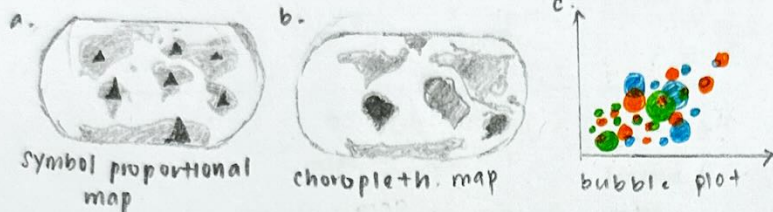
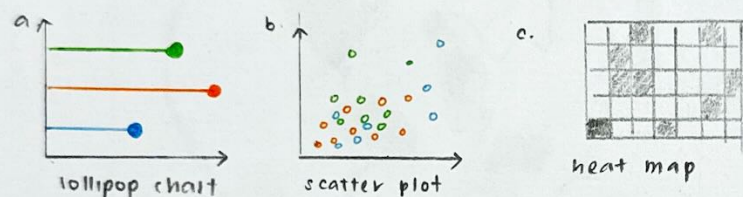


## IDEAS //

### 1. Geographic & Economic Overview



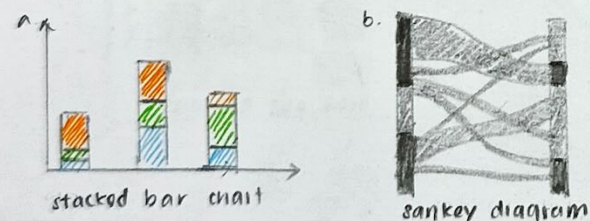
### 2. Climate & Environmental Impact



### 3. Agricultural Productivity

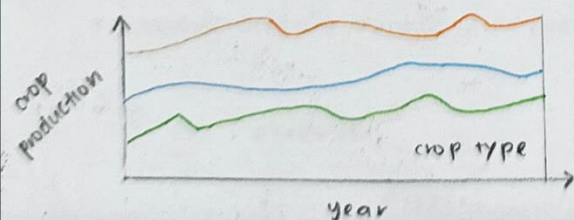


### 4. Resource Use

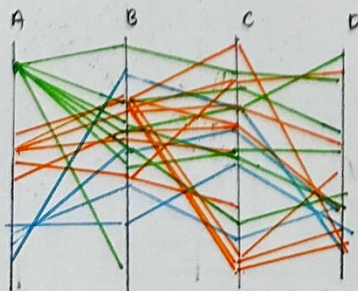


## COMBINE & REFINE //

#### 1. combine 3a & 3b into stacked area chart



#### 2. transform 4b into parallel coordinate plot



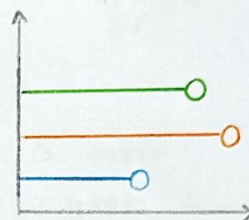
## FILTER //

### 1a. Symbol Proportional Map



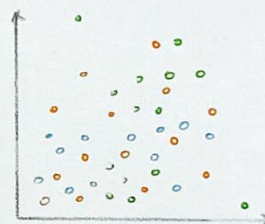
- easy to cause clutter
- might be hard to perceive size of symbol

### 2a. lollipop chart



- take up a lot of space if a country used to compare on the same field.
- 10 countries in dataset

### 2b. Scatter Plot



- no correlation between attribute
- ⇒ MEANINGLESS ??

