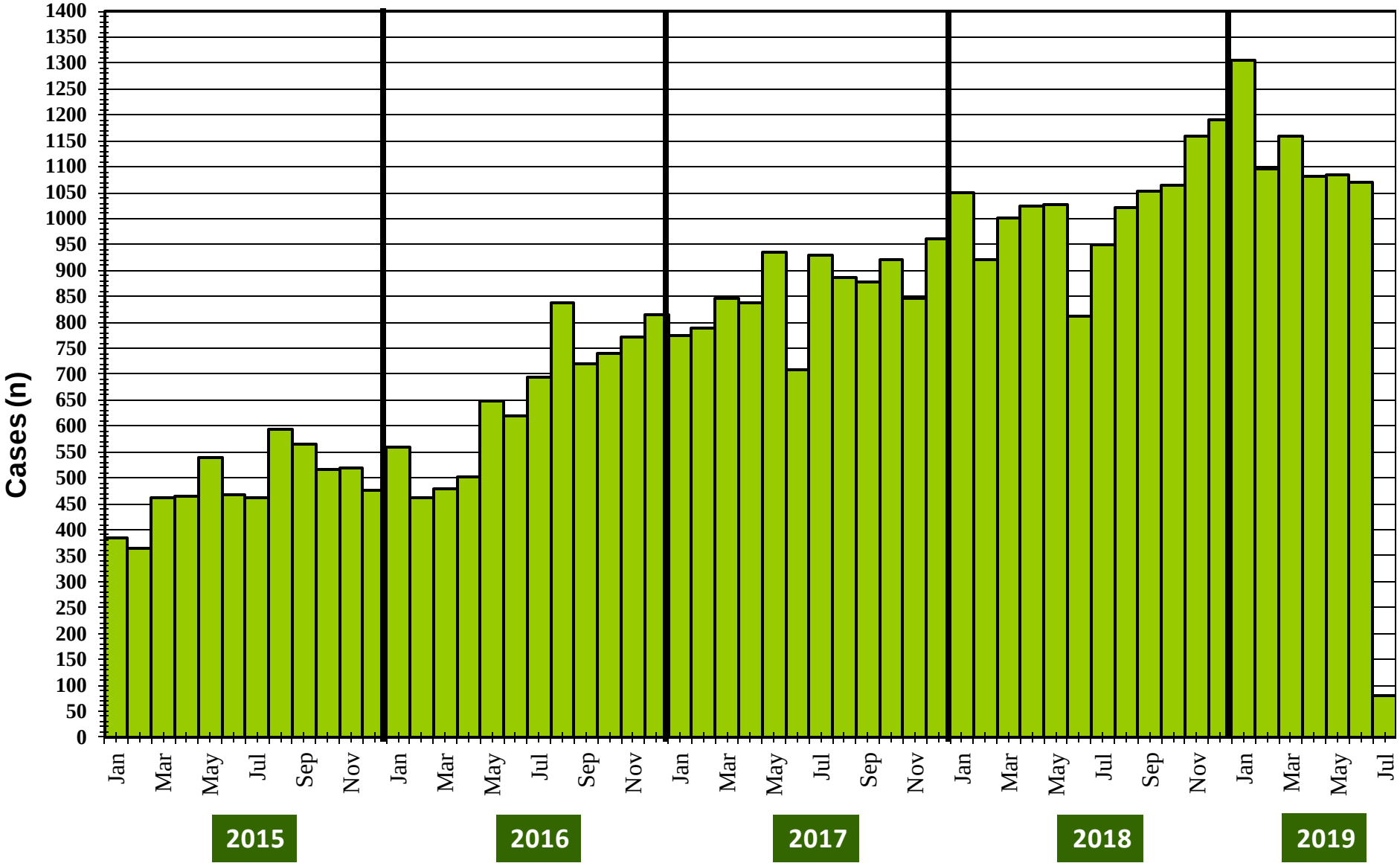
Introduction to plotting in R

Where we will get to…

Graph 1: Distribution of AFP Cases by Month, Pakistan 2015-2019*



