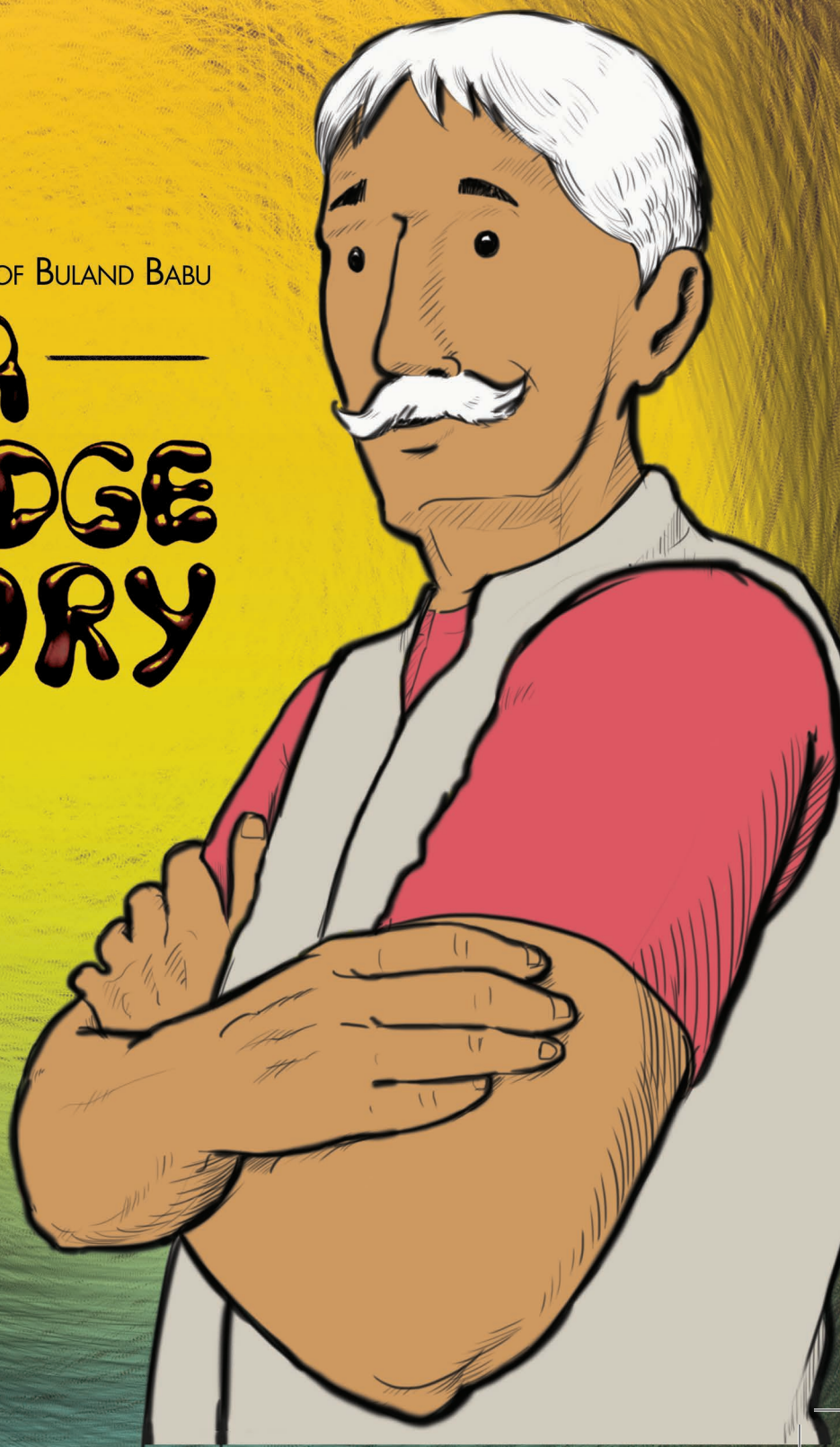


THE ADVENTURES OF BULAND BABU

— A —  
**SLUDGE  
STORY**





THE ADVENTURES OF BULAND BABU

— A —  
**SLUDGE  
STORY**

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STORY, LAYOUT AND ILLUSTRATIONS BY TWIST OPEN INNOVATIONS



## THE SANITATION STAR CAST



**BULAND BABU**  
AN ORDINARY MAN,  
HE HAS THE  
EXTRAORDINARY  
DETERMINATION TO  
DO THE BEST FOR  
HIS CITY AND  
FELLOW CITIZENS...  
AN EVERYDAY HERO!



**RAHUL**  
AN ENGINEER, HE  
HELPS THE SANITATION  
DEPARTMENT DESIGN  
AND BUILD THE BEST  
POSSIBLE SOLUTION  
FOR YOUR WASTE!



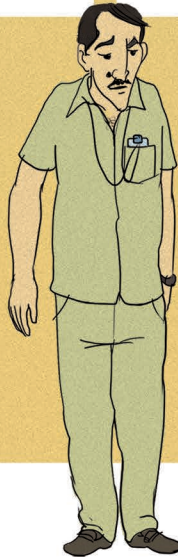
**MRS. SWATI**  
THE LOCAL  
CORPORATOR, SHE  
MUST KEEP THE  
PEOPLE HAPPY AND  
HELP THE CITY GROW!