## CATEGORIZE //

- ① Global & Economic Agricultural Contribution Overview
- ② Climate & Environmental Impact on Agriculture
- ③ Agricultural Production
- ④ Resource Use on Agriculture

## QUESTIONS //

- ? Are these visualisation able to be generated using Vegalite
- ? Is there any deceptive information
- ? what are the storytelling genre applicable
- ? Is this category sufficient to present a good visualisation for AGRICULTURE
- ? Is these chart complex



Author : Joey Liow

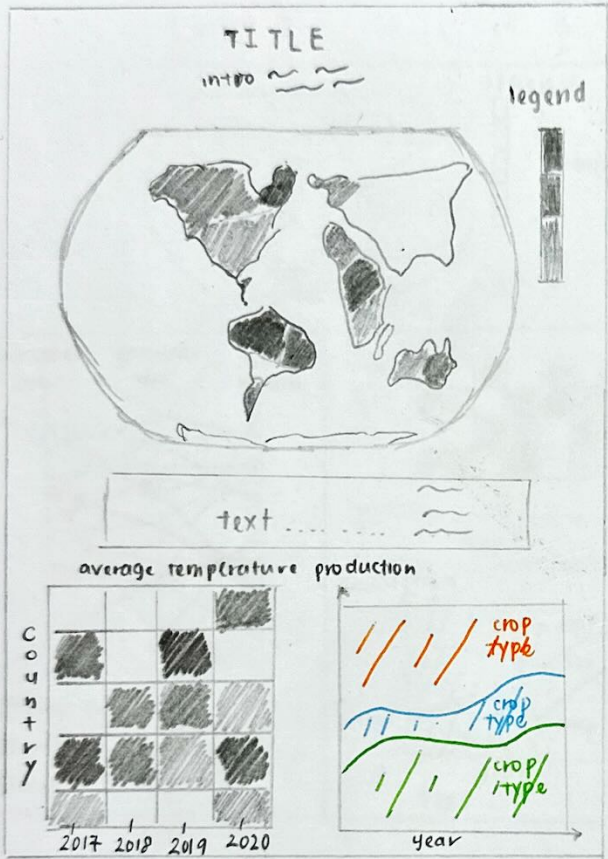
Title :

Task :

Date : 8/10/2024

2

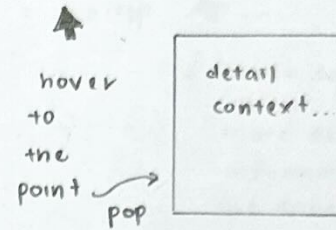
## LAYOUT //



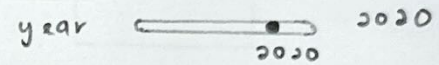
## OPERATION //

→ filter

1. tooltip



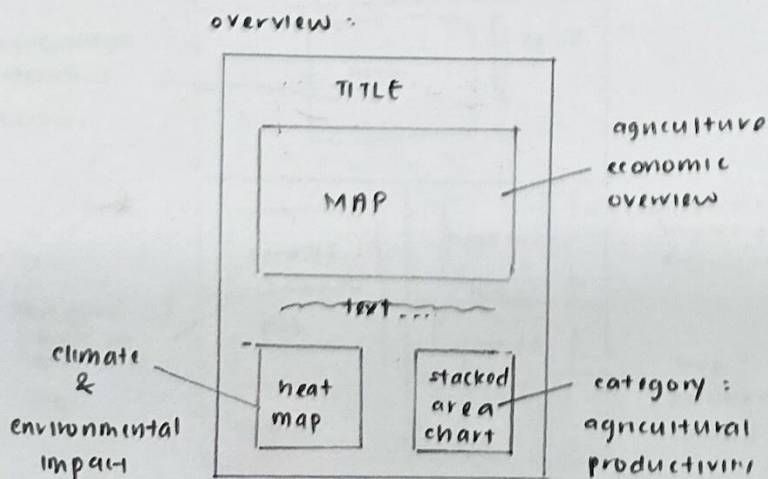
2. slider



→ reveal data before 2020

## FOCUS //

- main focus is on the (equal earth projection) of choropleth map to show agriculture economic impact across different countries



## DISCUSSION //

✓ Advantages :

- visual hierarchy on map
- balance layout
- clarity & simplicity

✗ Disadvantages :

- might be lacking of information , only focusing on :
  1. overview
  2. climate impact
  3. agricultural productivity



