

Exercise

Building Dashboards with Tableau

Summary

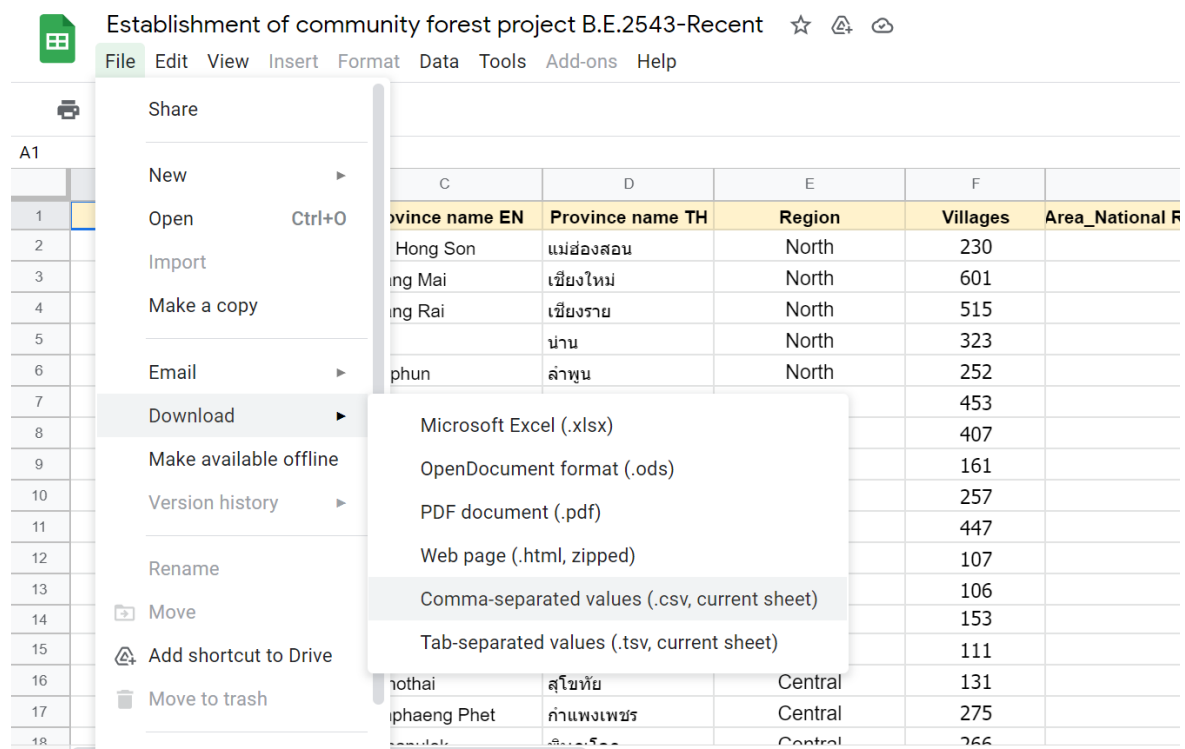
1. Module: Data Visualization¹
2. Lesson: Dashboards
3. Sub-topic: Building Dashboards Using Tableau
4. Objective: Introduction to building an interactive dashboard with Tableau
5. Time Allotment: 120 minutes

Steps

Getting Data into Tableau

We start up downloading a CSV version of the dataset. Click on File -> Download -> Comma-separated values.

¹ This lesson was adapted from the World Bank's Introduction to Data Literacy training manual by Eva Constantaras, and adapted by Yan Naung Oak, Open Development Cambodia and Open Development Initiative, and is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](#). For full terms of use, see [here](#).



Click Add Connection on Tableau and Click Text file. Next, choose the CSV file that you downloaded from Google Sheets. A preview of the data should appear.

Establishment of community forest project B.E.254...

Filters 0 | Add

Establishment of commu...

Need more data?

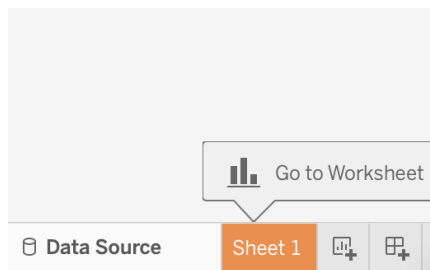
Drag tables here to relate them. [Learn more](#)