**MR. GOKHALE**  
A JOURNALIST, HE  
BELIEVES THE MEDIA  
MUST BE THE VOICE  
OF THE PEOPLE, A  
MIRROR TO SOCIETY  
AND THE CONSCIENCE  
OF THE GOVERNMENT!



**MR. RAO**  
THE MUNICIPAL  
COMMISSIONER, HE  
BEARS THE BURDEN  
AND THE PRAISE OF A  
WELL-PLANNED CITY!



**MR. SHARMA**  
THE LOCAL SANITARY  
INSPECTOR, HE MANAGES  
THE TRICKY AND OFTEN  
SMELLY SOLUTIONS!

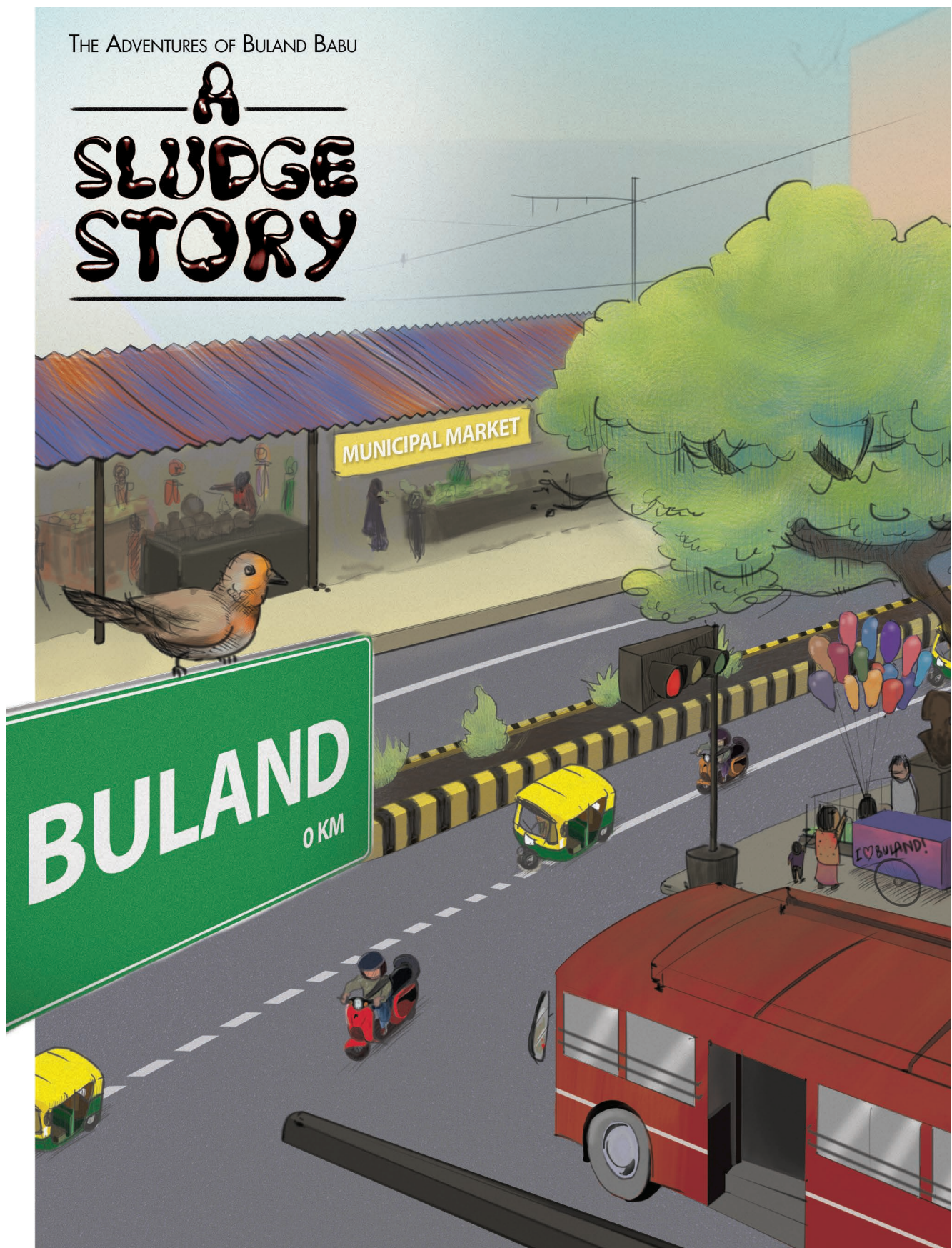


**MR. PATEL**  
THE OWNER AND  
