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# Creating Beat Map

## For Solid Waste Management

### Mumbai Prabhag61 example

Visit <https://geonode.communitygis.in/>

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Create new account  
Click on “Register” on navigation bar

# Welcome

GeoNode is an open source platform for sharing geospatial data and maps.

[Get Started »](#)

## Search for Data.

 Search

[Advanced Search](#)

# Sign up

Activities Firefox Web Browser Dec 2 21:52 Sign up - Mozilla Firefox

Sign up

https://geonode.communitygis.in/account/signup/

GeoNode Data Maps Apps About

Search Register Sign In

## Sign up

Create a new local account

**E-mail**

E-mail address

**Username**

Username

**Password**

Password

**Password (again)**

Password (again)

Sign up

Data Layers Documents Remote Services Maps Explore Maps About People Groups

Powered by GeoNode Developers | About

English

**Creating empty layer**

Once logged in click on “Data” dropdown and then click “Create layer”



# What is Beat?

- Beat is the area, mostly a group of buildings from where the waste is collected.
- It is of around 8000 m sq.
- So, our motive is to trace the beats and mention who is responsible for the Waste Management of the particular beat.

Hence, we need 3 fields in our data:

- area\_name,
- beat\_name and
- emp\_responsible.

Note: We will also be calculating the area of the polygon so as to know it remains around 8000 m sq.

- Enter layer name and title
- Select Geometry type as Polygons

## Create an empty layer

Layer name

Layer title

Geometry type

Add Attribute

Create

- **Add Attribute Like area name, beat name and employee responsible for that beat along with their data type accordingly using “Add attribute button”**
- **Click on create**

Geometry type

Polygons

Add Attribute

area\_name

String

Remove

beat\_name

String

Remove

emp\_responsible

String

Remove

Create



**A new empty layer is created.. Click on view layer**

Prabhag61\_beat

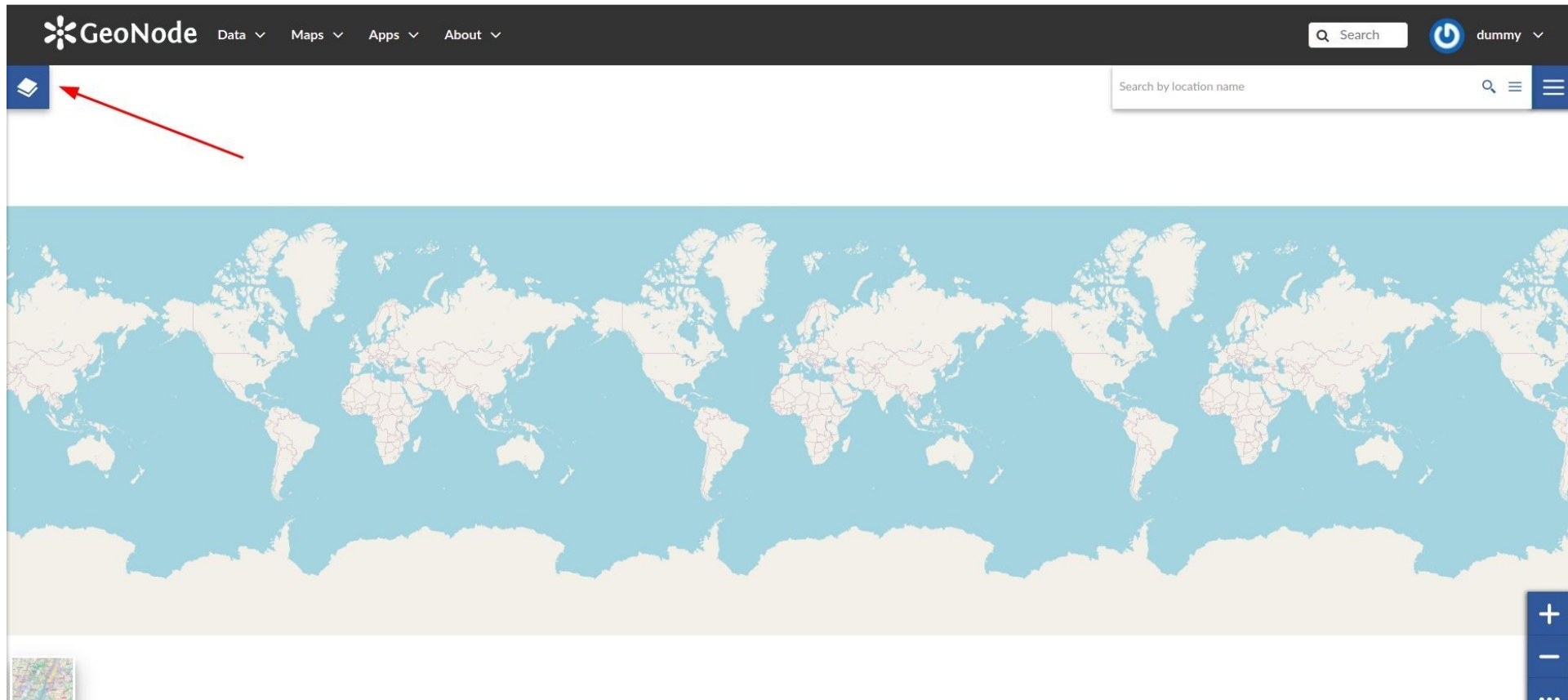


The screenshot displays a web application interface. On the left is a world map with a blue background and light beige landmasses. A large brown arrow points from the map towards the sidebar on the right. The sidebar contains a vertical list of buttons: 'Download Layer', 'Metadata Detail', 'Editing Tools', 'View Layer', and 'Download Metadata'. The 'View Layer' button is highlighted with a light gray background, and a mouse cursor is positioned over it. Below these buttons is a section labeled 'Legend'.