Sort fields Data source order

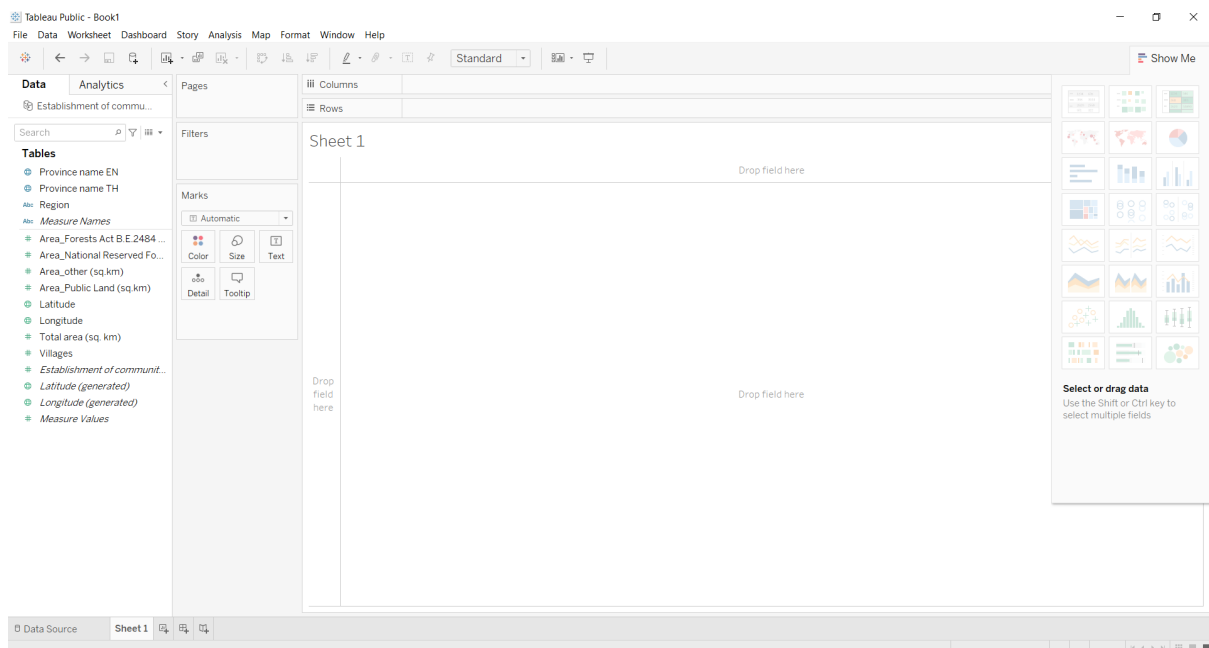
Show aliases Show hidden fields 77 rows

Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent	Establishment of community forest project B.E.2543-Recent
Latitude	Longitude	Province name	Province name	Region	Villages	Area_National	Area_Forests	Area_Public	Area_other	Total area (sq.)
19.3007	97.96492	Mae Hong Son	แม่ฮ่องสอน	North	230	910.50	2.2000	0.0000	1.0000	912.80
18.7909	98.98805	Chiang Mai	เชียงใหม่	North	601	1,349.00	21.0000	0.0000	0.0000	1,370.00
19.7321	99.88474	Chiang Rai	เชียงราย	North	515	462.70	42.6000	15.2000	2.9000	520.40
18.7838	100.77899	Nan	น่าน	North	323	298.00	42.7000	6.7000	0.0000	347.30
18.2661	98.96749	Lamphun	ลำพูน	North	252	284.80	32.3000	0.0000	0.0000	317.00
18.6800	99.73325	Lampang	ลำปาง	North	453	1,158.00	6.4000	0.0000	0.0000	1,164.40
18.2931	100.08868	Phrae	แพร่	North	407	411.90	13.0000	0.0000	1.9000	424.90
6.3345	101.14097	Uttaradit	อุดรดิต	North	161	118.40	27.1000	0.0000	0.0000	145.50
19.3417	100.18545	Phayao	พะเยา	North	257	114.60	11.6000	0.0000	5.2000	126.20

Next, click on the "Sheet 1" tab to start making a chart.



This is the view that you will see when you go to Sheet 1. On the left you can see all the columns in your dataset. They are separated into Dimensions, which show categories, and Measures, which shows numbers.

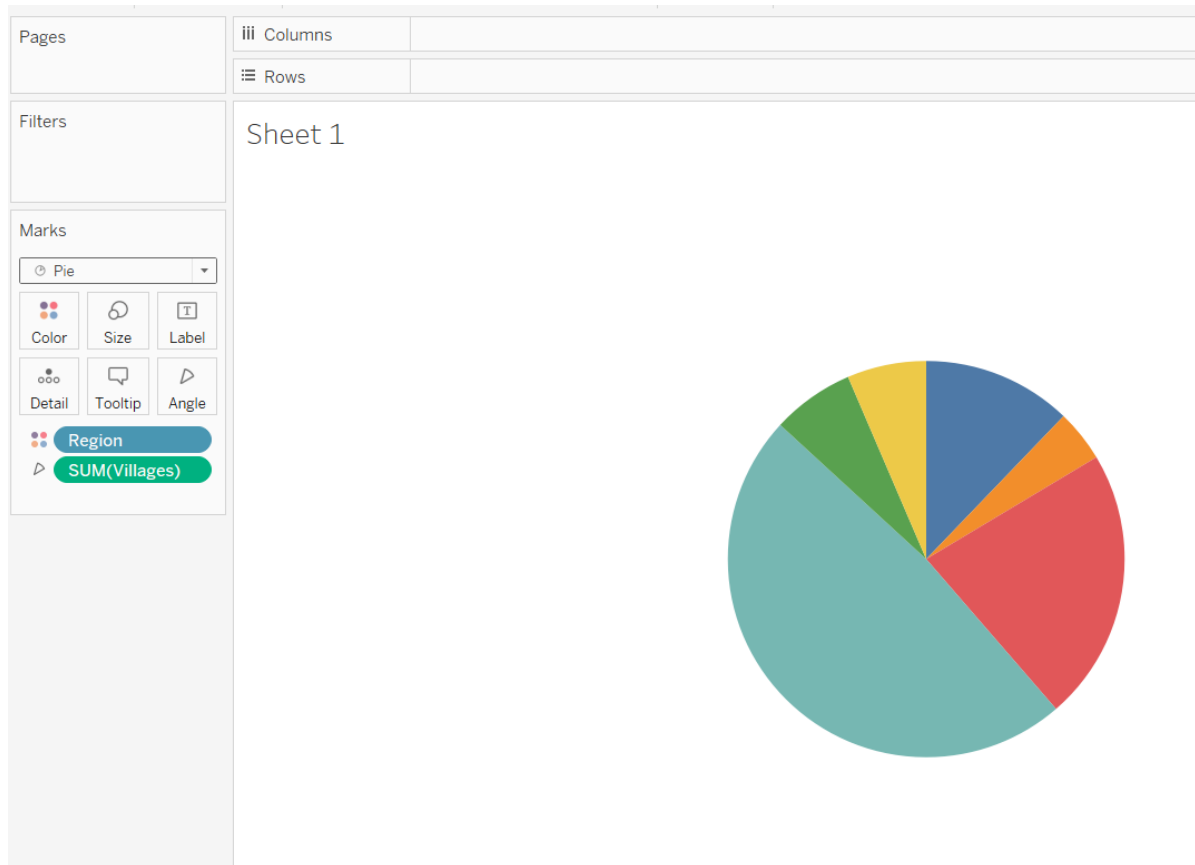


Pie Chart

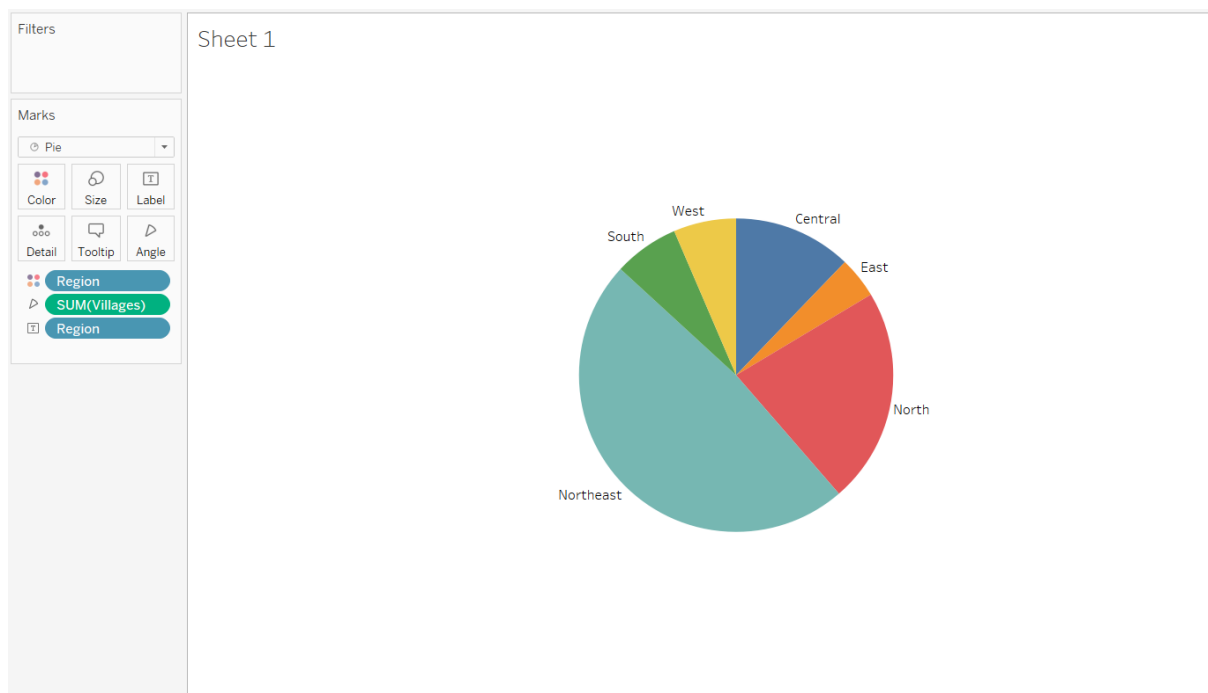
Let's start with a pie chart of the **total number of villages of different regions**.