* Afp.rec Data as of 15-07-2019

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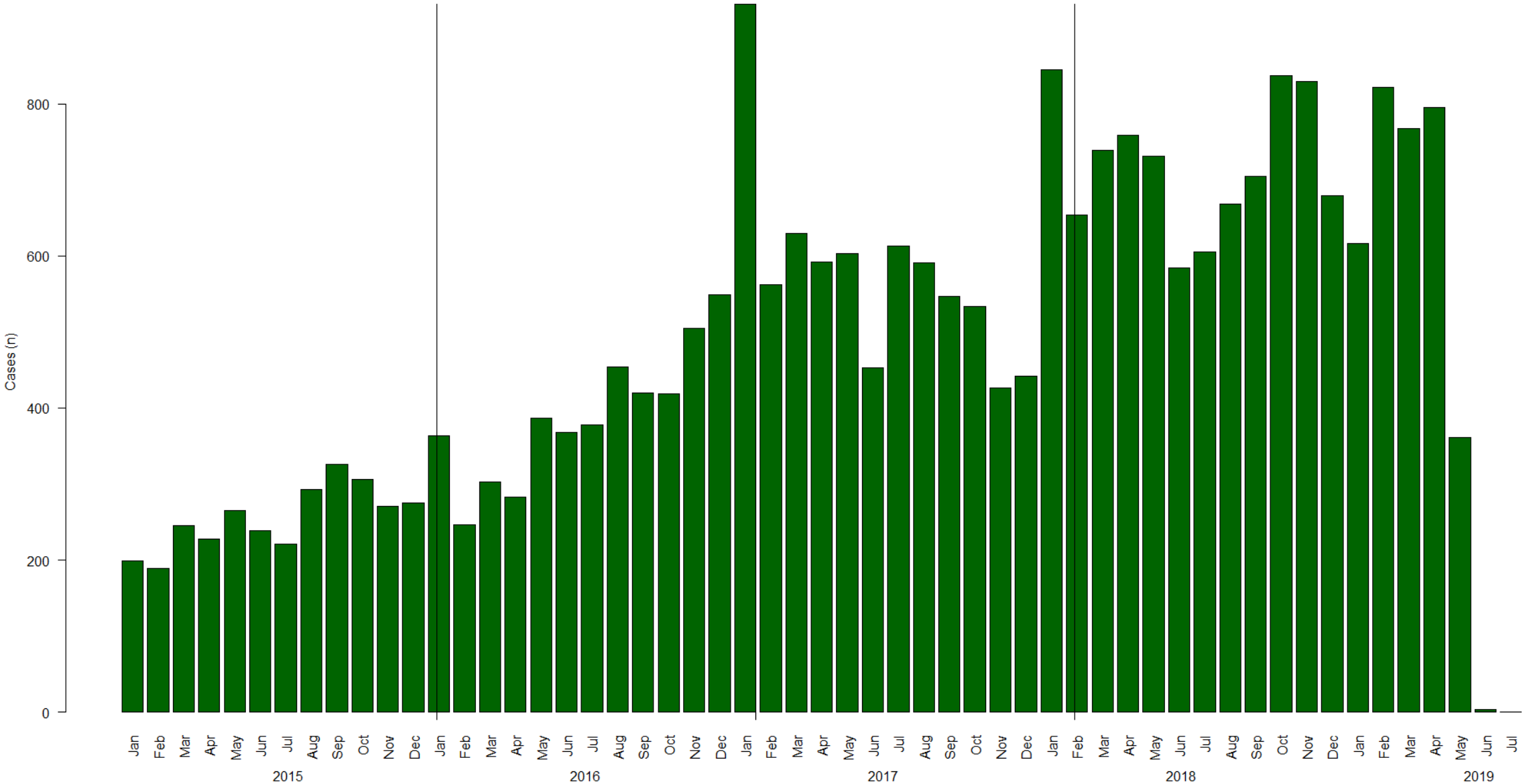