Download Layer
Metadata Detail
Editing Tools
View Layer
Download Metadata
Legend

# **Adding Ward layer**

# Click on layer icon



# Click on add layer icon

GeoNode Data ▾ Maps ▾ Apps ▾ About ▾

Search Search

Search by location name

Filter layers

Default

Ward61 - Regions

100 %

Open Street Map

Preview Not Available

Decrease zoom

Scale: 1 : 147914678

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- Search for corporator ward layer in search bar of right panel  
Click on + icon to add that to act as an overlay

The screenshot displays the GeoNode web application interface. The top navigation bar includes the GeoNode logo, links for Data, Maps, Apps, and About, a search bar, and a user profile for Himanshi2301. The left sidebar contains a 'Filter layers' section with a 'Default' layer and a layer named 'Prabhag61\_beat'. The main map area shows a world map. The right panel, titled 'Catalog', shows search results for 'corpora'. The first result is 'Corporate\_Ward\_Boundaries\_22Dec2021' with a thumbnail map of India and a '+ ' icon. The second result is 'Corporatorwardboundary Mumbai 13May' with a thumbnail map of Mumbai and a '+ ' icon. A mouse cursor is hovering over the second result.

GeoNode Data Maps Apps About Search Himanshi2301

Filter layers

Default

Prabhag61\_beat

Catalog

corpora

Search

Corporate\_Ward\_Boundaries\_22Dec2021

No abstract provided

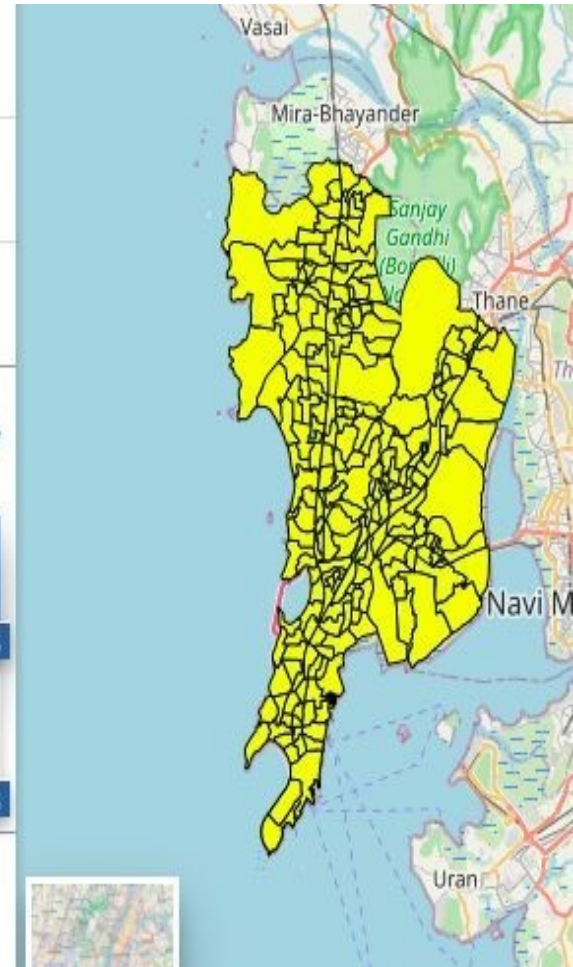
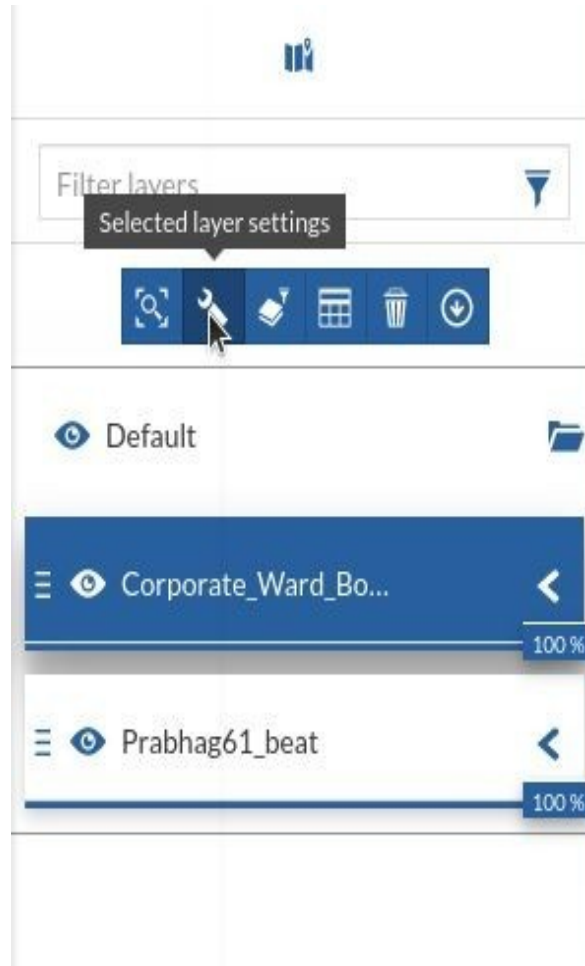
935da388-6305-11ec-bc18-0242ac120009

