---

title: "Varun's Dashboard"

output:

flexdashboard::flex\_dashboard:

orientation: rows

vertical\_layout: fill

social: ["twitter", "facebook", "menu"]

source\_code: embed

---

```{r setup, include=FALSE}

library(flexdashboard)

library(knitr)

library(DT)

library(rpivotTable)

library(ggplot2)

library(plotly)

library(dplyr)

library(openintro)

library(highcharter)

library(ggvis)

library(tidyverse)

```

```{r}

df <- read.csv("honeyproduction.csv")

```

Interactive Data Visualization

========================================

Row

----------------------------------------

### Honey Production

```{r}

valueBox(paste("Honey Produciton Analysis"),

color = "orange")

```

### Average annual honey production

```{r}

valueBox(paste("1.47 million Pounds"), icon = "fa-user",color = "info")

```

```{r}

mycolors <- c("blue" , '#FFC125' , "darkgreen" , "darkorange")

```

### \*\*\*Average Cost\*\*\*

```{r}

gauge(round(mean(df$priceperlb),

digits = 3),

min = 0,

max = 4.20,

gaugeSectors(success = c(0, 1.20),

warning = c(1.20, 2.40),

danger = c(2.40, 4.20),

colors = c("green", "yellow", "red")))

```

### Total Production in North Dakota 2012

```{r}

df\_ND\_2012 = filter(df, df$state == "ND" , df$year == 2012)

valueBox(paste('$',df\_ND\_2012$totalprod/10000000,'M'),

icon = "fa-map",color = "blue")

```

### Total Production in South Dakota 2012

```{r}

df\_SD\_2012 = filter(df, df$state == "SD" , df$year == 2012)

valueBox(paste('$',df\_SD\_2012$totalprod/10000000,'M'),

icon = "fa-map",color = "blue")

```

### Total Production in California 2012

```{r}

df\_CA\_2012 = filter(df, df$state == "CA" , df$year == 2012)

valueBox(paste('$',df\_CA\_2012$totalprod/10000000,'M'),

icon = "fa-map",color = "blue")

```

Row

-----------------------------------------------------------------------

### Honey Production Industry through years

```{r}

allPlots <- df %>%

group\_by(year) %>%

mutate(

colNum.year = mean(numcol),

colYield.year = mean(yieldpercol),

totalprod.year = mean(totalprod),

totalStocks.year = mean(stocks),

priceperlb.year = mean(priceperlb),

totalProdValue.year = mean(prodvalue)) %>%

select(contains("year")) %>%

gather(key = "type", value = "value", -year)

label <- c(

"colNum.year" = "No. of Honey colonies",

"priceperlb.year" = "Average price per pound",

"totalProdValue.year" = "Total production",

"totalStocks.year" = "Total Stocks",

"totalprod.year" = "Total production (pounds)",

"colYield.year" = "Honey yield per colony"

)

plot1 <- allPlots %>%

ggplot(aes(x = year, y = value, group = type, color = type)) +

geom\_line(show.legend = F) +

facet\_wrap(~type, scales = "free\_y", labeller = as\_labeller(label), shrink = TRUE) +

geom\_vline(xintercept = 2006, color = "red",

linetype = "dotted", size = 1.3) +

labs(y = "")

plot1%>% ggplotly()

```

Row

---------------------------------

### State wise production

```{r}

state.production <- df %>%

ggplot(aes(x = year, y = totalprod/1000000, color = state)) +

geom\_smooth(show.legend = T, se = FALSE) +

labs(title = "Honey Production from 1998 to 2012 by each state") +

ylab("Total Production in Millions")+

xlab("Years ")

state.production %>% ggplotly()

```

### Stock by State

```{r}

p3 <- state.production <- df %>%

ggplot(aes(x = year, y = stocks, color = state)) +

geom\_smooth(show.legend = T, se = FALSE) +

labs(title = "Honey Stock from 1998 to 2012 by each state") +

ylab("Stocks of Honey per State")+

xlab("Years ")

state.production %>% ggplotly()

p3 %>% ggplotly()

```

Maps

=========================================

### Map

```{r}

map1 <- df %>%

group\_by(state) %>%

summarize(total = mean(prodvalue))

map1$state <- abbr2state(map1$state)

highchart() %>%

hc\_title(text = "Honey Production in the USA") %>%

hc\_subtitle(text = "Source: honeyproduction.csv") %>%

hc\_add\_series\_map(usgeojson, map1,

name = "state",

value = "total",

joinBy = c("woename", "state")) %>%

hc\_mapNavigation(enabled = T)

```

### Map

```{r}

map1 <- df %>%

group\_by(state) %>%

summarize(total = mean(prodvalue))

map1$state <- abbr2state(map1$state)

highchart() %>%

hc\_title(text = "Honey Production in the USA") %>%

hc\_subtitle(text = "Source: honeyproduction.csv") %>%

hc\_add\_series\_map(usgeojson, map1,

name = "state",

value = "total",

joinBy = c("woename", "state")) %>%

hc\_mapNavigation(enabled = T)

```