dollar prizes, and two 3,500 dollar prizes available for the IDEAS Competition, plus two more 7,500 dollar prizes for this year's Yunus Challenge, which is focusing on tuberculosis.

Case Study: Re-using Human Waste

- Humus
- Parasite protection in plants
- Chemical and microbial
- Improve soil structure
- Barriers
 - Taboo
 - Is it taboo on the same level as cannibalism? No.
 - Health hazard (parasites, cysts, bacteria, viruses, worms) is greater than it is with the use of animal excreta
 - Aesthetics
 - Smell
- Benefits
 - Increased nitrogen content fertilizer
 - Economic reasons (it's free)
 - It's controlled: you know where your shit is going to end up
- This hasn't been successful in the past, because there are just too many cultural taboos and aesthetic barriers
- Even in developing nations, the economic advantages aren't large enough to overcome the cultural issues
- Traditional wastewater treatment
 - Here in Boston today: Toilet → Sewer → Sewage treatment plant → Massachusetts Bay
 - In San Diego and parts of Florida and Arizona they're using higher level waste water treatment, where it is much better cleaned and then put back into the groundwater, from which drinking water is ultimately drawn
 - In Boston in the 1980s, they used to use less stringent treatment methods. They used only primary waste water treatment, and then dumped it in Boston Harbor instead of out into the Mass Bay. The fishermen liked this method, because lobster thrived on it, but it made for the dirtiest harbor in the country.
- You can make bio-gas from any type of animal waste. Is it worthwhile to try to reuse human waste for this application?

MIT OpenCourseWare
<http://ocw.mit.edu>

EC.715 D-Lab: Disseminating Innovations for the Common Good
Spring 2007

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.