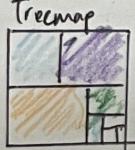


Filter



Show plantation type distribution.
Some percentage are similar. Does not show obvious differences across low value plantations.

Should consider other visualisation

Questions

1. Will the streamgraph too overwhelming for user to see?
2. Does multiline series chart show 10 countries of forest loss will be complicated and not intuitive to visualise data?

Categorize

Multiseries chart

- show how ASEAN countries forest loss condition

Symbol map

- easier to compare forest loss across Malaysia

Choropleth map

- show ASEAN countries forest coverage clearly

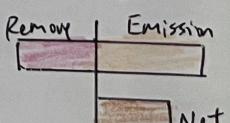
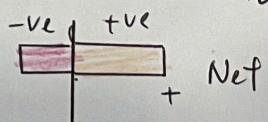
Ponut chart

- analyse how Malaysia's forest is made of

Diverging chart

- clearly see carbon dioxide emission as result

Combine & Refine



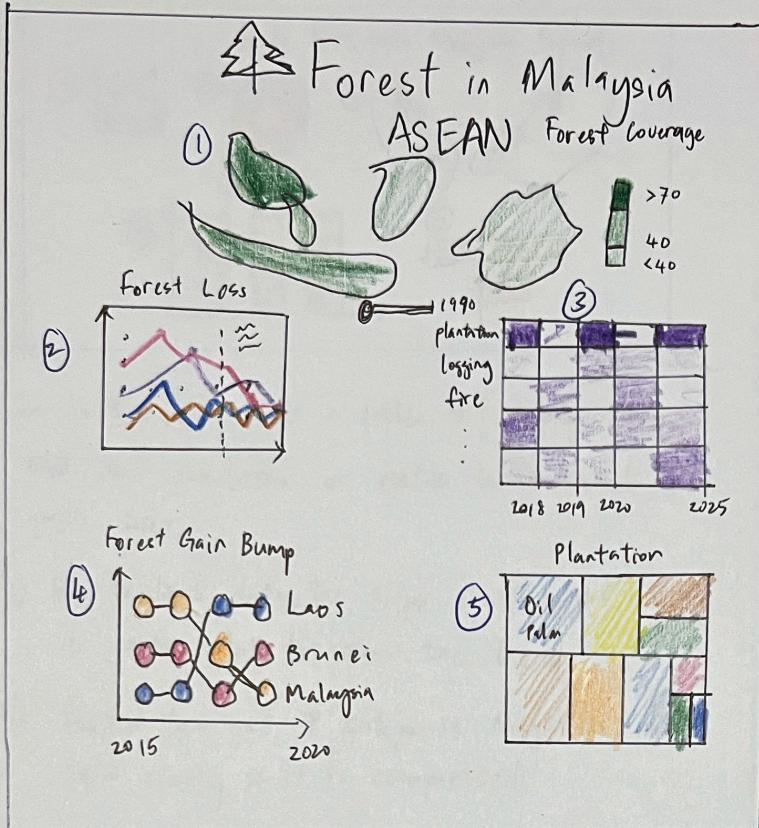
Calculate the net emission of carbon dioxide will show clear result

Author: Ang Qiao Xin

Date : 8/10/2025

Sheet : 1

LAYOUT

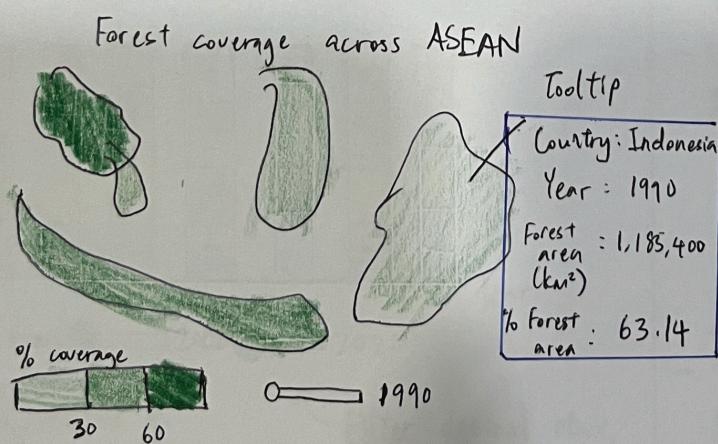


Title: Forest in Malaysia - changes
Author: Ang Qiao Xin
Date: 8/10/2025
Sheet: 2
Task: Design portrait poster

OPERATION

- User slide filter on choropleth map ① to see specific year or how world coverage change.
- Clicking a line or section in ④, ⑤ the selected line will be highlighted, making other part greyed.

FOCUS



Hover over to see exact number of forest in (ha).
Give information about unit hectares. 1 ha = 10,000 m².
Color chosen friendly to visual impairment people.