- First drag the "Region" dimension to the Color box under Marks.

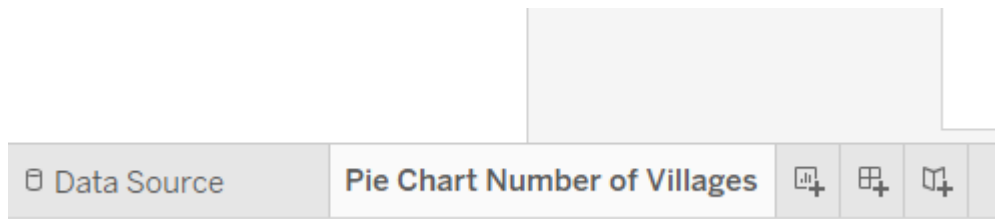
- Next, drag “Villages” to the Angle box.



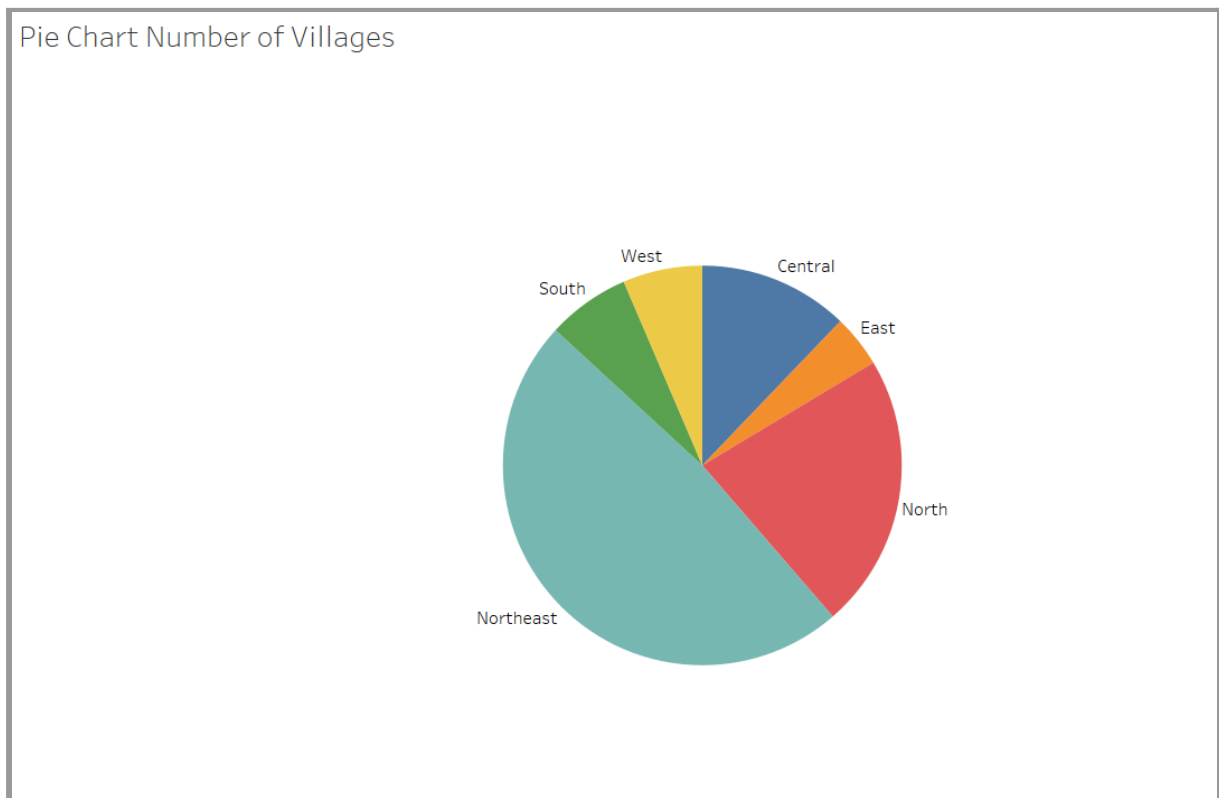
Next, we want to label our pie chart. To do this, we drag “Region” to the label box.