Corporatorwardboundary Mumbai 13May

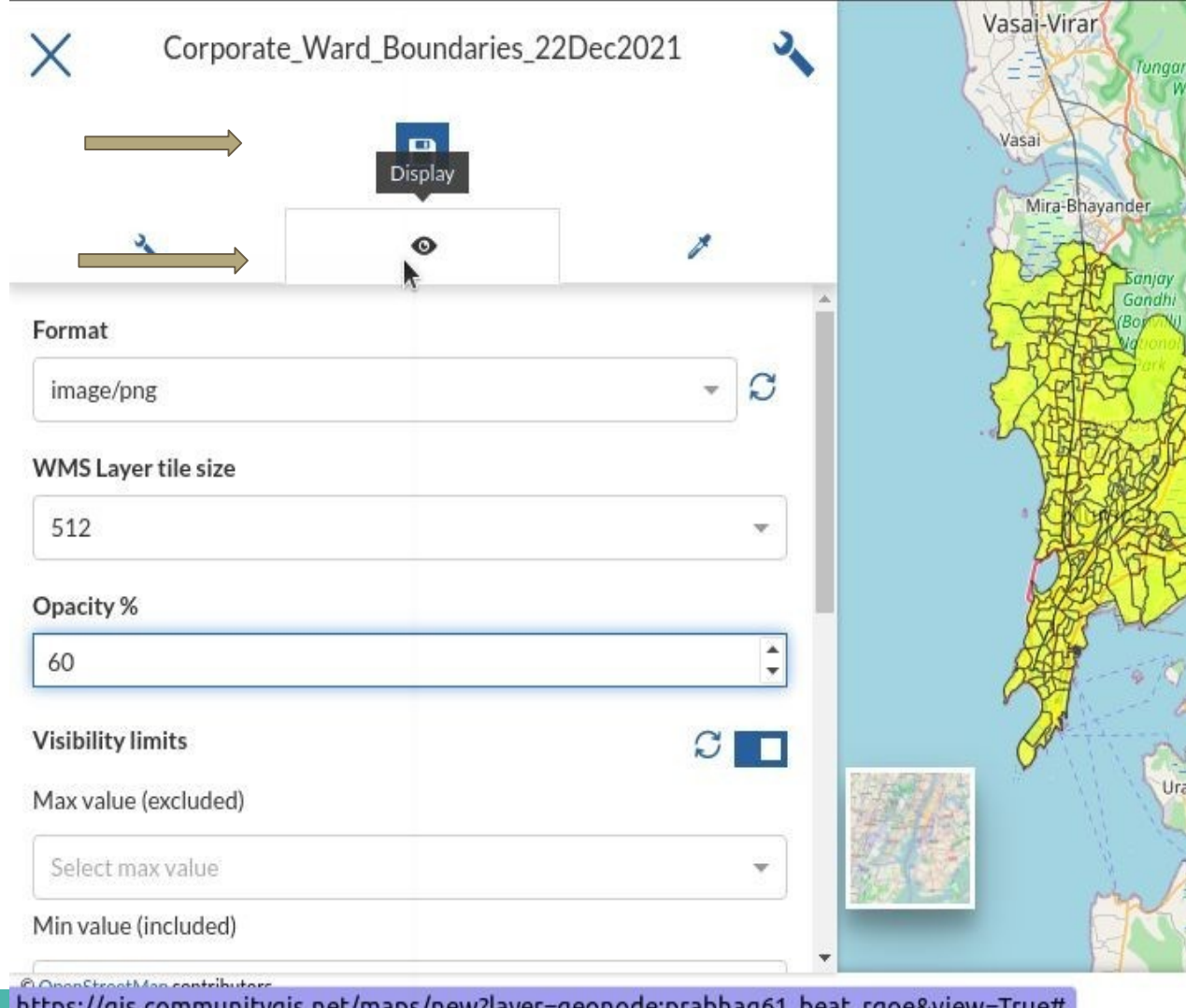
No abstract provided

**Reducing opacity of added layer**

- Click on corporator ward layer on right panel
- Click on Settings Icon



- Click on “display” icon
- Enter required opacity in “Opacity %”
- Click on Save Icon



Corporate\_Ward\_Boundaries\_22Dec2021

Display

Format

image/png

WMS Layer tile size

512

Opacity %

60

Visibility limits

Max value (excluded)

Select max value

Min value (included)

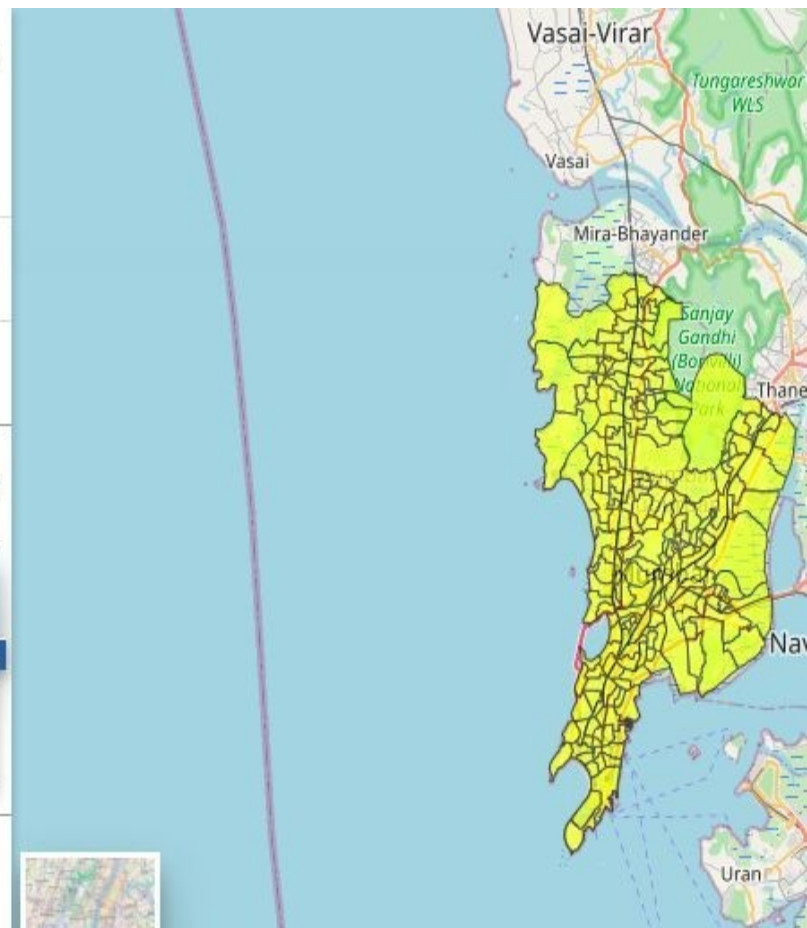
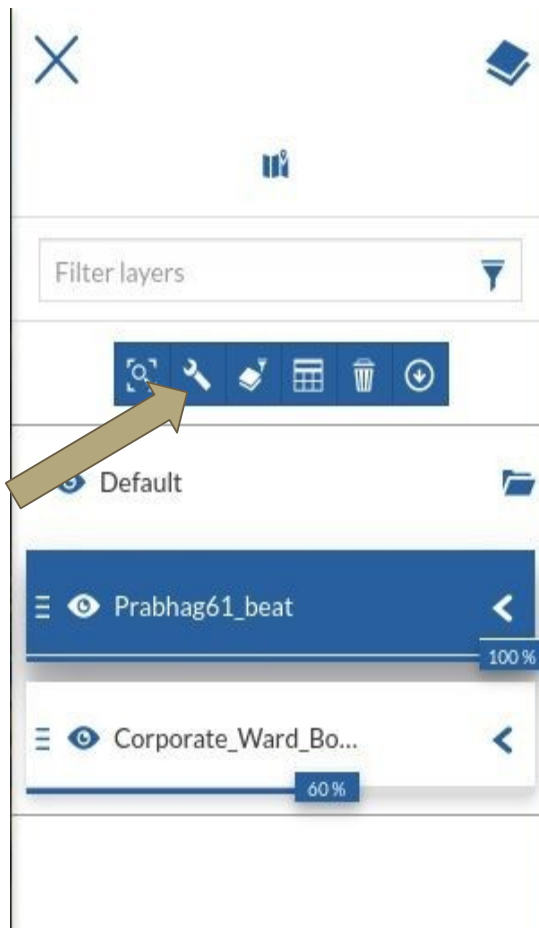
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[https://nls.communigis.net/maps/new?layer=geonode:prabha61\\_beat\\_rgoe&view=True#](https://nls.communigis.net/maps/new?layer=geonode:prabha61_beat_rgoe&view=True#)