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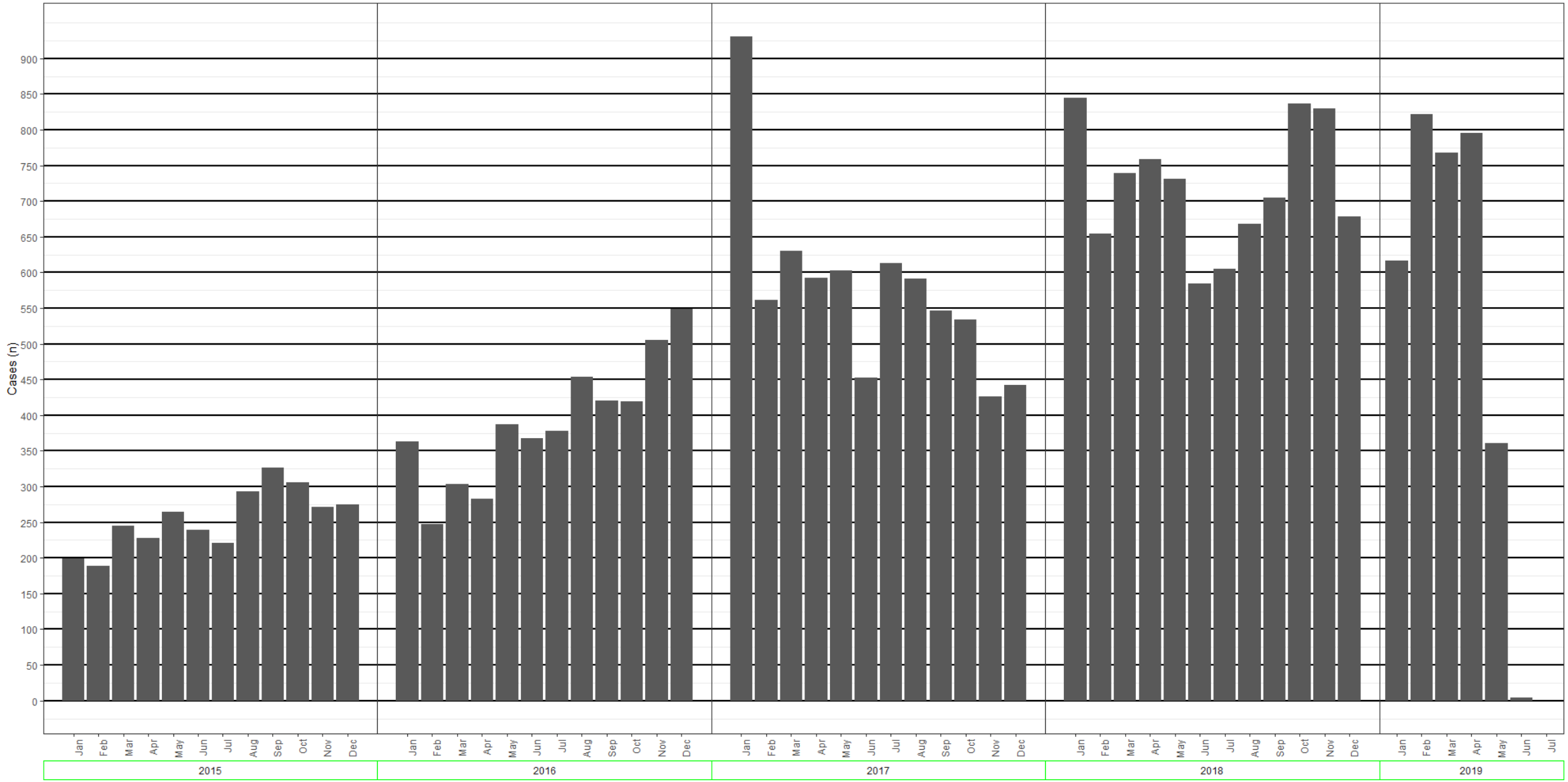

