

Ways & Means Transcript—S3E1—Slum Detectives

Narrator: This episode of Ways & Means is supported by the Josiah Charles Trent Memorial Foundation Endowment Fund.

Emily Hanford (EH): From Duke University Sanford School of Public Policy, this is Ways and Means. I'm Emily Hanford.

Mary-Rose Abraham (MA): Just introduce yourself.

Jennumah (J): [speaks]

Translator: My name is Jennumah, I have been living for the past 10 years in this particular settlement. Before I had a child, I was working in construction, as a helper. But now I have kids so from 5 to 7 every night I go and work as a housekeeper. My husband works in construction.

EH: Jennumah lives in a slum in Bangalore, India that, according to the government, doesn't exist, even though she has been living here for 10 years. Some slums in India are official. They get water, sewer, electricity. Jennumah's slum has none of that. Jennumah, her family and the other thousand or so people who live here are essentially invisible to everyone but themselves -- or so they thought.

Anirudh Krishna (AK): We are heading to a blue polygon slum called "Tuberharli" which is one of the slums in our database of close to 200 slums in Bangalore.

EH: This is professor Anirudh Krishna. It is a hot July day in Bangalore. He's just grabbed an Uber and he is heading to the slum where Jennumah lives. It will be his first time there. He calls it a "blue polygon slum" because most of the homes- if you can call them homes- are covered with big, blue tarps.

AK: This is the lowest type of slum, it is really next to homeless people. This is the next higher or next lowest social segment in Bangalore. They live very precarious lifestyles, most of them have no identity papers, and forget about the title to their home, they are squatters on a piece of land, or paying rent to a slumlord.

EH: Anirudh knows where this slum is because for the past 6 years, his group of researchers has been finding and tracking these undocumented blue tarp slums in Bangalore. They use a combination of boots on the ground, and Google. Their goal is to find out just how many of these slums there are, why they are there, and what the people who live there need. Today on Ways & Means, we begin a three-part series. We're calling it "New Ideas for Policy in the Developing World". In this episode, high-tech meets high-need: how researchers are using Google Earth to find the undocumented slums of India.

Professor Anirudh Krishna grew up in India. He says there were very few slums when he was a boy, so he's been shocked to see how they've proliferated in the last 20 years. Now, much of his professional work centers on slums. He's so into it, he calls it his "slum studies."

AK: When we started the first round of slum studies- this was six, seven years ago- we went to the government and got a list of slums and, like good researchers, we took a random sample of slums and when we went to those slums we said, "These aren't slums," because they were mostly three-story concrete structures.

EH: These were places that were once the lowest type of slums of India, decades ago, but life has gotten better for many of the people who live there.

AK: Stuck in between those three-story structures, there was this occasional house with a thatched roof that looked like what the slum might have been 20 or 30 years ago. And so we realized that, after having gone to about 15 of these settlements, that we got off the official list, that these aren't the real slums of Bangalore. You know, passing by, we could see structures and places that were much cruder, but there was no list of these places. No official agency had a list of slums that were other than the three-story concrete structure type.

EH: Anirudh thought, "If places with concrete buildings are considered slums, what about the places where people are living under blue tarps with no water or electricity? Why aren't those places showing up on any government lists? Why isn't anyone documenting the real slums of Bangalore?"

Grady Lenkin (GL): The city of Bangalore is a big city, upwards of 10 million people today.

EH: This is Grady Lenkin, a student researcher on Anirudh Krishna's team. He says at first, the researchers walked around the city block by block searching for the blue tarp slums, but that was taking a very long time. Then someone had an idea, "Why not look for these slums from above, using Google Earth?"

GL: And the way we ended up analyzing it is was- we broke it up into quadrants, I mean, we literally just drew a vertical and a horizontal line through the city on our maps and then we just went through literally pixel by pixel, starting at the far corners of the city where it's mostly farmland, and we would just work our way across the image. You know, we were finding all these neighborhoods of densely clustered homes, and then we were seeing these blue blobs popping up in empty lots.

EH: Those blue blobs were the blue tarps.

GL: We actually went to check some of these places out and it turned out that they were, I mean, essentially temporary economic migrant refugee camps- and the order of magnitude of poverty they were living was greater than anyone else's in the city.

EH: This kind of amazed the researchers. From high above, they could see whole communities covered with blue tarps- sometimes the communities were as small as a few homes, sometimes there were dozens of homes, even hundreds all bunched together.

MA: Good morning.

AK: Good morning, Mary Rose.