Author: Joey Liow

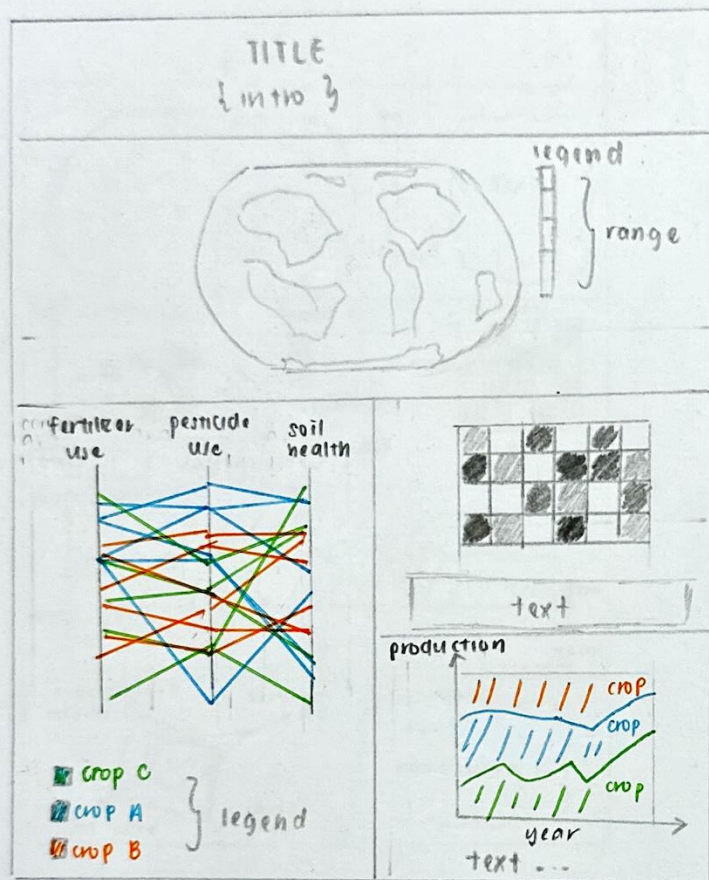
Title:

Task:

Date: 8/10/2024

3

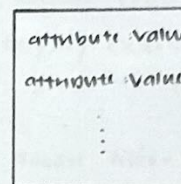
## LAYOUT //



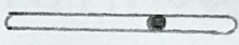
## OPERATION //

1. tooltip

↓ hover to show more detail information of the data point



2. slider

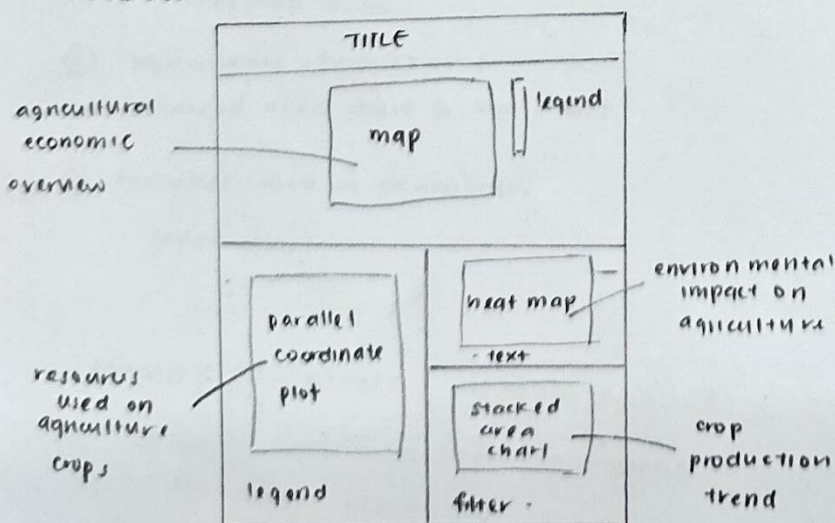
year:  2024

↓  
filter chart to only show data before 2024

## FOCUS //

• no main focus ⇒ all equally important

• overview:



## DISCUSSION //



Advantages:

contain more information with chart



Disadvantages:

- layout unbalanced
- lack of interaction
- might be overwhelming



Author: Joey Liow

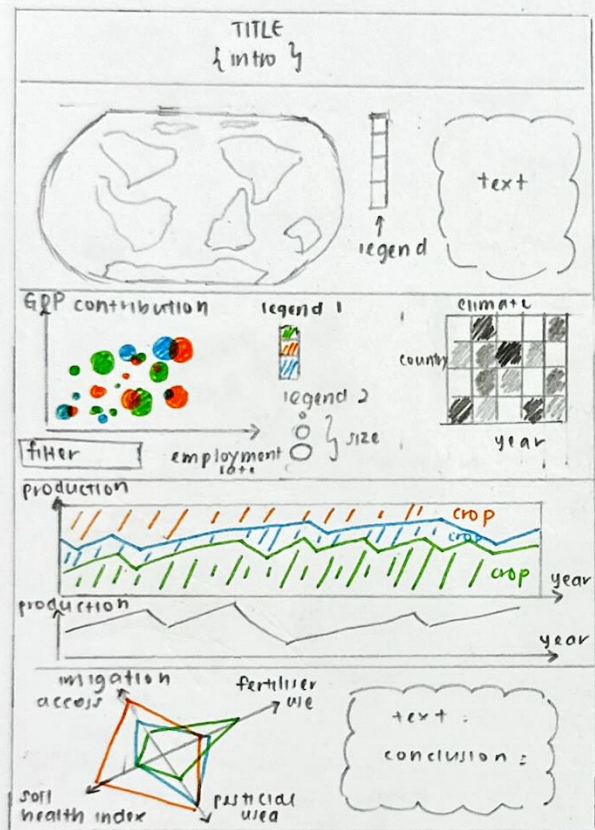
Title:

Task:

Date: 8/10/2024

4

## LAYOUT



## OPERATION

1. tooltip: ↑

↓ hover to show more details on data point

attribute 1: value  
attribute 2: value

2. slider: ————— 2020  
adjust year

→ display chart based on value prior to selection

3. drop down filter: [shows all ▼]

→ to filter year / category like country // region

→ display chart to based on filter

4. brushing effect: —————

→ filter on line chart to apply changes to stacked area chart

## FOCUS

Focus on 4 categories:

- ① Agricultural Global Economic Impact:  
map & bubble plot
- ② Country climate impact on Agriculture:  
heatmap
- ③ Agriculture Productivity:  
stacked area chart & line chart
- ④ Resources used on agriculture:  
radar chart

EQUALLY IMPORTANT !, NO MAIN FOCUS !

⇒ might have to reorder the sequence for better readability

## DISCUSSION



Advantages:

- a lot of user interactivity to enhance experienced
- more information
- balanced layout