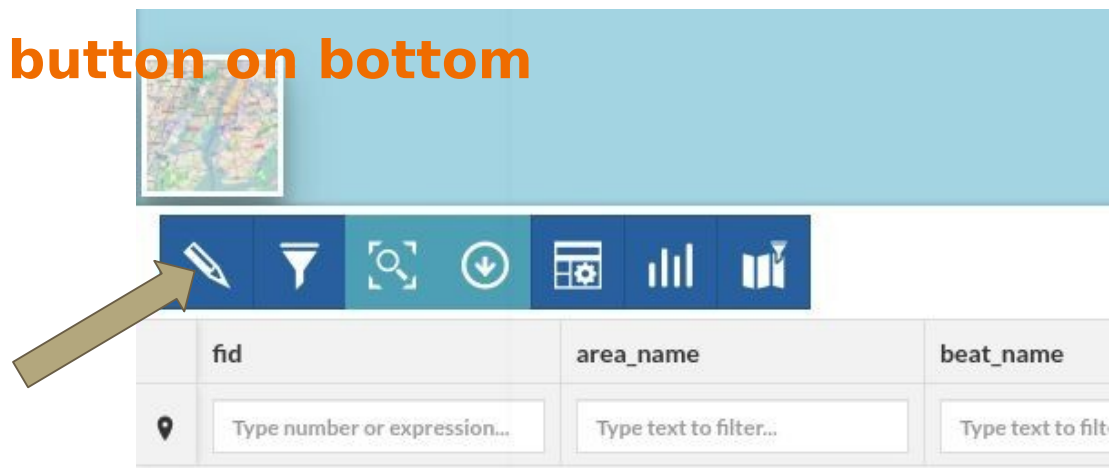


**Adding polygon with attribute**

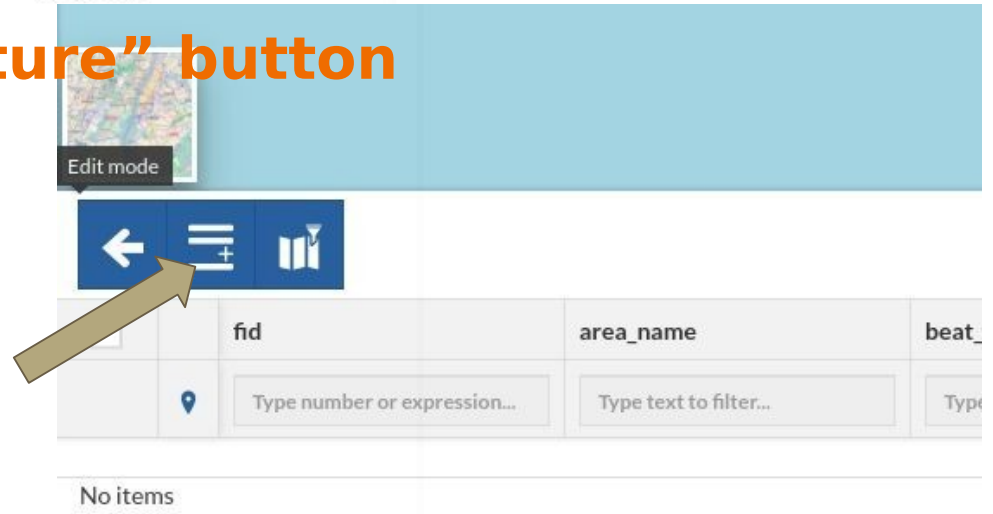
- Click on layer that you created initially
- Click on its attribute table



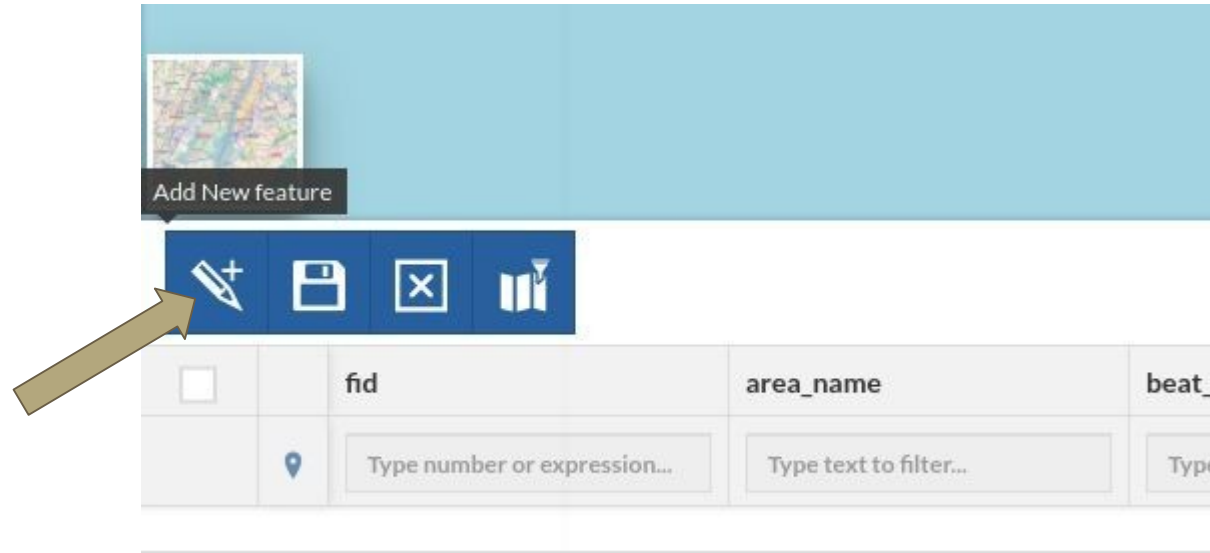
- Click on “edit mode” button on bottom panel