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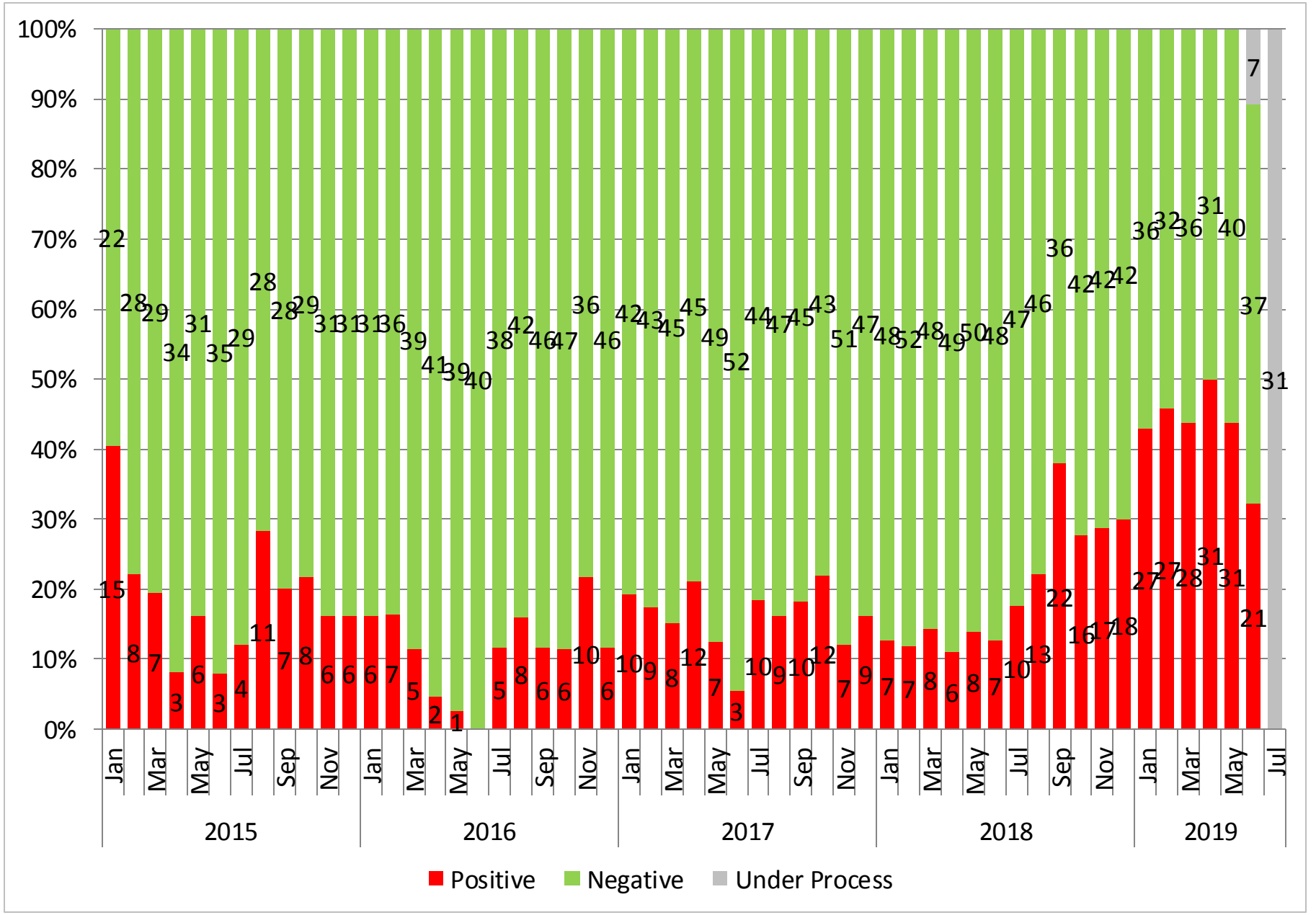
ENVIRONMENTAL SAMPLING RESULTS 2015-19*
PAKISTAN