OPERATOR OF A  
HONEYSUCKER TRUCK,  
HE GETS YOUR WASTE  
OUT OF THE WAY!

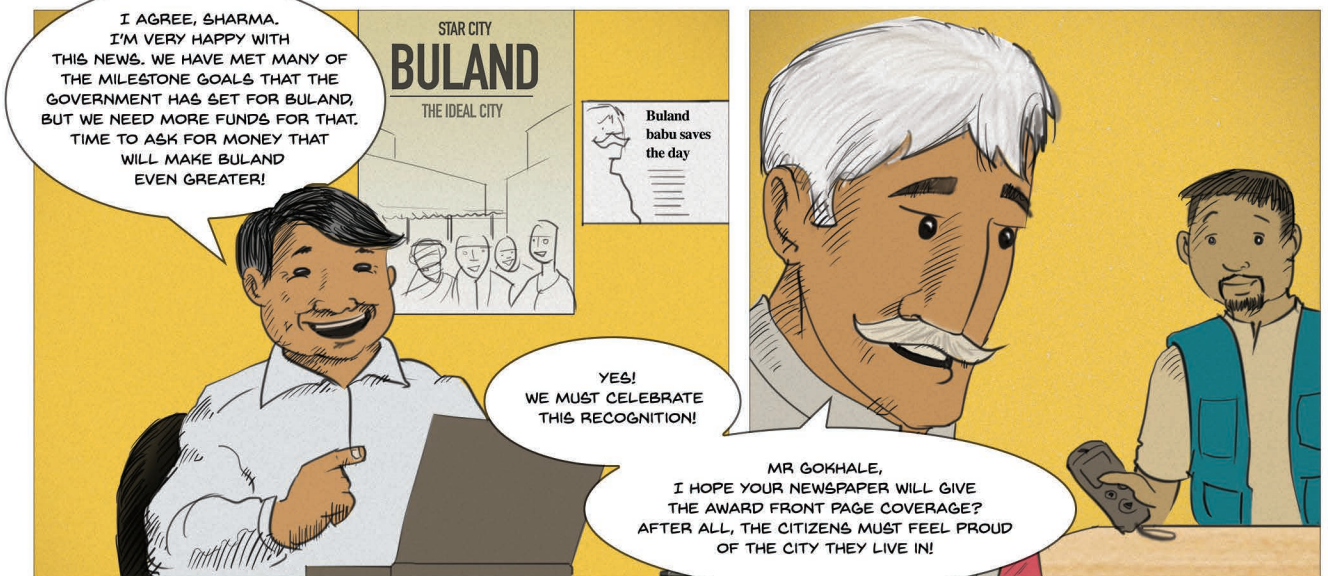


THE ADVENTURES OF BULAND BABU

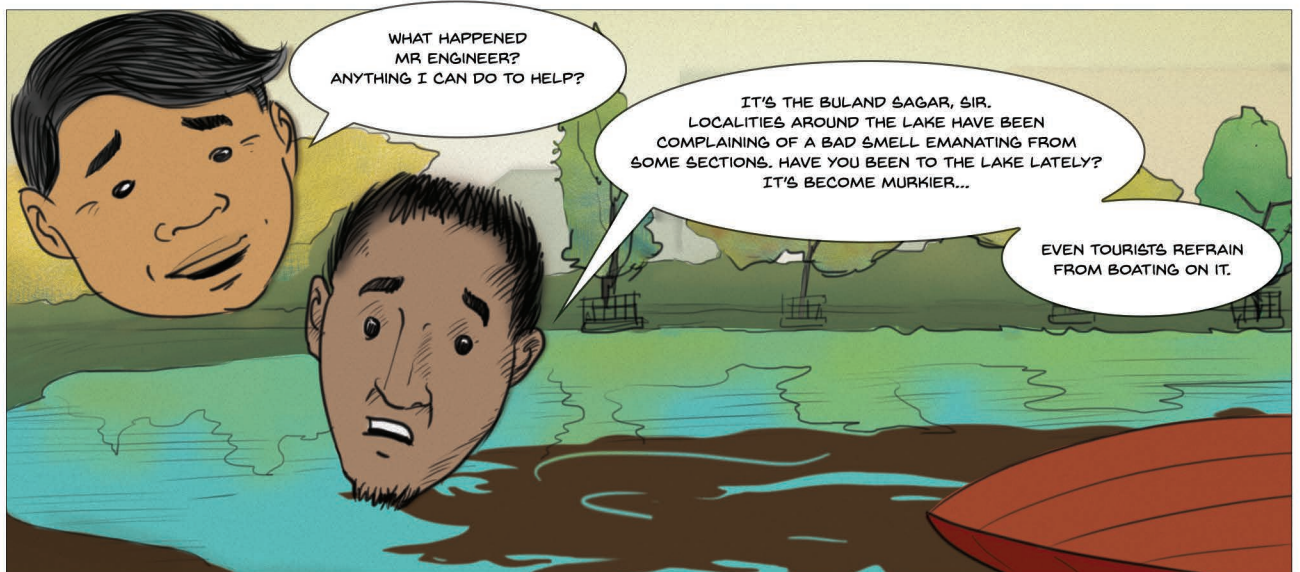
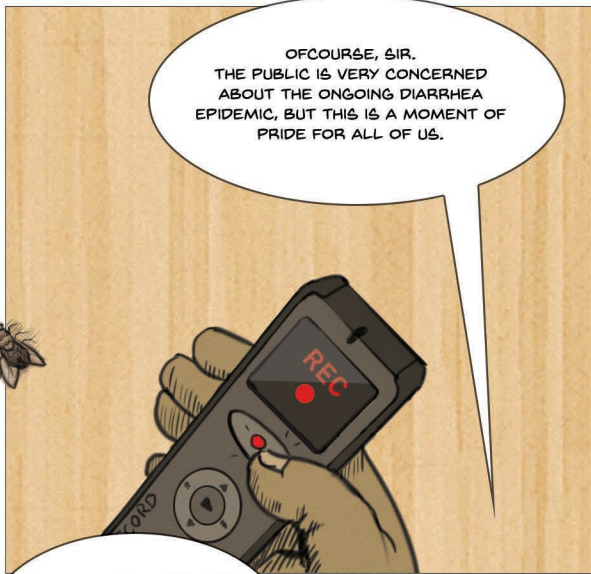
# A SLUDGE STORY













YES, MY DAUGHTER WHO WAS VISITING LAST WEEKEND, SAID THE SAME THING. THAT THE BULAND LAKE LOOKS AND SMELLS DIFFERENT. WHAT DO YOU THINK IS WRONG? DO YOU THINK IT'S GARBAGE TO BLAME?