- Click on “Add new feature” button




- Click on “Draw Feature button”




- Zoom to the region you want to create layer







[Data](#) [Maps](#) [Apps](#) [About](#)




Search by location name





Prabhag61\_beat

<input type="checkbox"/>	fid	area_name	beat_name	emp_responsible
	<input type="text" value="Type number or expression..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>

No Features Available



Prabhag61\_beat

Icons: Save, Close, Delete, Add Layer

fid	area_name	beat_name	emp_responsible
Type number or expression...	Type text to filter...	Type text to filter...	Type text to filter...

No Features Available



- Click on save button again to save the data attached v





Prabhag61\_beat

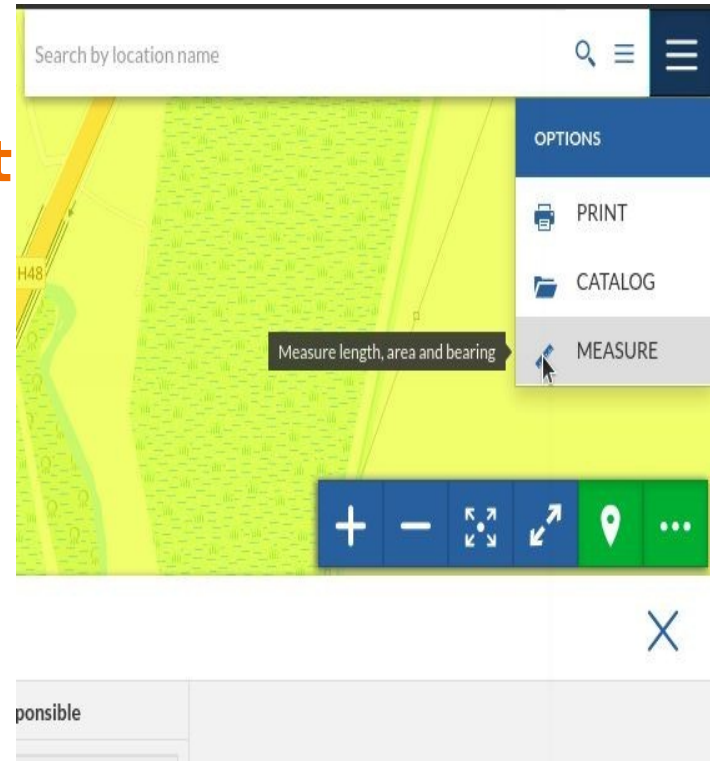


fid	area_name	beat_name	emp_responsible
<input type="text" value="Type number or expression..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>
1	Kanjurmarg_east	xyz	abc

1 Item (1 Selected)

**Now we need to make sure that the drawn polygon is approximately 8000 m. sq.**

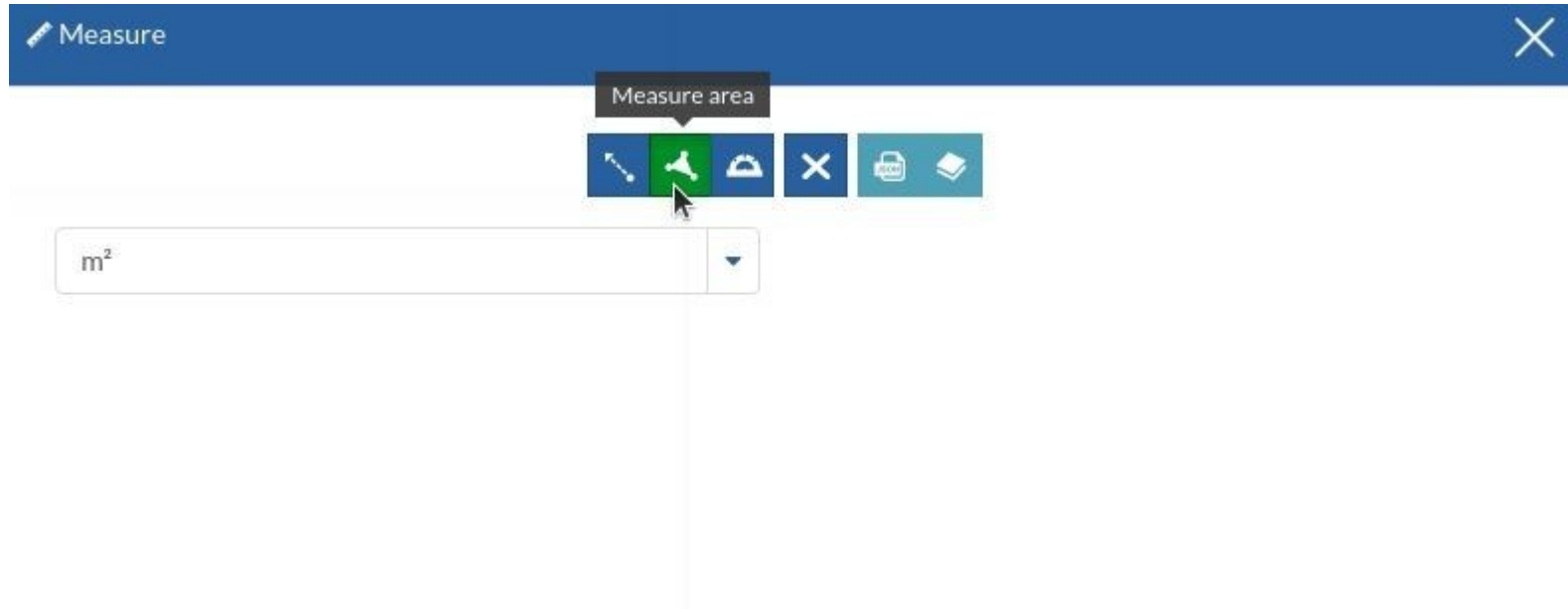
- **Go to options icon in right**
- **most of the screen**
- **Click on measure.**