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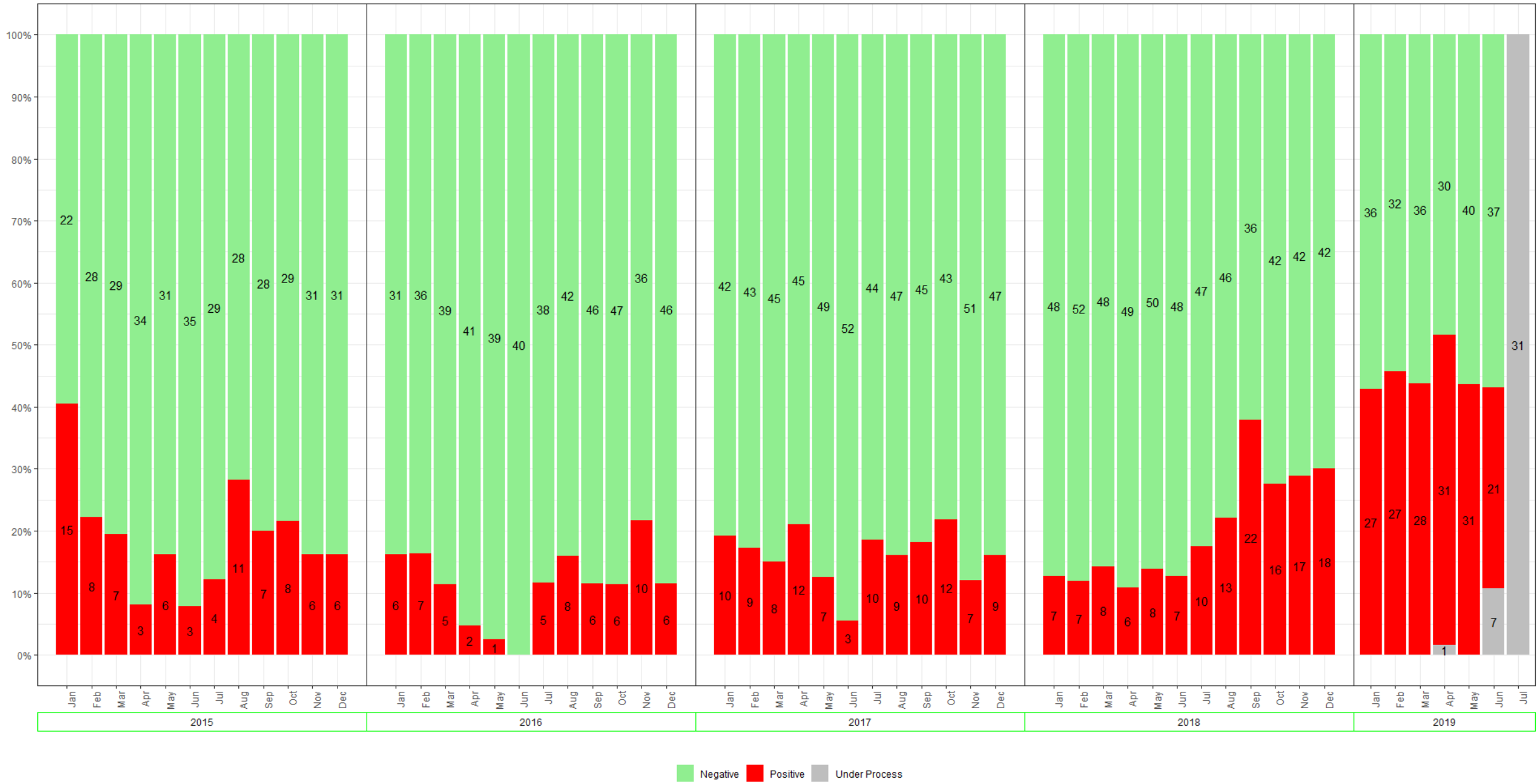
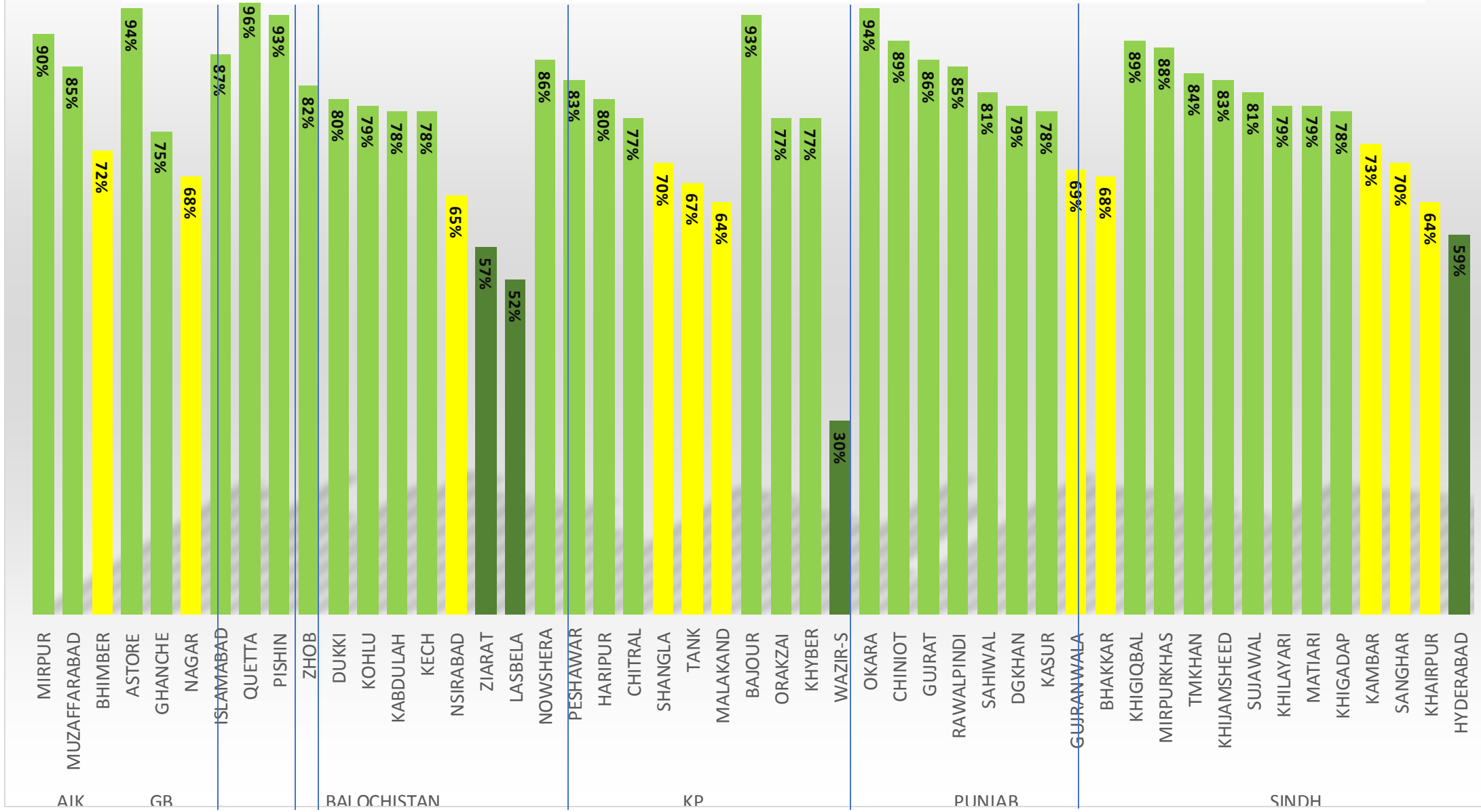