DISCUSSION

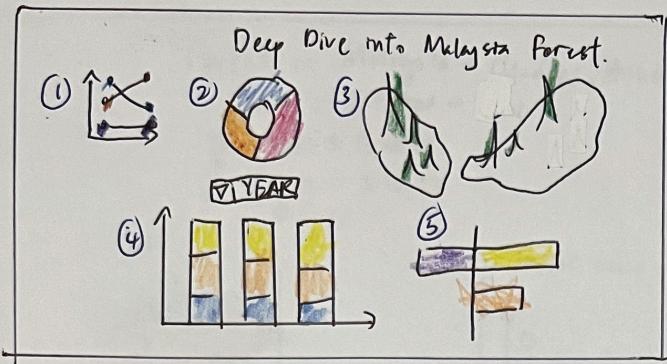
Advantages

- Interactive to keep user engage.
- can easily see rank between ASEAN in bump.
- User understand overview of forest info.

Disadvantages

- Hard to show factor across year (20) will be too long for user to scroll horizontally.
- 7x20 is cognitive tiring.

AYOUT



In bottom row, it is a little bit empty. Can add text annotation or extra information to guide user.

- ① Due to lack data, the slope chart might not as meaningful to show the trend.
- ④ Factor loss got 7 categories. Might not able show clearly if it is compressed.

Title: Forest in Malaysia

Author: Ang Qiao Xin

Date: 8/10/2025

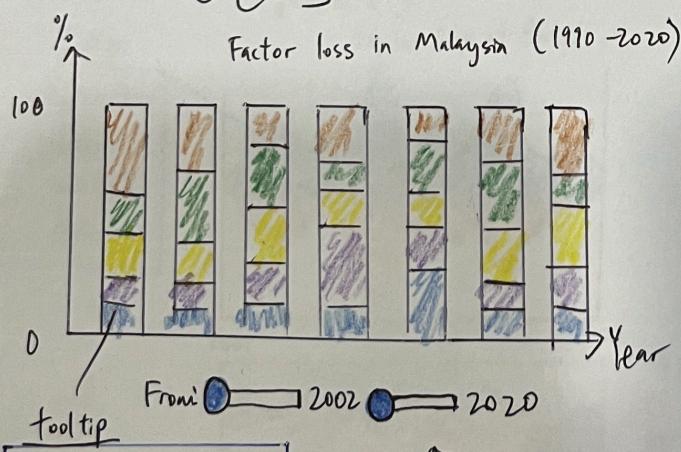
Sheet: 3

Task: Design landscape poster

OPERATION

- When user hover around all chart, it will show tooltip to show detailed information about the data.
- User can zoom into the map to see clearly.
- When pressed the line chart, other part will be greyed out for figure ground.

FOCUS



Factor : Agriculture
Year : 2012
Loss(ha) : 475,617
Share : 28%

Filter desired start, end year for more detailed and simpler view.

DISCUSSION

Adv

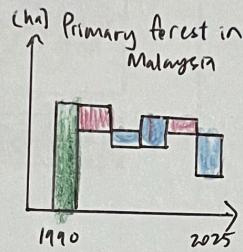
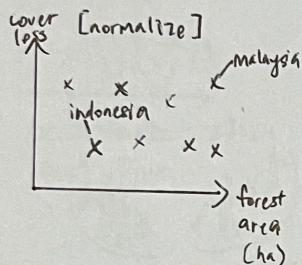
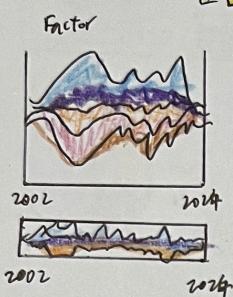
- 100% stacked bar chart show good job to show factor cause forest loss across year.

Disadvantage

- Having 20 year + data for factor forest loss, it might be too long and confusing for user to scroll through horizontally.

AYOUT

Forest in Malaysia - Changes, drivers.
1 person \approx 287 tree in forest.



Title: Forest in Malaysia

Author: Ang Qiao Xin

Date: 8/10/2025

Sheet: 4

Task: Refine portrait poster

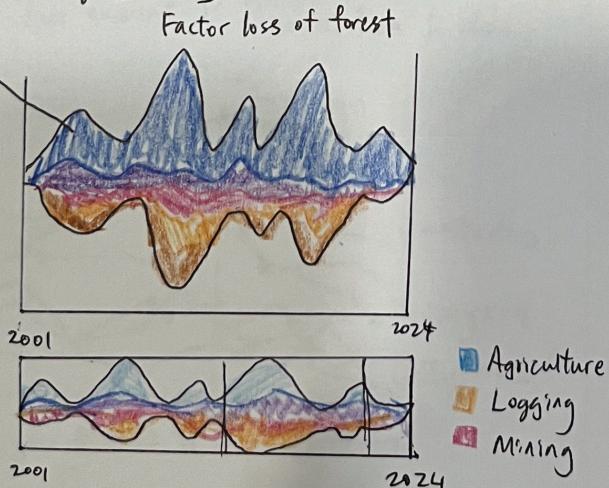
OPERATION

- User brush through in streamgraph to see detailed view across factor cause loss years.
- Hover to lollipop chart to see more info like actual number of gain and % contribute to world.