IT'S NOT JUST GARBAGE SIR... THERE ARE MANY INSTANCES OF OPEN DEFECACTION AROUND THE LAKE. I'VE ALSO COME TO KNOW THAT THERE IS RAMPANT ILLEGAL SLUDGE DISPOSAL HAPPENING AT THE LAKE.



SLUDGE DISPOSAL? WHY IS THAT HAPPENING?

BULAND'S GROWTH ON THE MAP HAS NOT BEEN EASY TO KEEP UP WITH, ESPECIALLY FOR PUBLIC INFRASTRUCTURE, SUCH AS DRAINAGE NETWORKS. LIKE THOUSANDS OF CITIES ACROSS INDIA, BULAND DOES NOT HAVE A LARGE ENOUGH TREATMENT PLANT. WE CANNOT HANDLE THE AMOUNT OF FAECAL WASTE THAT BULAND CREATES ANY MORE.



YES. WE'RE CONSTANTLY FACING COMPLAINTS OF BLOCKED DRAINS. THE HEALTH BOARD OFFICIALS BELIEVE THE DIARRHEA EPIDEMIC IS BECAUSE SEWAGE IS CONTAMINATING OUR GROUND WATER.



PLEASE LET US DROP THIS TOPIC BEFORE SNACKS! LET'S FOCUS ON WHAT IS **GOOD** ABOUT BULAND... THE BIG BUILDINGS THAT HAVE COME UP, THE WIDE ROADS, THE GARDEN SPACES THAT THE GOVERNMENT HAS PLANNED. **WHO WANTS TO TALK ABOUT SUCH DIRTY THINGS WHEN WE'RE ABOUT TO EAT SUCH DELICIOUS FOOD!**



**THAT'S IT, MR SHARMA. WE'RE DOING SHIT ABOUT SHIT! NO ONE GIVES A SHIT ABOUT SHIT! THIS WAY, BULAND ITSELF WILL GO TO SHIT!**



BULAND'S PROGRESS IS AT STAKE, I KNOW, RAHUL. BUT OUR HANDS ARE TIED: WE RECEIVE VERY LITTLE MONEY FROM THE GOVERNMENT, WE CAN'T AFFORD TO FIGHT MANY BATTLES AT ONCE!



HOW LONG WILL WE WAIT, MR COMMISSIONER? YOU KNOW HOW MUCH TIME GOVERNMENT MATTERS TAKE: IT IS HIGH TIME WE FIND A SOLUTION TO PROTECT OUR LAKES AND RIVERS.



WE NEED TO BE PROACTIVE. THERE'S MORE TO PROGRESS THAN WHAT PLEASES THE EYE. BOTH OUR PROBLEM AND PROGRESS IS HIDDEN UNDERGROUND.



WE NEED TO PUT OUR HEADS TOGETHER AND COME UP WITH A PLAN THAT WORKS FOR BULAND.



GOKHALE, OPEN UP THIS TOPIC FOR DISCUSSION IN YOUR NEWSPAPER, WILL YOU? INVITE PEOPLE TO WRITE IN. ...



IT'S TIME TO GET OUR HANDS DIRTY, SO THAT BULAND CAN BE CLEAN, ONCE MORE.







PEOPLE OF BULAND,  
THANK YOU FOR COMING HERE.  
TODAY, WE ALL HAVE A BIG  
PROBLEM IN FRONT OF US -  
**A PROBLEM THAT IS  
THREATENING BULAND'S  
HEALTH AND GROWTH.**



MR SHARMA,  
AS BULAND'S SANITATION OFFICER,  
CAN YOU PLEASE EXPLAIN  
WHY BULAND IS REELING UNDER  
INEFFICIENT SANITATION  
MANAGEMENT?



THERE IS NOTHING INEFFICIENT  
ABOUT OUR SANITATION PLAN.  
WHAT CAN I DO IF THE  
POPULATION OF BULAND HAS  
INCREASED SO MUCH?

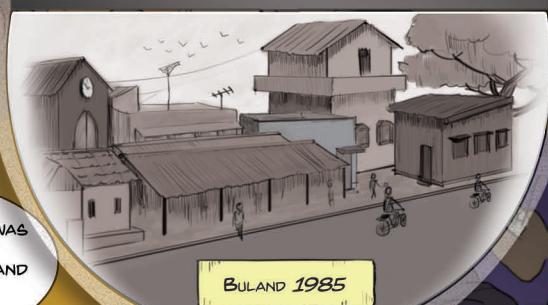


LOOK AROUND YOU. WAS  
THERE A SINGLE  
SKYSCRAPER IN BULAND  
10 YEARS AGO?

