Plus Codes

maps.google.com/pluscodes

shelter-associates.org

Plus Code

Convenience just a click away

SA shelter associates

unicef

BACKGROUND

Having an independent navigable address & access to basic services means so much more than just having a place of living. Millions of families living in the informal settlements are often crammed into overcrowded dwellings and cramped living conditions. They either don't have an address or have one that does not identify their house or business location accurately. Therefore, for basic facilities and emergency services to reach doorsteps or getting to the nearest infrastructural facilities, a navigable location is a prerequisite. This is where the need for a unique & powerful solution like **Plus Codes** is indispensable.

PLUS CODES FOR SLUMS & LOW INCOME SETTLEMENTS

Plus Codes which are increasingly being used across the globe, are open source and free to use. It uses latitude and longitude of any place on the Earth to produce a short, easy-to-share alpha-numeric digital code that can represent a specific location. Whether you want to navigate a person to a house or get to the nearest amenities such as water standposts, electrical posts, community toilets, manholes, etc. all you have to do is enter the destination Plus Code on google maps and get directions to the destination. Plus Code boards are fixed on the doors of individual houses for ready reference.

PRE-INTERVENTION GROUND RESEARCH

To understand the need for Plus Codes in the slum communities, Focus Group Discussions with men, women, adolescents, senior citizens, ULB representatives, sanitation workers, waste collectors, political representatives and other related organisations were conducted as a preliminary activity that helped gather ground level data, facts and practical issues faced by communities due to lack of accurate address.

Feedback from the community

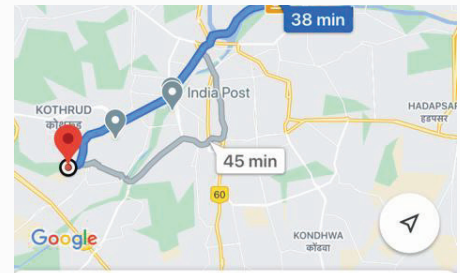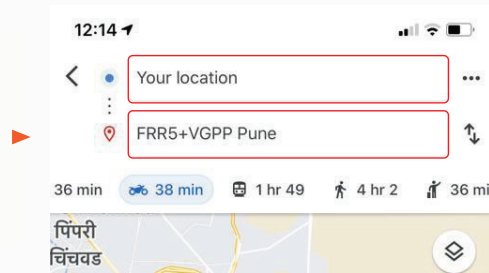| Unable to report infrastructural problems in the slum | Untimely collection of household waste and garbage | Difficulty for service providers to locate our homes | Posts and parcels get delivered at a common area | During emergencies no services can reach our doorsteps |

HOW TO FIND YOUR LOCATION THROUGH PLUS CODES

For e.g. **'FRR5+VGPP Pune'** is the Plus Code of a Community Toilet in one of the slum settlements in Pune. If you enter this code into either Google Maps or Google Search, you'll be directed to that location.

Step 1: Open Google Maps

Step 2: Enter the Plus Code & City name in search

Step 3: Click on start to find your route

BENEFITS OF PLUS CODE FOR THE COMMUNITY

Receiving basic urban services & Welfare schemes

Opening bank or postal accounts

Ordering medicines, food or commodities online

Finding a Community Toilet

Receiving letters from the post/courier

Getting LPG cylinder at your doorstep

Receiving timely emergency services

Door to door waste collection in slums

PLUS CODES FOR GOOD GOVERNANCE

- The household and amenities linked Plus Code will act as a unique reference for various Govt Departments who can further link it to their department's datasets.

Electricity Department

Water Department

Solid Waste Department

Plus Code of every house linked to Basic Household and Infrastructure Data

+ Electricity Connection Data

+ Water Connection Data

+ Solid Waste Connection Data

- Getting real time data of families and infrastructural facilities within the slum for timely decision making & planning
- Tracking and monitoring families during pandemics such as COVID19
- Leading service providers for the maintenance of drainage lines, waste collection, etc.
- Disaster response and management during flood, fire, etc.
- Planning programs related to Water Supply, Sewerage, Sanitation, Waste Management, Public health, livelihood, etc. for every slum household
- Every ULB department can link their datasets to Plus Codes for effective Governance

My Map Tool

The plus code data of an informal settlement will be uploaded on Google My Map tool and shared with key stakeholders

THE IMPLEMENTATION PROCESS

A step-by-step process is followed before every household, business establishment or infrastructural facilities receive their independent Plus Code.

A. Slum mapping & Plus Code Generation

Slum mapping is conducted to create maps of each settlement followed by digitization based on ground surveys post which alpha-numeric Plus Codes are generated for each house & existing infrastructural facilities.

C. Mobilization of Plus Codes

The Urban Local Bodies and Communities are educated on the concept and application of Plus Codes through various training, group discussions, meetings, live demonstrations, display of large slum maps for easy reference, etc.

B. Rapid Household Surveys

Basic information of individual families is gathered which is then linked to their Plus Code. This information is essential for government and non-government organisations for effective service delivery.

Beneficiary Experience:

"The drainage gutters near my house were clogged and they were being cleaned but the dirt was laid on the road for over 2 days. The stench and increased number of flies around the area was bothering us. I contacted the Sanitation workers by sharing the Plus Code of my house and got the dirt cleaned."
- Sagar Thorat (Resident of Chinchpada, Navi Mumbai)

A JOINT COLLABORATION

Shelter Associates (SA) is a Civil Society Organization founded in 1994 that strives towards equitable distribution of resources by enabling access to basic infrastructure, sanitation and social housing to the urban poor. Working strongly on a data driven & community centric approach, SA has recognized the importance of having an easily navigable location & have implemented Plus Codes for the urban slums.

Project Plus Codes for the informal settlements have been undertaken by Shelter Associates jointly with Google and UNICEF Maharashtra in a few slums of Pune, Thane and Navi Mumbai on pilot basis with 14000+ Plus Codes generated for houses & infrastructural facilities in the selected slums of these three cities (Dec. 2020). The Plus Code technology has been developed by Google while UNICEF India through its special WASH program aimed as a response to the COVID pandemic has jointly supported this initiative.

Reaching out to the urban poor and convergence of various Government Schemes will be easier when data is gathered by various departments against one common unique code. This innovation can be scaled across India and benefit the slum population at a larger level.