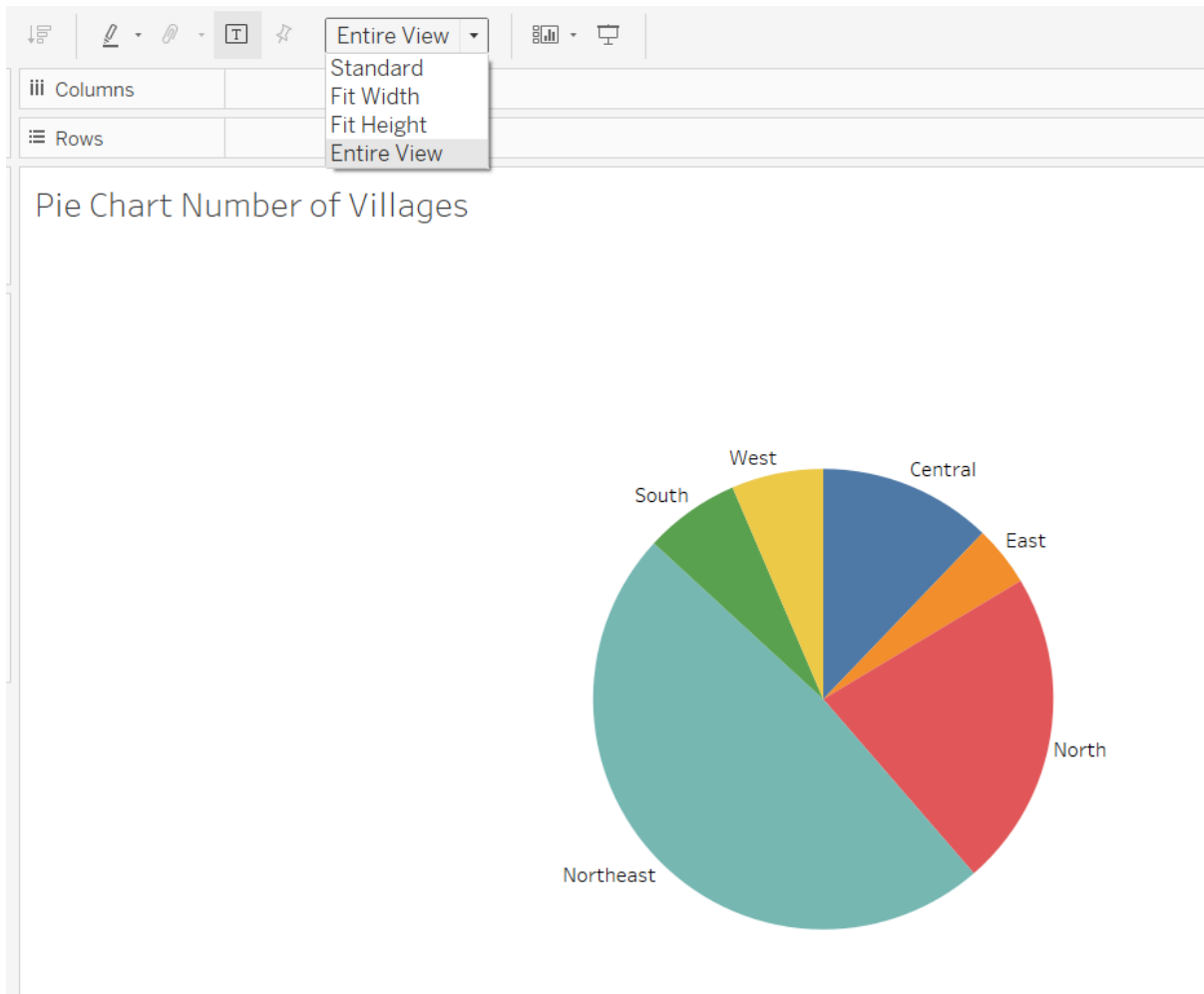
Next, we change the name of the tab to something more relevant, such as “Pie Chart_number of villages”.



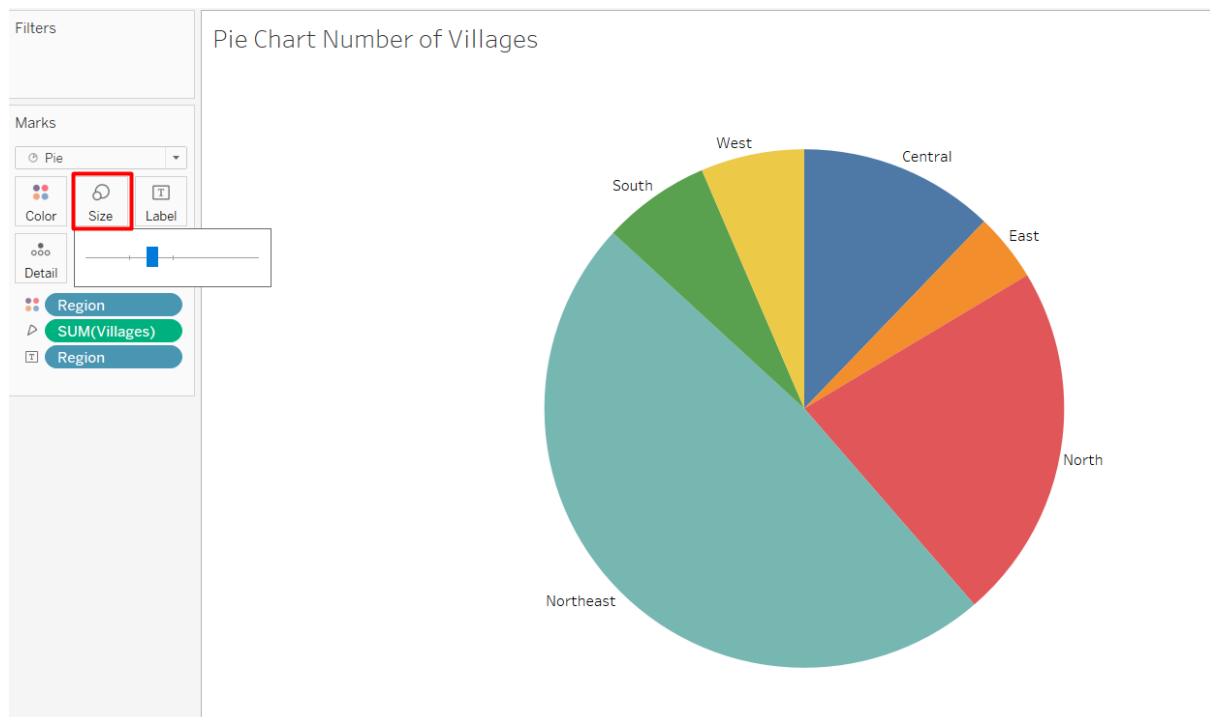
This will also change the label of the chart.



We’re done with making the pie chart, but visually, it looks too small. To resize it, click on “Entire View” in the dropdown box seen in the screenshot below.



This increases the size of the pie chart.



To further increase its size, you can click on the size box, and drag on the slider until the chart fills most of the screen.