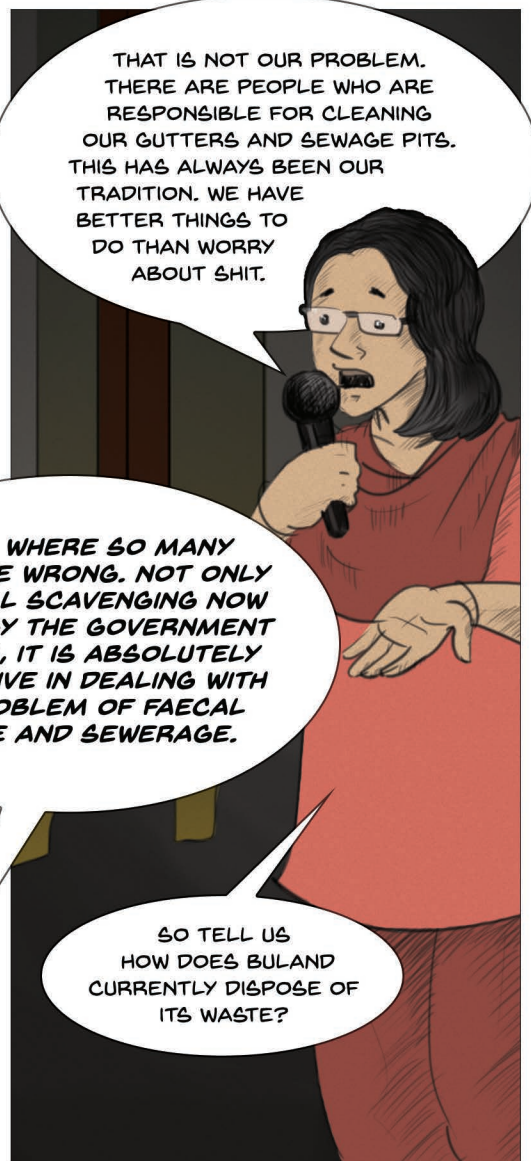
WHAT WAS ONCE  
THE CITY'S OUTSKIRTS,  
IS NOW ITS HEART!

WE HAVE BARELY  
MANAGED TO KEEP UP  
WITH DEMAND  
ABOVE GROUND

**SEWERAGE IS A  
FAR FETCHED  
GOAL.**









WITH SO MUCH GROWTH,  
WHERE IS THE SPACE TO PUT UP SUCH A PLANT?

WE CAN'T EVEN TALK ABOUT IT WITHOUT A GRIMACE;  
**HOW MANY PEOPLE WILL WILLINGLY LIVE  
NEXT TO IT?**

**PLUS THERE ARE BIG FINANCIAL IMPLICATIONS.**

DO YOU KNOW THAT BULAND WOULD HAVE TO SPEND  
BETWEEN RS6,000 TO RS8,000 PER PERSON ON  
THE DEVELOPMENT OF A SEWERAGE NETWORK  
THAT CONNECTS TO A CENTRALIZED SYSTEM?

BUT SIR, WE HAVE OTHER SYSTEMS IN PLACE ALSO.  
MOST HOUSEHOLDS AND LOCALITIES IN THE  
SUBURBS HAVE THEIR OWN SEPTIC TANKS

WHERE PIPED SEWERAGE IS  
UNAVAILABLE, PEOPLE RELY ON  
ON-SITE CONTAINMENT IN THE FORM  
OF PITS/PIT LATRINES OR  
DIFFERENT TYPES OF  
SEPTIC TANKS.

THESE PITS AND TANKS  
REQUIRE DESLUDGING.  
FAECAL SLUDGE IS COLLECTED AND  
THEN EMPTIED AT DESIGNATED  
DUMP SITES OR AT THE  
WASTE-WATER  
TREATMENT PLANT.

AND THAT'S WHERE  
PRIVATE DESLUDGING  
OPERATORS COME INTO PLAY.  
THESE GUYS ARE COMPLETELY  
IRRESPONSIBLE.  
THEY'RE TO  
BLAME FOR  
THE MESS  
THAT WE  
ARE IN.

PLEASE, SIR,  
DON'T ONLY  
BLAME US PRIVATE  
OPERATORS.

OFCOURSE  
IT IS YOUR FAULT, MR PATEL.  
YOU'RE NOT DOING  
YOUR JOB!

MR SHARMA,  
AND DEAR BULAND CITIZENS,  
WE HAVE ONE OF THE TOUGHEST JOBS  
POSSIBLE. WE ARE ASKED TO WORK  
ONLY AT NIGHT. WE WORK IN SMELLY  
AND DIFFICULT CONDITIONS...





SO MANY NEW AREAS OF BULAND ARE HAPHAZARDLY BUILT...  
LOW-INCOME HOUSING AREAS ARE SO CONGESTED, THAT WE ARE UNABLE TO  
BRING IN OUR TRUCKS. A SMALL SIZED TRUCK IS NOT ECONOMICALLY VIABLE TO  
MOST PRIVATE OPERATORS.



THE SLUDGE THAT IS ACCESSIBLE THROUGH THE TRUCK PUMPS IS DIFFICULT TO  
REMOVE: IT HAS BEEN LYING IN THE TANK FOR A VERY LONG TIME AND HAS  
BECOME VERY HARD.





BUT THE BIGGEST PROBLEM IS THAT IN MOST AREAS, WE HAVE NOT EVEN BEEN GIVEN A PLACE TO DUMP THE SLUDGE. THIS FORCES US TO DUMP INDISCRIMINATELY, AND THEN WE ARE FINED FOR DOING SO! FINED AND HARASSED BY THE LOCAL POLICE FOR HELPING KEEP SOCIETY CLEAN! HOW IRONIC!