**Now we need to make sure that the drawn polygon is approximate**

- **In this dialogue box click on second icon to measure the area of**
- **Select the unit as m sq. from the dropdown.**



Now we need to make sure that the drawn polygon is approximately 8000 m. sq.  
Slide the dialogue box using mouse to zoom on drawn polygon

The screenshot shows the GeoNode web interface in a Google Chrome browser. The browser's address bar displays the URL: `gis.communitygis.net/maps/new?layer=geonode:prabhag61_beat&view=True#`. The page features a dark header with the GeoNode logo, navigation links (Data, Maps, Apps, About), a search bar, and a user profile for 'Himanshi2301'. The main content area is split into two panels. The left panel shows a map of Kanjur Village with a grey polygon drawn on it. Two labels on the polygon indicate a length of '117.67m'. A tooltip says 'Click to continue drawing the polygon'. The right panel is a 'Measure' tool interface with a dropdown menu set to 'm²'. Below the map, there is a toolbar with various icons for map interaction. At the bottom, a table titled 'Prabhag61\_beat' is visible, showing columns for 'fid', 'area\_name', 'beat\_name', and 'emp\_responsible'. The table currently displays '1 Item (1 Selected)'. The footer of the page includes the copyright notice '© OpenStreetMap contributors.' and a scale indicator 'Scale: 1:9028'.

Activities Google Chrome Jan 6 12:16 PM

Journey T... District wi... Layer\_cre... New Map - x Corporate... Tasks:No... Options M... Live story... +

gis.communitygis.net/maps/new?layer=geonode:prabhag61\_beat&view=True#

Apps GeoWebCache... GeoServer: Dis... d3/API.md at... Leaflet layers... Ubuntu 20.04... Visualizing Ge... Reading list

GeoNode Data Maps Apps About Search Himanshi2301

Measure

m²

Click to continue drawing the polygon

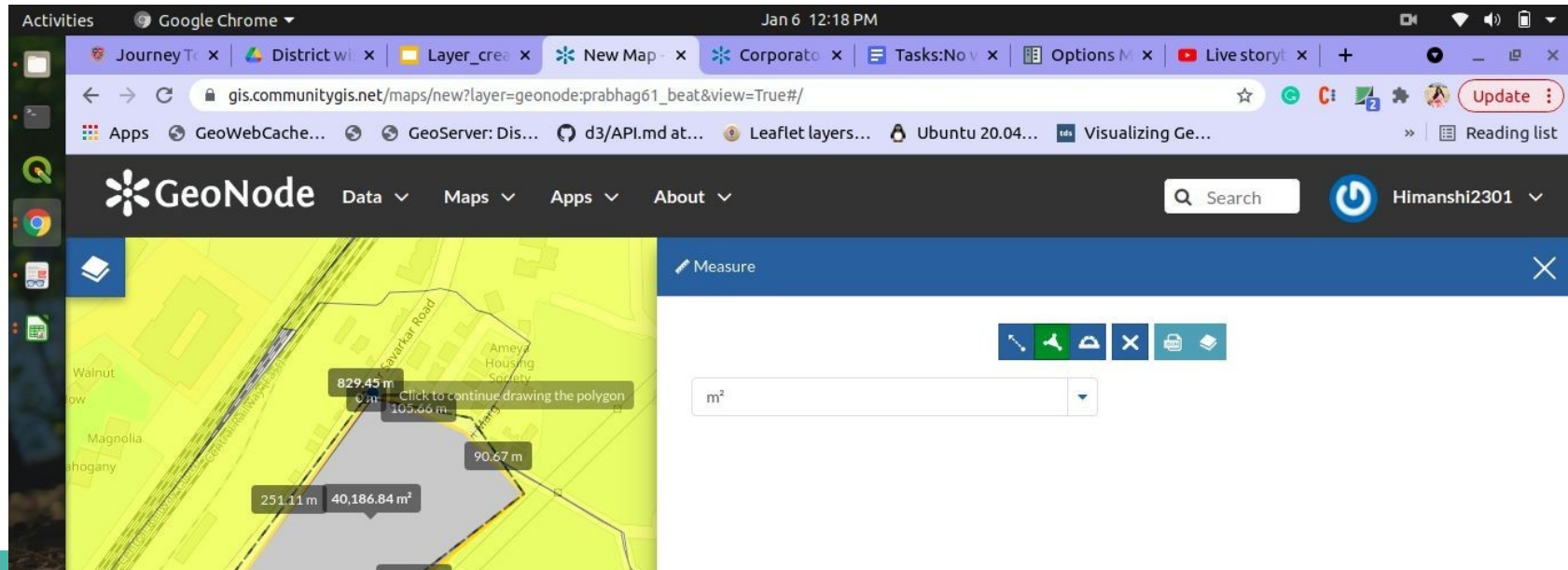
Prabhag61\_beat

	fid	area_name	beat_name	emp_responsible
1 Item (1 Selected)				

© OpenStreetMap contributors. Scale: 1:9028

Now we need to make sure that the drawn polygon is approximately 8000 m. sq.

- Start drawing polygon on the drawn polygon. It will show the area in between of the polygon. (Here its showing ~40,000 m sq which is way more higher than our requirement which is 8000 m sq.)



**We need to edit the drawn polygon.**

- Close the measure dialogue box
- Click on polygon's vertices and start reducing their lengths.