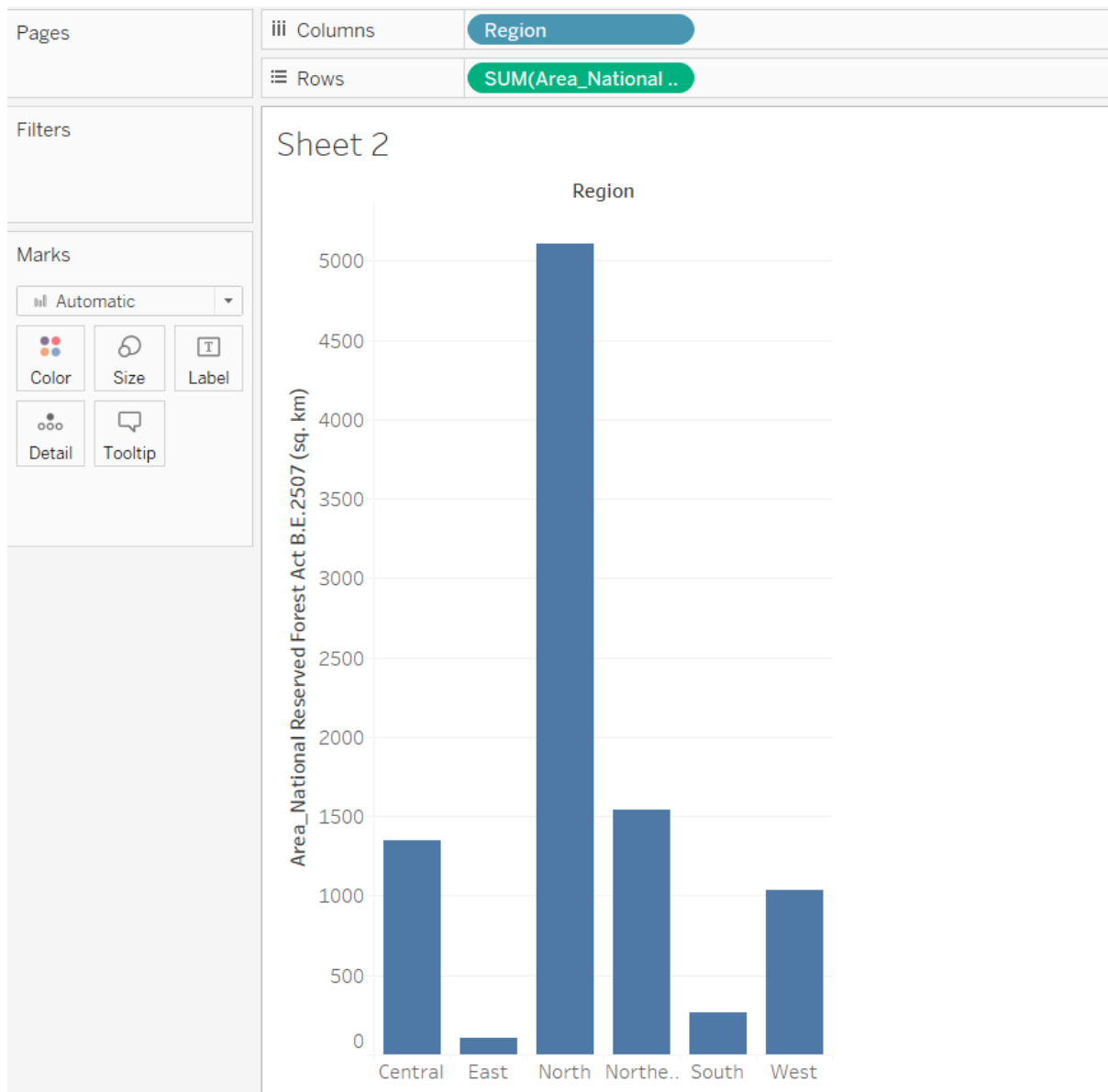
Bar Chart

The next chart we want to make is a simple bar chart

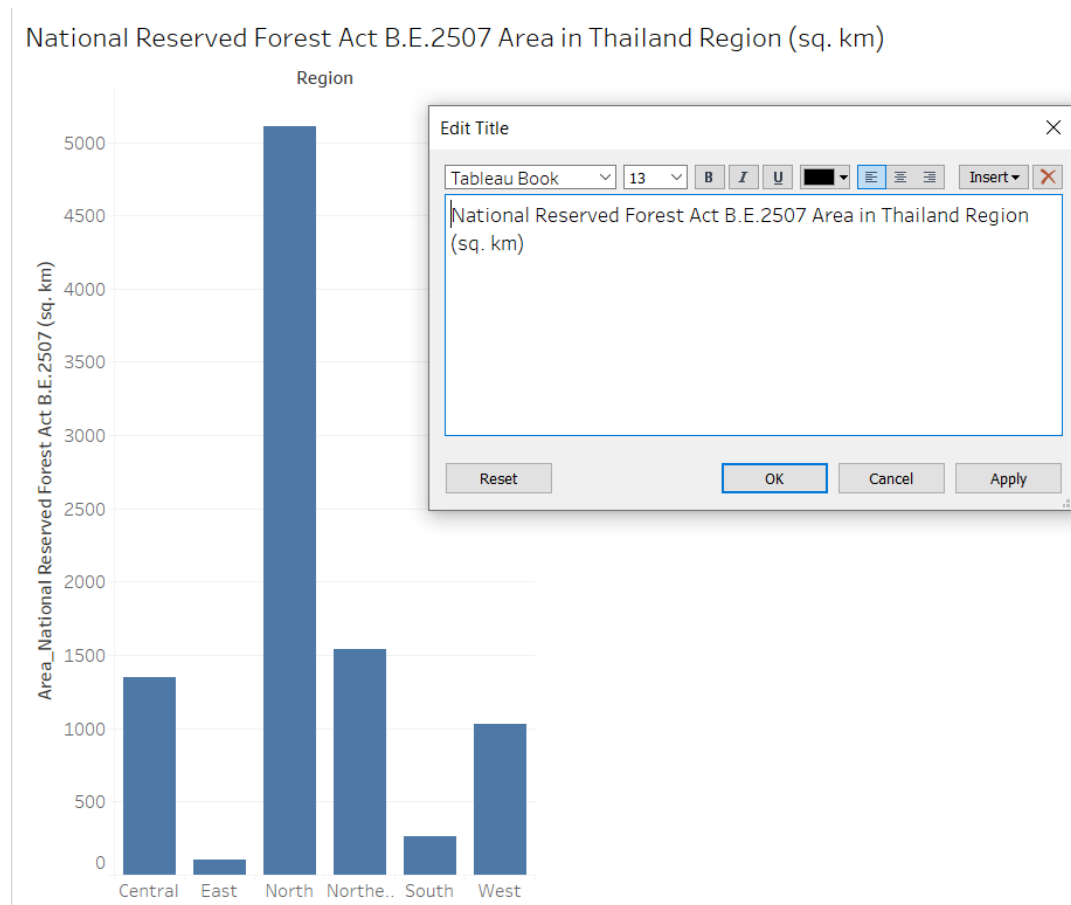
Click on “New Worksheet” to bring up a new sheet on the tab bars below.



To do so we drag “**province**” to the Columns box and “**Area_National Reserved Forest Act B.E.2507 (sq. km)**” to the Rows box. And that’s it! You’ve got a bar chart.