OK, SO WHY ARE YOU DUMPING IN THE CITY LAKE? GO OUTSIDE OF THE CITY AND DUMP!

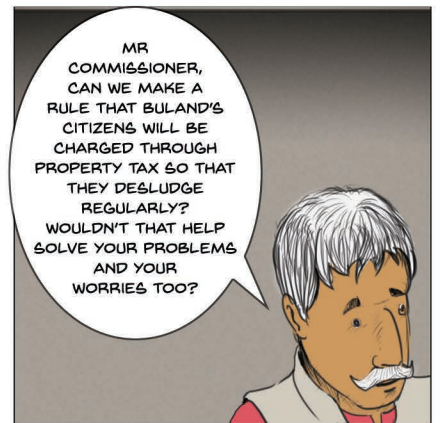
THAT WILL COST ME A LOT TO GO SO FAR. THE CONSUMER DOES NOT PAY ME TO COVER THOSE COSTS AS WELL.

SO WHY DON'T YOU DESLUDGE MORE OFTEN? YOU'LL GET ENOUGH MONEY THEN!

PEOPLE DON'T CALL US UNTIL THE PIT IS FULL, SIR.

WHY SHOULD I CALL YOU TO DESLUDGE FREQUENTLY? THAT WILL COST ME MORE!

IT WILL NOT COST YOU MORE MA'AM. ON THE CONTRARY, IF YOU DESLUDGE MORE OFTEN, IT WILL TURN OUT TO BE EVEN CHEAPER.



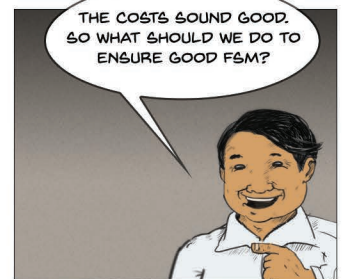
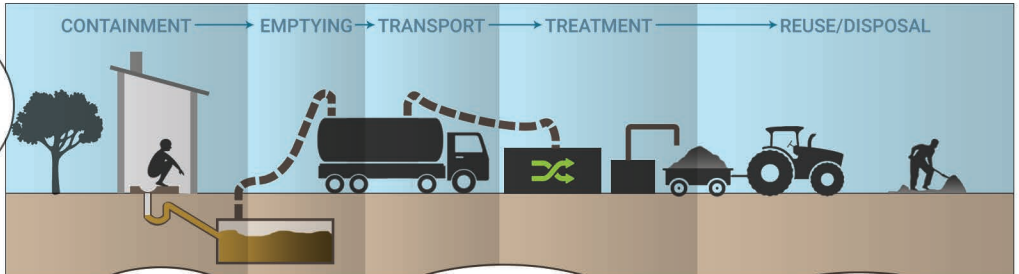
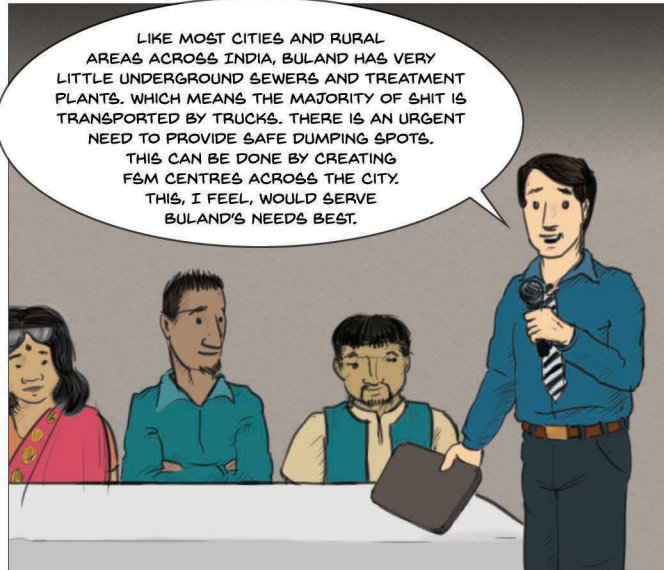
MR. COMMISSIONER, CAN WE MAKE A RULE THAT BULAND'S CITIZENS WILL BE CHARGED THROUGH PROPERTY TAX SO THAT THEY DESLUDGE REGULARLY? WOULDN'T THAT HELP SOLVE YOUR PROBLEMS AND YOUR WORRIES TOO?



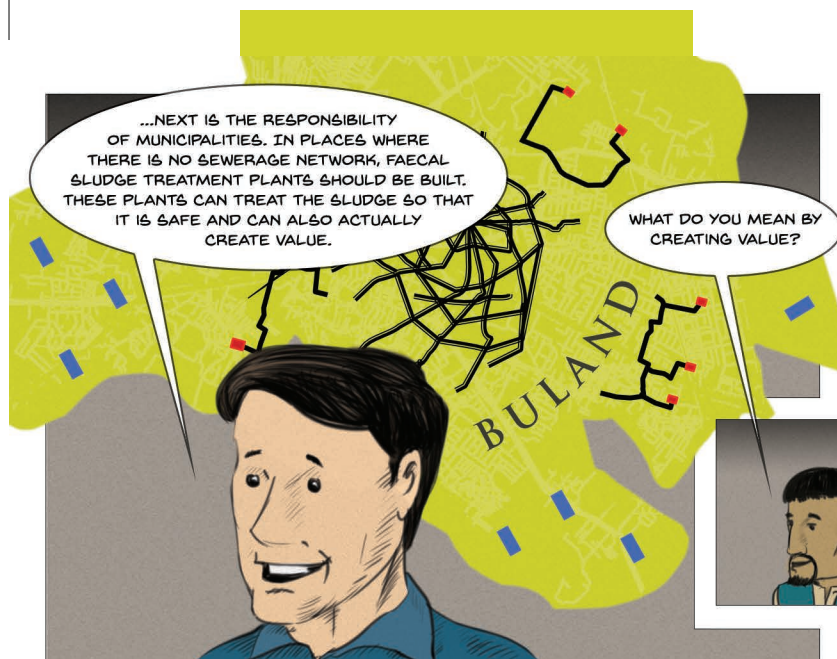
WAIT A MINUTE: BEFORE WE OFFER IDEAS, WE NEED TO GET TO THE ROOT OF THE PROBLEM.