EH: That's Anirudh again on a hot July day in Bangalore.

MA: So we've started off pretty early this morning.

EH: We sent reporter Mary Rose Abraham out with him, another Duke researcher named Erik Wibbels, and lead investigator for the slum study in Bangalore, Mohammed Monsoor. Mohammed is our

interpreter today. The team has identified a relatively large slum on the edge of the city using Google Earth. They've estimated there are about 200 blue tarp tents here.

Child (C): Hello!

AK: Hello.

C: Hello!

AK: Hello.

C: Hello!

AK: I see a group of crude huts constructed helter-skelter with blue tarpaulin stretched over crude mud walls. There are some palm fronds tied on top of the blue tarps which are lashed down with rope.

EH: Anirudh says this slum is pretty typical of the blue tarp slums he's found.

AK: It's not marked on any city map. It is a non-place as far as the official authorities are concerned.

EH: If a slum is on the government's official list, it gets streetlights and running water. But not these undocumented slums. Anirudh calls them low-category slums.

AK: So the, one of the first indications that you are nearing a low-category slum is a strong stench of refuse- of neglected and long-standing human refuse. The air quality is bad, the water quality is bad- and people live here, because that's the only place they can find some place to put their feet and their heads down. The lanes are crooked, the lanes are unpaved, there is water flowing down these lanes. When it rains, I can imagine this whole place turning into a quagmire.

EH: Right next to this smelly, muddy low-category slum, there is a construction site where a swanky new apartment building is going up. And that is why people live here- most of them are helping to build that building, and they have nowhere else to live. Here in Bangalore, there is massive construction happening all over the place. The city has become known as the "Silicon Valley of India" and, because of this building boom, masses of people have come from rural villages to work in construction. Most people who live here send as much of their paychecks as they can back to family in the rural villages they came from. There is no affordable housing to speak of nearby- and even if there was, there probably wouldn't be enough to accommodate the huge influx of workers. So, new slums keep popping up right next to the construction sites; the more shiny new buildings going up, the more blue tarp slums.

AK: So I want to ask you how long have you been living here?

EH: Most of the men in this blue tarp slum are at work, so the person Anirudh meets on this hot summer day is Jennumah, who we heard from her earlier.

J: [speaks]

Translator: It's very difficult to live here, because we don't get drinking water. We have to wake up every morning at 4 o'clock to go to other neighborhoods to get water. We don't have bathrooms, we have to go to the bathroom outside, over there, so it is very difficult to stay here.

EH: Jennumah says a man she knows only as "Tata" charges her family 400 rupees a month for rent; that's about six dollars. The rent is for the land only; they built their home themselves.

MA: Um, can you describe your house for us, and what it is constructed of? The materials?

J: [replies]

Translator: So, we purchased this bamboo from the local area, and then we started to construct the house. We arranged some stones along with mud half-way up the walls. We used tarp for walls, and coconut leaves too.

EH: What she said there was they "Use tarp for walls,"; it's their roof, too. Residents cook inside over an open flame. They don't even make slits in the tarps to let smoke from the fire out, because, if they did, the rain would come in. And the only light is from the flame.

The slumlords who own this land- very often they have applied for building permits themselves. They're hoping to build++their own shiny new office building or apartments or something else that could make lots of money. While they're waiting for permits, they make what they can off the construction workers and their families who have nowhere else to go. Jennumah says it is difficult to scrape together the money for rent every month.

J: [speaks]

Translator: With the help of my husband, I am able to collect the money. Some of the months we are not able to pay. At that time, the landlord will scold us. He says [bleep] and [bleep] and [bleep].

Mohammed Monsoor (MM): She is telling words that guy will use for us.

J: The next month we have to pay two months rent.

MA: Is there any paperwork or anything that they have? Do they have paper saying, "this is my area"?

J: [replies]

Translator: No, we have no paperwork, no paperwork. If I wanted to leave this house, I would give this house to another person and that person would give the rent to the landlord. If nobody wants to stay here, they demolish the hut.

MM: I have visited around 157 slums.

EH: This is Mohammed Monsoor again, our interpreter and the lead investigator for the slum study in Bangalore. As researchers discover new blue tarp slums using Google Earth, it's Mohammed's job to take the GPS coordinates and go visit. As he said, he's been to 157 slums so far. Before he started working on the project, Mohammed says he would notice these blue tarp slums. He figured they were temporary, short-term shelters; maybe people lived in them for a month or two. But every time Mohammed goes to a slum for his research, he finds people like Jennumah who have been living there for years.