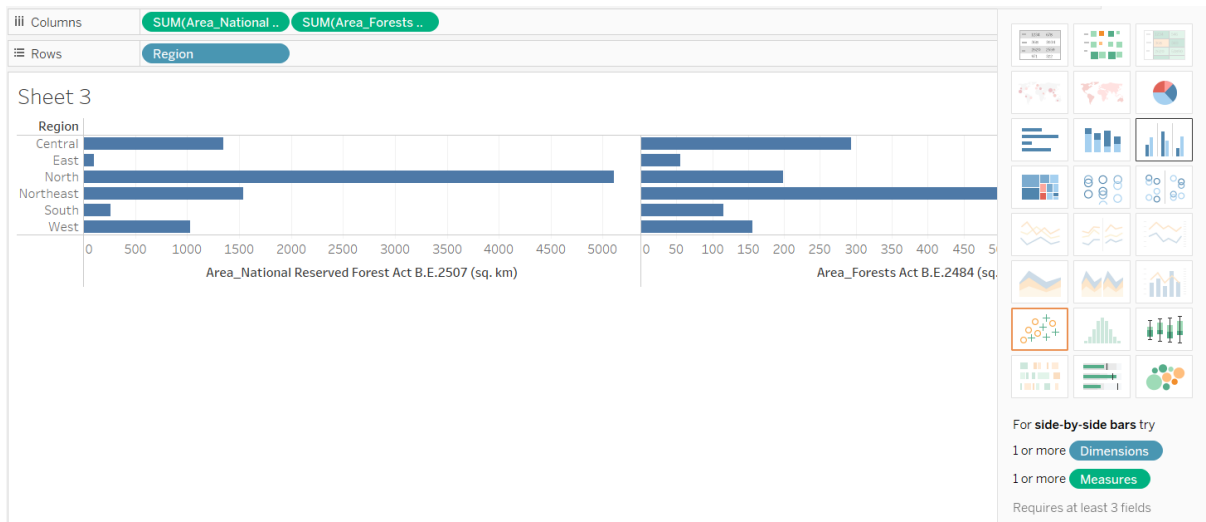
We can rename the tab to change the title of the chart.



Side-by-Side Bar Chart

Next, let's make a side-by-side bar chart, showing the area of forest by region

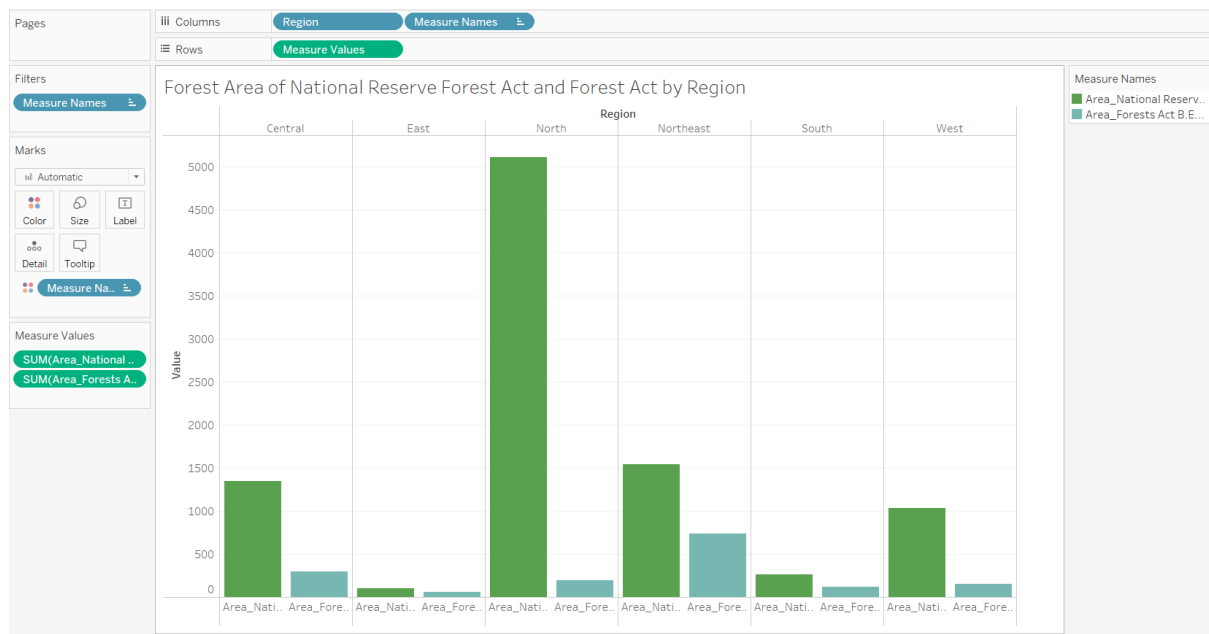
First, drag "Region" to Rows. After that, drag "Area_National Reserved Forest Act..." and "Area_Forests Act..." to Columns.



Next, click “side-by-side bar” to change chart type.



Rename the tab. And we're done with our chart.



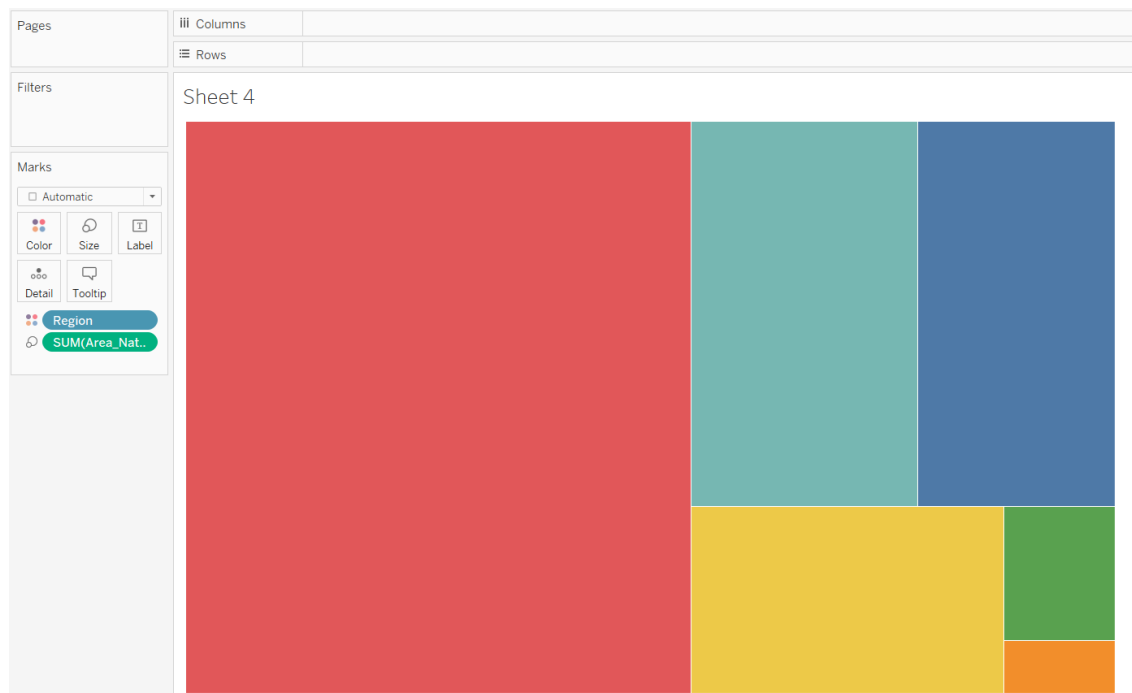
Circle Packing Chart

Now let's try a more unusual type of chart.