I'VE INVITED SOME EXPERTS ...



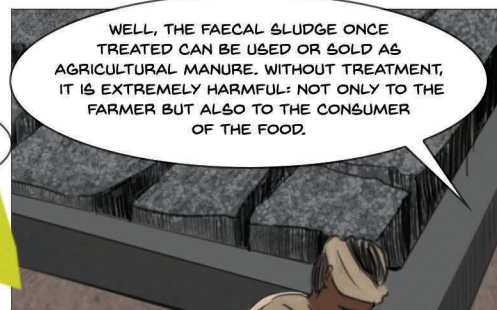




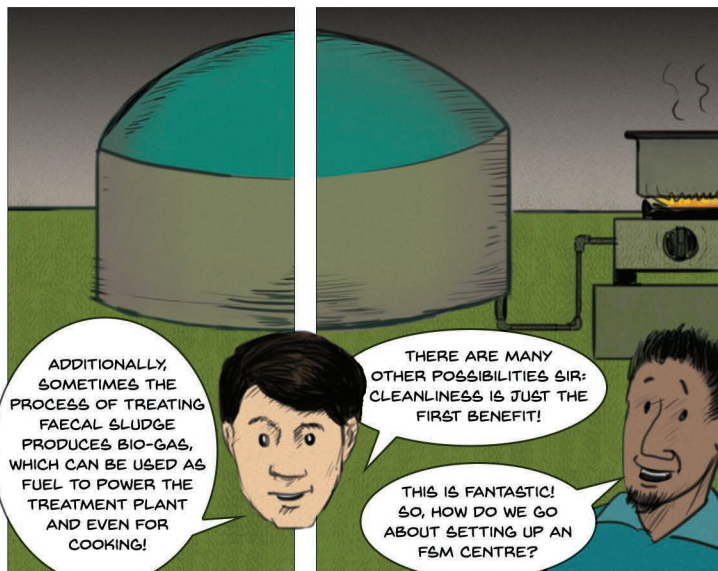
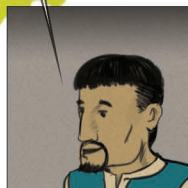


...NEXT IS THE RESPONSIBILITY OF MUNICIPALITIES. IN PLACES WHERE THERE IS NO SEWERAGE NETWORK, FAECAL SLUDGE TREATMENT PLANTS SHOULD BE BUILT. THESE PLANTS CAN TREAT THE SLUDGE SO THAT IT IS SAFE AND CAN ALSO ACTUALLY CREATE VALUE.

WHAT DO YOU MEAN BY CREATING VALUE?



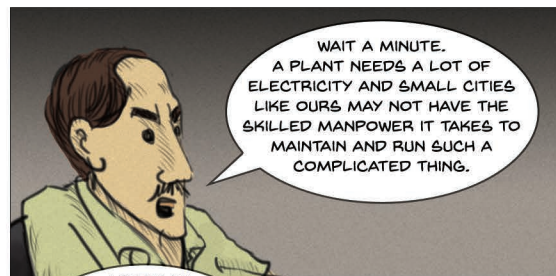
WELL, THE FAECAL SLUDGE ONCE TREATED CAN BE USED OR SOLD AS AGRICULTURAL MANURE. WITHOUT TREATMENT, IT IS EXTREMELY HARMFUL: NOT ONLY TO THE FARMER BUT ALSO TO THE CONSUMER OF THE FOOD.



ADDITIONALLY, SOMETIMES THE PROCESS OF TREATING FAECAL SLUDGE PRODUCES BIO-GAS, WHICH CAN BE USED AS FUEL TO POWER THE TREATMENT PLANT AND EVEN FOR COOKING!

THERE ARE MANY OTHER POSSIBILITIES SIR: CLEANLINESS IS JUST THE FIRST BENEFIT!

THIS IS FANTASTIC! SO, HOW DO WE GO ABOUT SETTING UP AN F&M CENTRE?



WAIT A MINUTE. A PLANT NEEDS A LOT OF ELECTRICITY AND SMALL CITIES LIKE OURS MAY NOT HAVE THE SKILLED MANPOWER IT TAKES TO MAINTAIN AND RUN SUCH A COMPLICATED THING.



ACTUALLY, TREATMENT PLANTS ARE OF ALL KINDS. AN F&M CONSULTANT CAN HELP YOU CHOOSE A FAECAL SLUDGE TREATMENT METHOD THAT WORKS BEST FOR BULAND.



THIS IS TRUE RECYCLING OF WASTE PRODUCTS! LET'S PLAN TO BUILD SUCH CENTRES RIGHT AWAY!