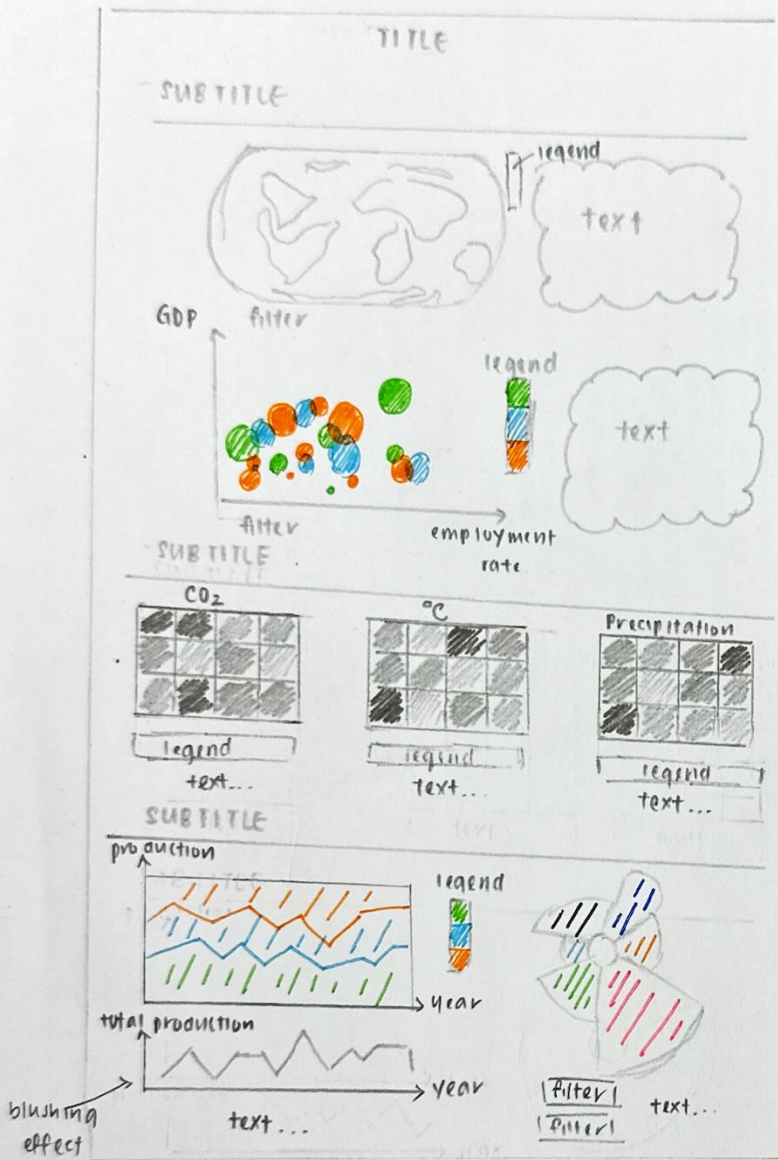


Disadvantages:

- might encounter information overload



## LAYOUT



## OPERATION

1. Tooltip : hover to show more details 

attr1: val 1  
attr2: val 2
2. Selection on Legend 

A

B

C

 : click to filter based on selected category
3. drop down filter 

show all ▼

 : click to filter based on selected value
4. slider filter : 

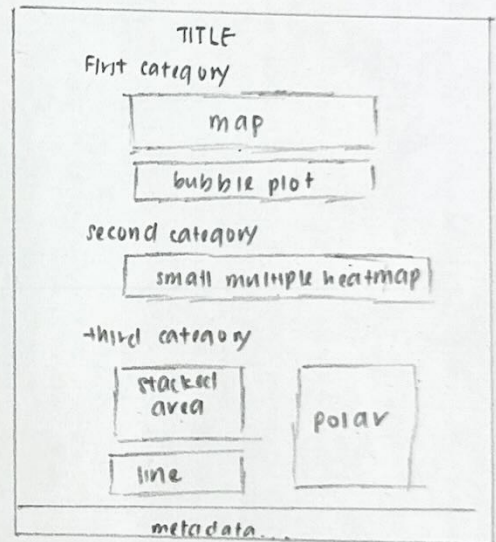
2021

 : drag to filter based on max value "2021"
5. brushing effect : filter on line chart to apply filter across stacked area chart
6. selection on heatmap : click to compare clearly in that row

## FOCUS

- no main chart focus, all graphs equally important
- category included:
  1. geographic & economic overview
  2. climate & environmental impact
  3. agricultural efficiency
- storytelling:
  - emphasis on consistent color across attributes, layout (white space, slight line, typography) principles to create a clear hierarchy

## OVERVIEW:



## DETAIL

Dependencies:

- Excel Workbook & Excel worksheet & Vegalite & HTML & CSS & Pandas & Github

Estimated Time taken to Complete:

1 Week