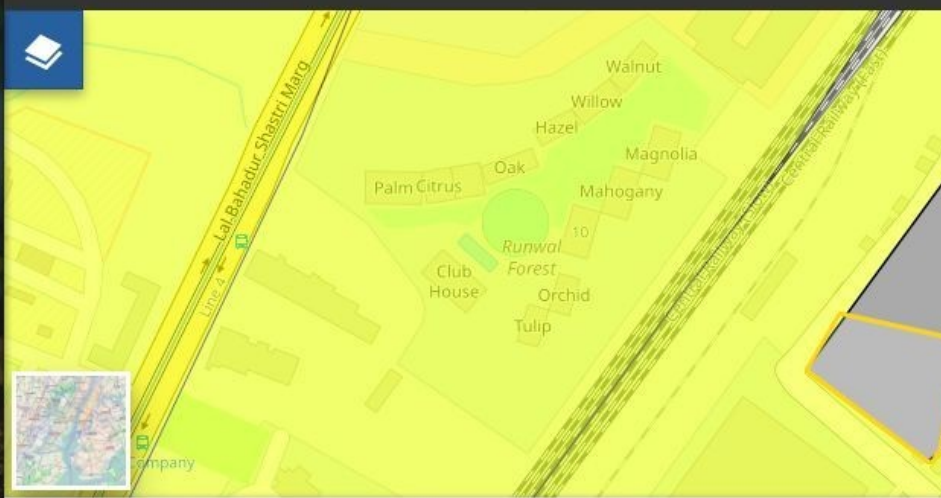
Activities Google Chrome

Journey To x District w x Layer\_cre x New Map x Corp

gis.communitygis.net/maps/new?layer=geonode:prabhag61\_beat&view=Tr

Apps GeoWebCache... GeoServer: Dis... d3/API.md at... Lea

**GeoNode** Data Maps Apps About



	fid	area_name	beat_name
	1	Kanjurmarg_east	xyz

# We need to edit the drawn polygon.

- Again measuring the area of reduced polygon.
- It's ~7800 m sq
- Close measure dialogue box.
- Click on save.

The screenshot shows the GeoNode web interface in a Google Chrome browser. The browser's address bar displays the URL: `gis.communitygis.net/maps/new?layer=geonode:prabhag61_beat&view=True#`. The GeoNode header includes navigation links for Data, Maps, Apps, and About. The main map area shows a yellow-green map with a grey polygon drawn over it. The polygon's vertices are labeled with distances in meters: 51.24 m, 97.45 m, 363.01 m, 83.56 m, 13.2 m, 117.55 m, and 7,892.53 m. A measurement dialog box is open on the right, showing the area as 7,892.53 m². Below the map, there is a toolbar with icons for saving, deleting, and other map functions. At the bottom, a table displays the data for the selected polygon.

	fid	area_name	beat_name	emp_responsi
<input checked="" type="checkbox"/>	1	Kanjurmarg_east	xyz	abc

1 Item ( 1 Selected )

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- Similarly you add more features(polygons)
- You can also Login later to edit layer and more features



Prabhag61\_beat

<input type="checkbox"/>		fid	area_name	beat_name	emp_responsible
<input type="checkbox"/>		<input type="text" value="Type number or expression..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>	<input type="text" value="Type text to filter..."/>
<input type="checkbox"/>		1	Kanjurmarg_east	xyz	abc



# Add KWest layer to the map

The screenshot displays the GeoNode web application interface. The browser window shows the URL `gis.communitygis.net/maps/new?layer=geonode:building_wise&view=True#`. The main map area shows a world map with a light blue background. On the left, there is a sidebar with a 'Filter layers' search bar and a list of layers including 'Default' and 'Beat'. On the right, a 'Catalog' panel is open, showing a search bar with the text 'kwest' and a 'Search' button. Below the search bar, two search results are listed:

- KWEST**  
No abstract provided  
2098f3f4-63a3-11ec-8463-0242ac120009
- kwest\_property\_location\_details**  
No abstract provided  
11c93294-63ad-11ec-b219-0242ac120009

Each result has a small map thumbnail and a blue '+' button to add the layer. At the bottom right, there is a pagination control showing 'Results 1-2 of 2' and a scale indicator 'Scale: 1:295829355'.

# Select new layer and open attribute table

Activities Brave Web Browser Dec 23 10:59

New Map - example.com x +

gis.communitygis.net/maps/new?layer=geonode:building\_wise&view=True#/

GeoNode Data Maps Apps About

Search admin

Filter layers Open attribute table

Default

KWEST 100%

Beat 100%

Mumbai

Scale: 1:72224



# Click on edit mode button to add feature

Activities Brave Web Browser Dec 23 10:59

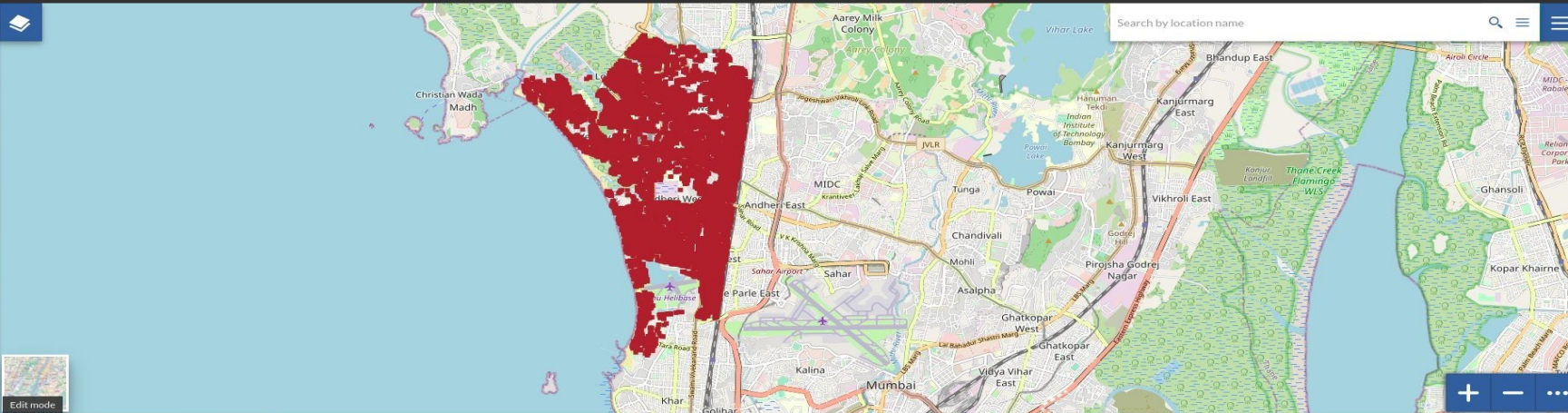
New Map - example.com x +

gis.communitygis.net/maps/new?layer=geonode:building\_wise&view=True#/

GeoNode Data Maps Apps About

Search admin

Search by location name



Map showing a large red polygon representing a building area in Mumbai. The map includes labels for various locations such as Christian Wada, Madh, Aarey Milk Colony, Vihar Lake, Kanjurmarg East, Kanjurmarg West, Vikhroli East, Pirojsha Godrej Nagar, Ghatkopar West, Ghatkopar East, Vile Parle East, Sahar, Kalina, Golibar, Khar, and Bhandup East. The map also shows the Arabian Sea to the west and the Thane Creek to the east.