FOCUS

Tot tip

Factor: Agriculture
Year: 2010
Loss(ha): 350488
Share: 81%



Select brush below streamgraph to get more focus on demand about user interested area.

Easily see trend of loss across time and which factor to tackle.

DISCUSSION

Advantage

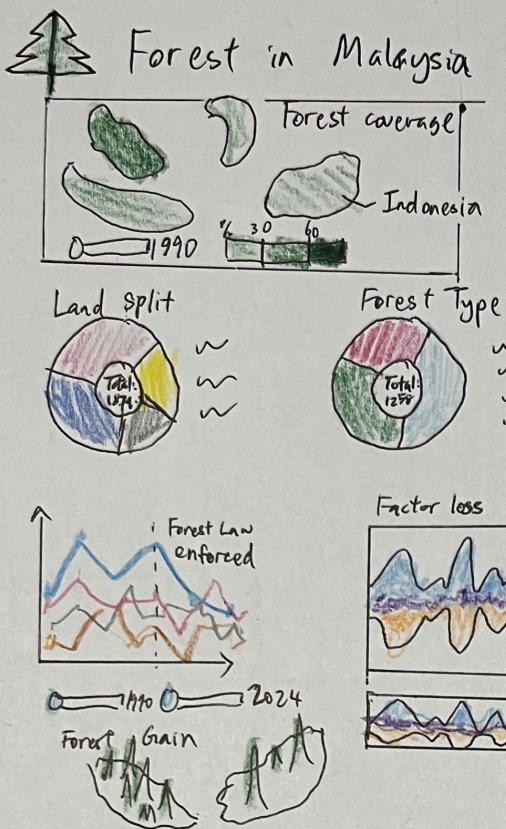
Details on demand using brush reduce cognitive load of user.

Follow Ben Shneiderman's mantra: Overview first, zoom and filter, then details on demand.

Disadvantage

Multiple country might clump together due to similar data. User can't differentiate them as there is overlap.

AYOUT



Title: Forest in Malaysia

Author: Ang Qiao Xin

Date: 8/10/2025

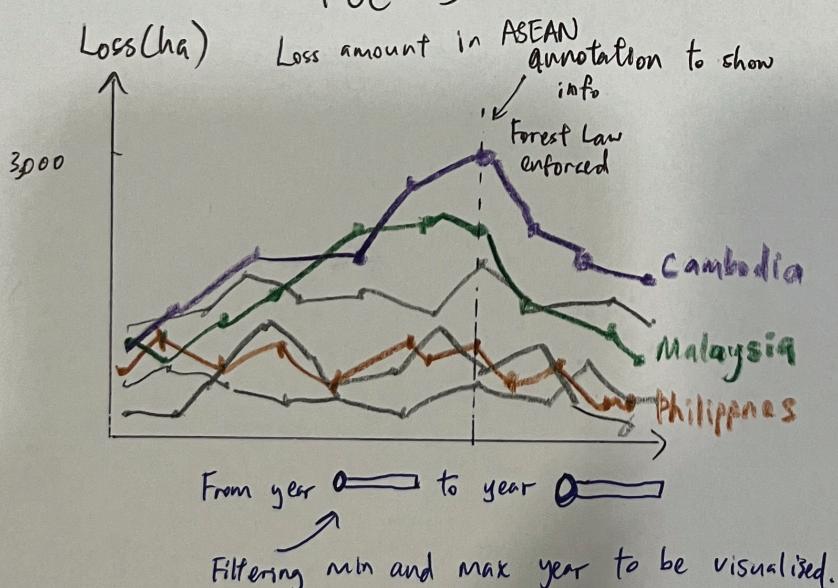
Sheet: 5

Task: Finalize realizing portrait poster

OPERATION

- Streamgraph can brush through to see detail on demand year.
- Malaysia map got option to zoom in using filter to see detailed part of Malaysia.
- Filter start, end year for multiseries line chart for more focus view.

FOCUS



- Figure ground to emphasize important countries to be compared.

DETAIL

Dependencies: Vega Lite, Github, Jupyter notebook to clean.

Estimate Time & Effort:

At least 7 days for production.
Use 2 day to receive feedbacks.

- ↳ each day build 1 fdm
- ↳ 1 day collect feedback
- ↳ 1 day improve based on suggestions.

Special requirement:

Best visualize on laptop for bigger screen and hovering mouse function for more details.