SUMMARY OF MPQA RESULTS

- Micro Plans of Tier-1 Districts from Karachi town, Quetta Block and Peshawar/Khyber are passed
- Substantial gaps identified primarily in Balochistan and pockets of KP and Sindh



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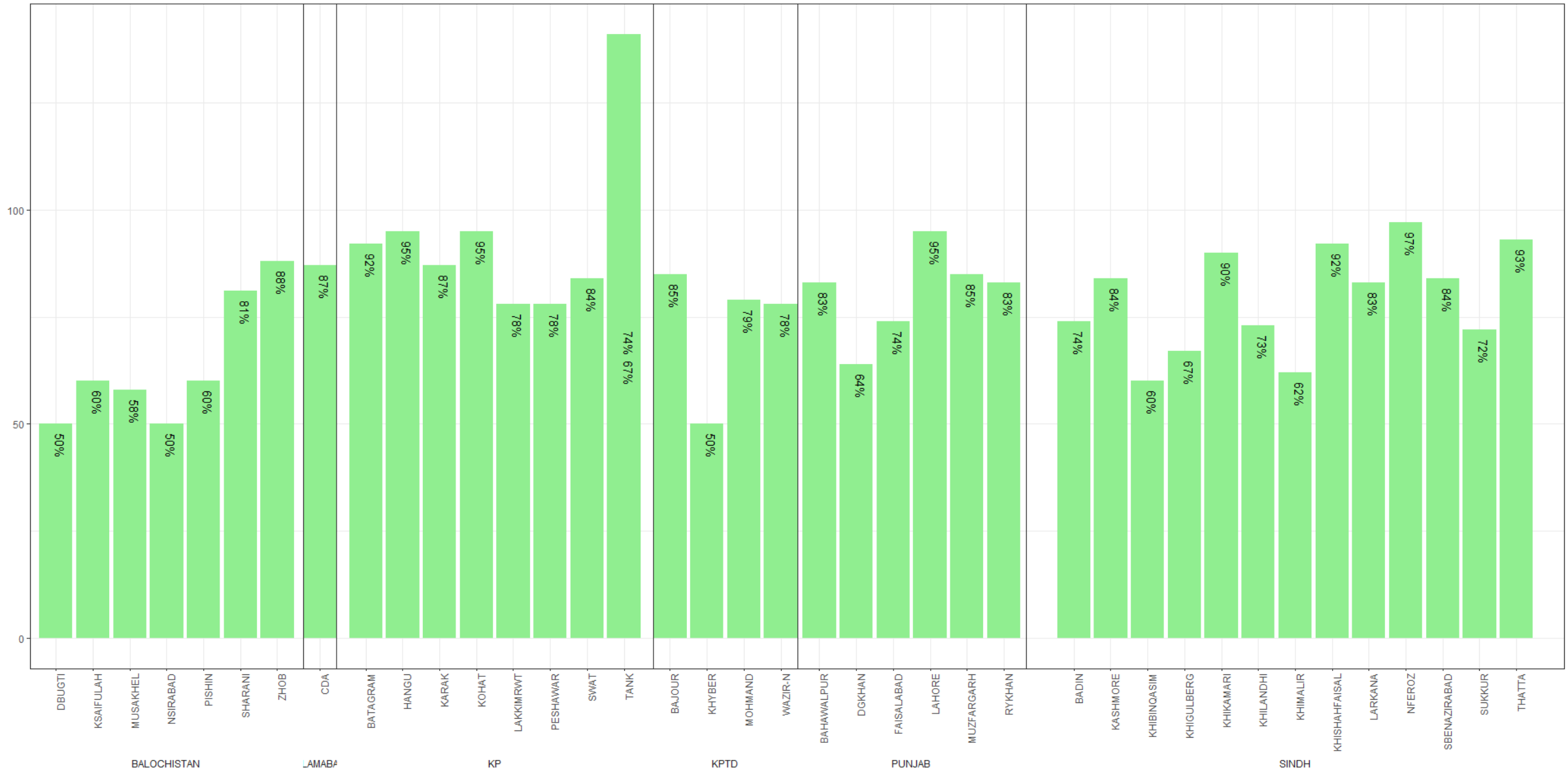

Exporting (saving) figures in file

- There are two ways in which figures and plots can be output to a file (rather than simply displaying on screen).

1. (easiest) is to export directly from the RStudio ‘Plots’ panel, by clicking on Export when the image is plotted. This will give you the option of png or pdf and selecting the directory to which you wish to save it to. It will also give you options to dictate the size and resolution of the output image.

2. Use R functions and have the write to file hard-coded in to your script.

This would allow you to run the script from start to finish and automate the process (not requiring human point-and-click actions to save). In R's terminology, output is directed to a particular output device and that dictates the output format that will be produced. A device must be created or "opened" in order to receive graphical output and, for devices that create a file on disk, the device must also be closed in order to complete the output.

- 1. initialize a plot using a function which specifies the graphical format you intend on creating i.e.pdf(), png(), tiff() etc. Within the function you will need to specify a name for your image, and the with and height (optional). This will open up the device that you wish to write to:

```
pdf("figures/scatterplot.pdf")
```

- If you wish to modify the size and resolution of the image you will need to add in the appropriate parameters as arguments to the function when you initialize. Then we plot the image to the device, using the ggplot scatterplot that we just created.

- Eg plot(x,y)

- Finally, close the “device”, or file, using the dev.off() function. There are also bmp, tiff, and jpeg functions, though the jpeg function has proven less stable than the others.

```
dev.off()
```