First, drag "Region" to Color. This is the area that is separate in each project.

Then drag "Area_National Reserved Forest Act B.E.2507 (sq. km)" to Size.

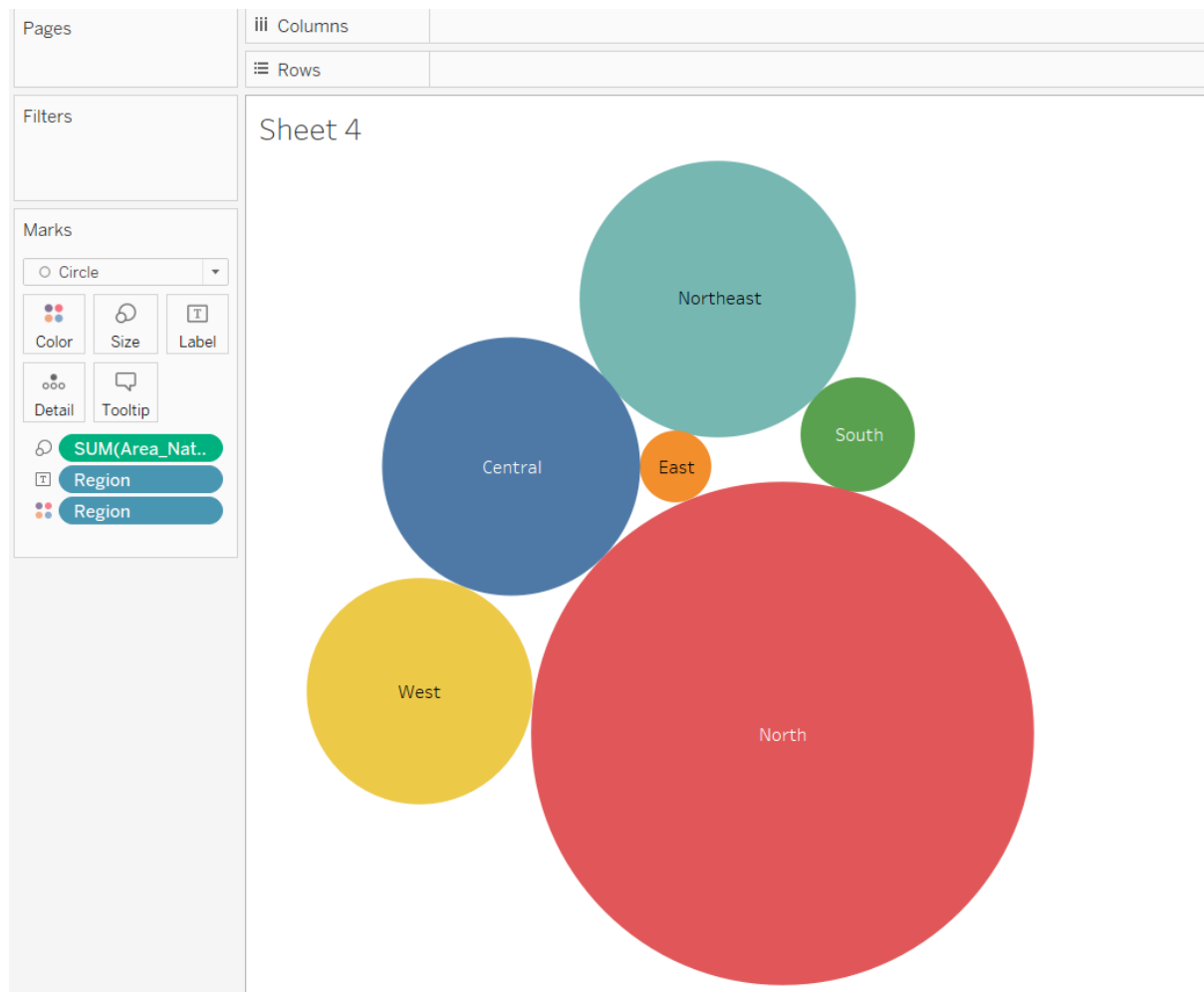
By default, you will get a treemap.



To change the chart type from a treemap to a circle packing chart, click on the Show Me tab on the top right, and select the circle packing chart.



You will see the following chart.



Edit Label

Marked: Circle

Color Size Label

Detail Tooltip

SUM(Area_Nat...)

Region

Region

Label Appearance

Text: <Region> of Thailand

Font: Tableau Book, 9pt, ...