Edit mode

fid

Type number or expression...

No Features Available

No items

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Scale: 1:72224

# Click on “Add New Feature” Button

Activities Brave Web Browser Dec 23 11:00

New Map - example.com New Map - example.com x +

gis.communitygis.net/maps/new?layer=geonode:building\_wise&view=True#/?

GeoNode Data Maps Apps About

Search by location name

Search

admin

Add New feature

fid

Type number or expression...

No Features Available

No items

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Scale: 1:72224

# Start creating geometry

activities

Save Web browser

New Map - example.com

gis.communitygis.net/maps/new?layer=geonode:building\_wise&view=True#/?

GeoNode Data Maps Apps About

Search

admin

Search by location name

Cancel geometry creation

Beat

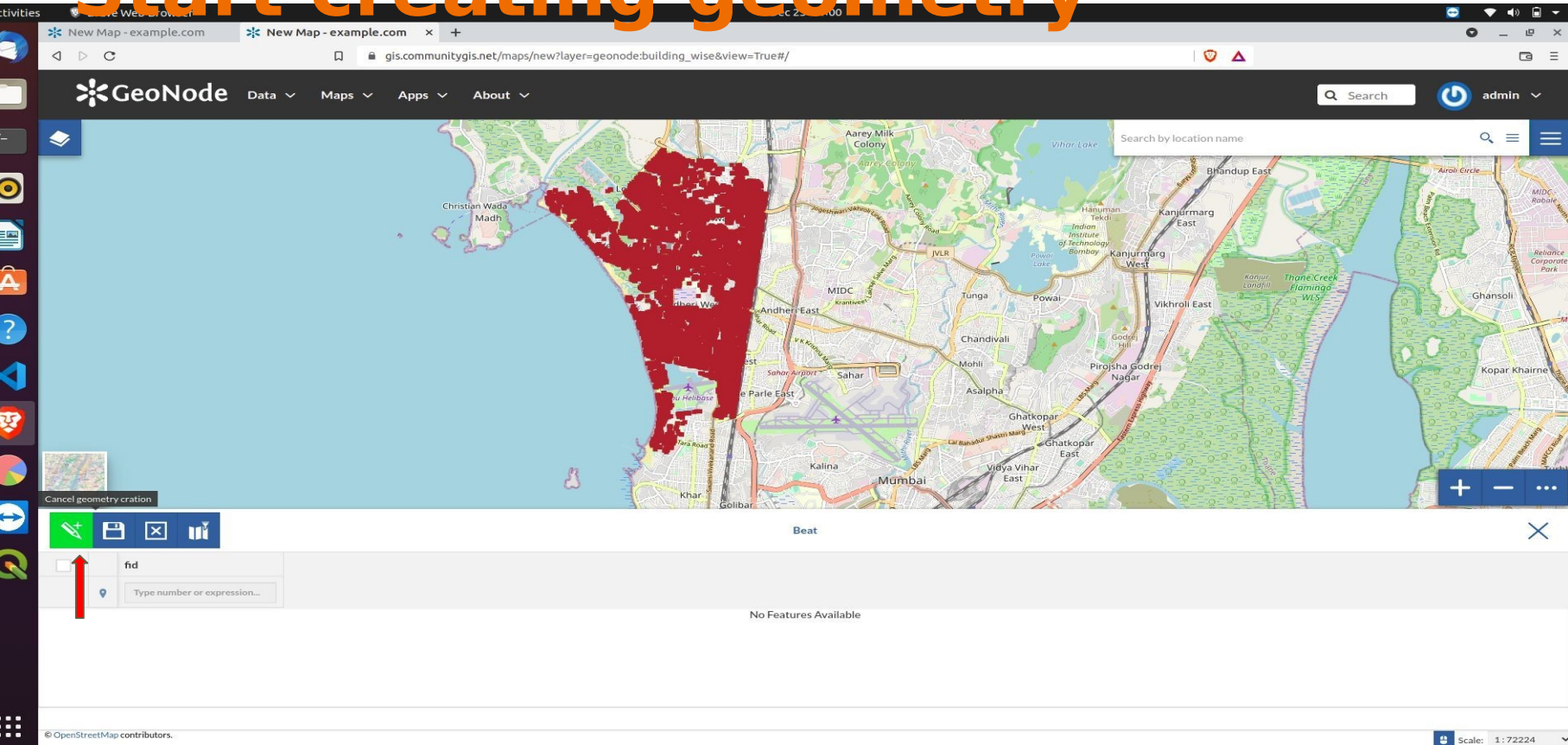
fid

Type number or expression...

No Features Available

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Scale: 1:72224



The screenshot displays the GeoNode web application interface. At the top, there's a navigation bar with the GeoNode logo and links for Data, Maps, Apps, and About. A search bar is located on the right side of the navigation bar. Below the navigation bar, a map of Mumbai is shown with a red polygon overlay. The map includes labels for various locations like Aarey Milk Colony, Vihar Lake, Kanjurmarg East, and others. A search bar is also present on the map interface. Below the map, there's a toolbar with icons for editing, saving, and other functions. A table is visible at the bottom of the screen, with a column header 'fid'. A red arrow points to the 'fid' column header. The table currently shows 'No Features Available'. The footer of the page includes the copyright notice '© OpenStreetMap contributors.' and a scale indicator 'Scale: 1:72224'.



# Create beat polygon and save

Activities Brave Web Browser Dec 23 11:01

New Map - example.com New Map - example.com x +

gis.communitygis.net/maps/new?layer=geonode:building\_wise&view=True#/?

GeoNode Data Maps Apps About

Search by location name

Search

admin

Map showing a street network with a highlighted yellow polygon area. The map includes labels for roads like Jai Prakash Road, Dadahai Road, and various landmarks like Bhavan's Ground, Shiv Temple, and Dr. Vaidya Eye Hospital.

Edit mode

Beat

fid

Type number or expression...

1

1 Item

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Scale: 1:4514

**Thanks**