MM: I don't know, I don't have the knowledge that people had been staying for the last 12 years, 20 years in same situation, in same huts. So it is new knowledge to me and it is very surprising to us.

EH: Duke Professor Erik Wibbels says it's surreal to visit these blue tarp slums where there's no government services, nothing- especially when there's an official slum right next door that might be equally poor, but it's on the government's official slum list, so at least it has basic necessities like water and sewer. He remembers visiting a particularly destitute slum in a city known not for slums, but for ancient palaces. He was walking in†a slum near the city wall.

Erik Wibbels (EW): And there was a hole in the old city wall, it was the ancient Udaipur city wall. And this slum as right on the edge of that and cut into the wall, you could soft of drive a motorcycle through, and I stepped through this wall. And in the one foot that I stepped it was like 100 years of development, because on the other side there was a paved road and electricity and running water and all sorts of things. The settlement on the other side of the wall had been settled at the same time as this one, and so there's an interesting story about how these two neighborhoods, which are separated by one foot, you know, just have very different histories over the last 30 years. But, there was something about that 100-year leap of development in one foot that was really, soft of striking, and sticks with me. How do you get such different outcomes in a small space when they started at the same time and by the same sorts of people?

EH: The government has a really narrow definition of what a slum is. So, the official counts leave out a huge number of them; they leave out the blue tarp slums. Essentially, the Indian government is just ignoring the problem all over the country. A national survey a few years ago found that 44 million people in India are living in slums. But, if you add in all the blue tarp slums- the invisible communities the Indian government doesn't count-it's more like 100 million people, according to the United Nations. Anirudh says he thinks the government hasn't acknowledged the existence of blue tarp slum communities for a couple of reasons. One is that the people who live in these communities are transient, and they don't have anyone in the government advocating for them. He also says, if the government did acknowledge the existence of the blue tarps slums, it would be under pressure to provide infrastructure and services. So, Anirudh's team of blue tarp detectives using Google Earth and going out to document living conditions in these undocumented slum communities- it puts the government in a tricky spot. Because of Anirudh's project, government officials now know how big the problem and they know exactly where many of the blue tarp slum communities are. What should the government do?†

AK: Do you help upgrade slums that you never condoned the existence of in the first place? Do you demolish them? So it's a bit of a mess actually.

EH: Here's what the Duke researchers hope will happen. They hope government officials will use the team's map to begin to deliver the services to the people who need it the most. Members of Anirudh's team have spoken with senior policy-makers in Bangalore. Team members have shared their methodology, essentially laying the groundwork for the government to do this kind of work itself and develop its own solution. In the meantime, researchers are doing what they can. Whenever they find a cluster of blue, they record the information and send a team member there to talk to people in the slum and find out what they need. Ultimately, the researchers hope their work will provide a more nuanced understanding of the twin faces of India's economic boom; that alongside many of those construction sites and shiny new buildings emerging from the earth, there are people, families, kids living in desperate conditions, in need of the most basic services.

Next time in our series: "New Ideas for Policy in the Developing World", we have this story. For many years, children- some as young as toddlers- have been trafficked from places like Bangladesh and Pakistan to be camel jockeys in the Middle East.

Woman: These children, many of them, they didn't even know how old they were, they didn't eat very much, but they sure knew how to get a camel to go.

EH: But a curious technological invention- robotic camel jockeys- has basically ended demand for human jockeys and stopped the practice of trafficking kids to ride camels. †For other victims of human trafficking, hope for a better life may depend on a diplomatic solution. That's next time on Ways and Means.

This 3-part series, "New Ideas for Policy in the Developing World", is supported by the Josiah Charles Trent Memorial Endowment Fund. We have a link to a collection of materials about the Google Earth/blue tarp slum project you heard about on this episode. It's at our website, waysandmeansshow.org. Professor Anirudh Krishna has written a book, it's just out and it's called "The Broken Ladder: The Paradox and Potential of India's One Billion". It's available from Cambridge University Press. Thanks to Mohammed Monsoor for translating for us in Bangalore and to our reporter there, Mary-Rose Abraham. Ravtosh Bal interpreted Jennumah's answers for us. She is a faculty member at the Sanford School of Public Policy at Duke. Ways and Means is produced by Carol Jackson, Alison Jones, and Karen Kemp. Our assistant producers are Thamina Stoll and Susannah Roberson. Cristina García Ayala creates our episode art. Our engineer is John E. Vince Evans. Until next time, I'm Emily Hanford.