Alignment: Automatic

Marks to Label

All Selected

Min/Max Highlighted

Options

Allow labels to overlap other marks

Edit Label

Tableau Book 9 B I U

<Region> of Thailand

Reset Preview OK Cancel Apply

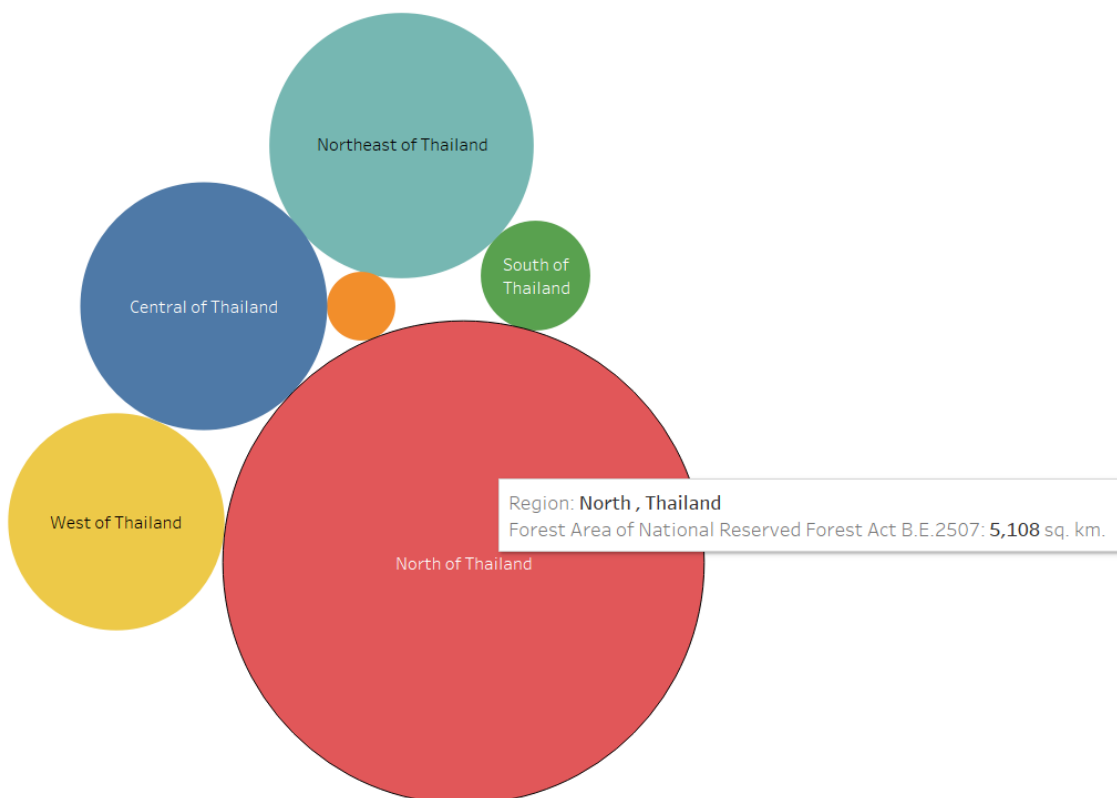
Edit Tooltip

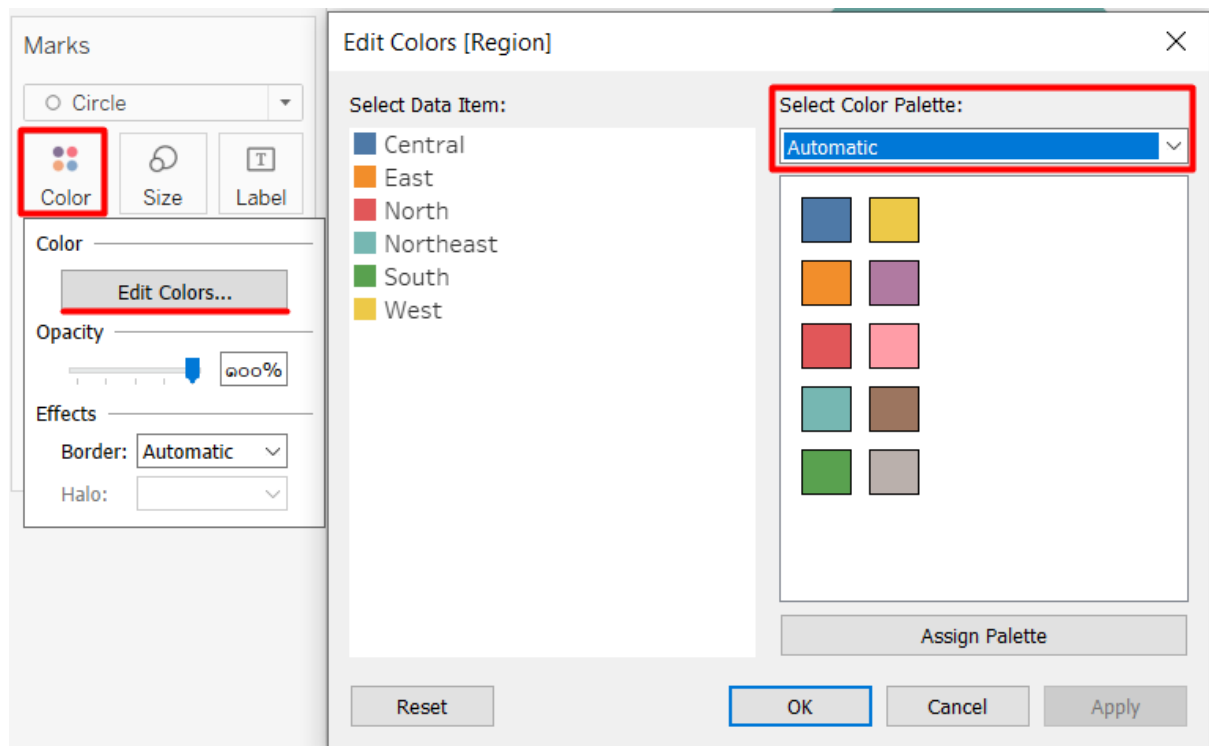
Tableau Book 10 B I U Insert X

Region: <Region>, Thailand
Forest Area of National Reserved Forest Act B.E.2507:
<SUM(Area_National Reserved Forest Act B.E.2507 (sq. km))> sq. km.

☒ Show tooltips Responsive - Show tooltips instantly
☒ Include command buttons
☒ Allow selection by category

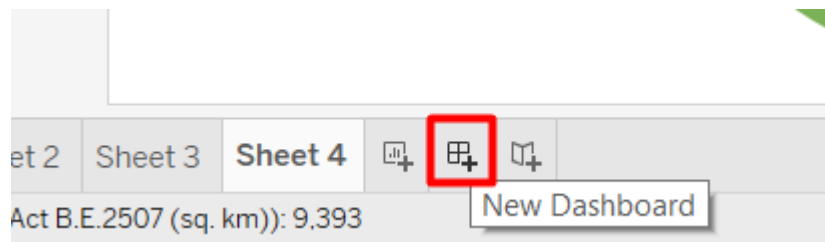
Reset Preview OK Cancel







Combining Everything into a Dashboard



Saving your Notebook

File	Data	Worksheet	Dashboard	Story
New				Ctrl+N
Open...				Ctrl+O
Open from Tableau Public...				Alt+O
Close				
Save to Tableau Public...				Ctrl+S
Save to Tableau Public As...				
Show Start Page				Ctrl+2
Paste				Ctrl+V
Manage My Profile...				
Workbook Locale				►
1 Book1				
Exit				



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Password

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[Create one now for free](#)



Processing Request

Sending data to server

Elapsed time 00:07

Cancel

⚠ Save Workbook to Tableau Public



Publishing this workbook will make it available on the Tableau Public website. Make sure it doesn't contain private or confidential information.

Workbook Title



Cancel

Save

Further Practice

Improve your dashboard's design

- Try to apply the tips that we covered in the Dashboard Design section to improve the design of your dashboard