I WISH IT WERE THAT EASY, MA'AM. UNFORTUNATELY, SUCH CENTRES DO TEND TO FACE SOCIAL ROADBLOCKS: PEOPLE MISTAKENLY ASSUME THAT A FAECAL SLUDGE MANAGEMENT CENTRE MEANS THAT THE AREA WILL BE UNATTRACTIVE AND STINK. SO THEY WILL PROTEST. THAT IS WHY IT IS UP TO CORPORATORS SUCH AS YOURSELF TO GUIDE YOUR VOTERS SO THAT AN AREA FOR THE PLANT CAN BE FOUND SOON.



NOT ONLY CAN TREATMENT PLANTS BE AESTHETICALLY APPEALING, THEY APPLY VARIOUS TREATMENT STAGES THAT ENSURE THAT THERE IS NO ODOR OR CONTAMINATION ANYWHERE.

THAT IS AMAZING! HOW DO WE GET STARTED?



IT'S A SIMPLE  
4 STEP PROCESS!

## 1 The Right set of Regulations



Containment systems should be made a part of building permission process



Block existing black water outlets to drains



Provide for subsidies for refurbishments of containment systems



Municipality owns & runs the honeysucker trucks directly, or outsources the work to one/more reliable contractor who satisfies the selection criteria



Desludging of all the containment units happen at proper intervals via scheduled system as well as on-demand

## 2 The Right Incentives



To ensure desludging services are priced in a judicious manner for all citizens the pricing must include the charges for desludging as well as operation and management of treatment plant



The Price paid to the truck operator can be dependent on the volume of the truck filled or on the distance from the fecal sludge treatment plant or both



Alternatively, the price can depend on the building footprint, as decided by & paid at the municipality



If desludging is on demand, there can be dynamic pricing fixed upon mutual agreements of the truck operator & customer







## 4 The Right Plant



Does not require highly skilled human resources



Requires minimal number of operation and management staff



Consumes less energy

## 3 The Right Monitoring



To ensure the trucks deliver their service and dispose the faecal sludge at the plant check systems should be in place. For example, manual signature sheets at every interface, or coupons system or real time tracking of trucks on its routing & timing via GPS.



For the FSTP's optimal efficiency, records must be maintained, regular assessments to be done by third parties, or there can be online monitoring via sensors





THANK YOU MR CONSULTANT,  
FOR OPENING OUR EYES AND MINDS TO THE  
CONSEQUENCES OF POOR SANITATION. BULAND IS  
NOT JUST A BRIGHT STAR CITY TODAY; WE WILL  
ENSURE THAT THE FUTURE OF OUR CITY AND OUR  
PEOPLE IS JUST AS BRIGHT, ABOVE THE  
GROUND AND BELOW IT!

A FEW MONTHS LATER...



HAVE YOU ALL BEEN TO YOUR LOCAL  
FSM CENTRE? I VISITED THE ONE NEAR MY HOUSE  
WITH MY CHILDREN THIS WEEKEND.

IT WAS SUCH  
A PLEASURE TO SEE THE  
WELL-MANICURED LAWNS AND  
THE GREENERY...  
AND KNOW THAT BELOW OUR  
FEET, THE PLANT WAS WORKING  
PERFECTLY AND KEEPING OUR  
SOIL AND WATER CLEAN!



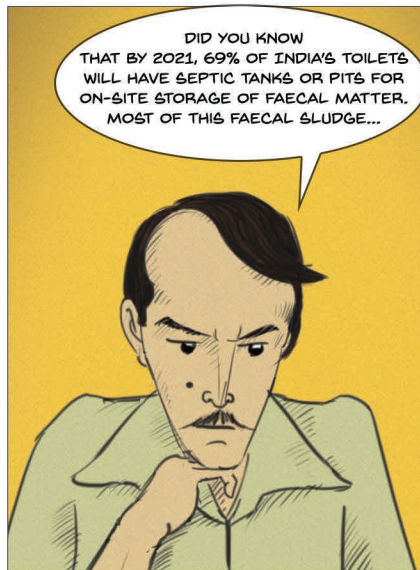
YES SIR...  
EVEN THE BULAND LAKE  
IS BLUE AGAIN!



FROM SCHOOLS  
TO COLLEGES TO HOMES,  
OUR PEOPLE HAVE BECOME AWARE AND  
PROACTIVE ABOUT FECAL WASTE  
MANAGEMENT. SHIT MATTERS!



COME ON EVERYONE,  
YOU KNOW THAT SHARMA DOES  
NOT LIKE THIS TALK  
WHILE EATING FOOD...  
RIGHT SHARMA?



DID YOU KNOW  
THAT BY 2021, 69% OF INDIA'S TOILETS  
WILL HAVE SEPTIC TANKS OR PITS FOR  
ON-SITE STORAGE OF FAECAL MATTER...  
MOST OF THIS FAECAL SLUDGE...



...WILL CONTINUE  
TO BE COLLECTED BY  
HONEYBUCKER TRUCKS  
AND DUMPED UNSAFELY  
IN WATER BODIES, OPEN  
LAND AND FIELDS --  
UNLIKE BULAND,  
IT WORRIES ME!





END!



**COMING  
SOON!**

**MORE ADVENTURES  
OF BULAND BABU...**



Consortium for  
DEWATS  
Dissemination  
Society



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