Wheat Yields FAO

Graphs for wheat yields

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2019-10-04

```
library(agData) # devtools::install_github("derekmichaelwright/agData")
```

```
# Prep data
xx <- agData_FAO_Crops %>%
  filter(Crop == "Wheat", Measurement == "Yield",
         Area %in% agData_FAO_Country_Table$SubRegion) %>%
  left_join(agData_FAO_Country_Table, by = c("Area"="SubRegion"))
# Plot
ggplot(xx, aes(x = Year, y = Value)) +
  geom_smooth(aes(color = Region, group = Area), method = "loess", se = F) +
  scale_color_manual(values = agData_Colors) + theme_agData() +
  labs(title = "A) SubRegions", y = "Tonnes / Hectare", x = NULL)
```

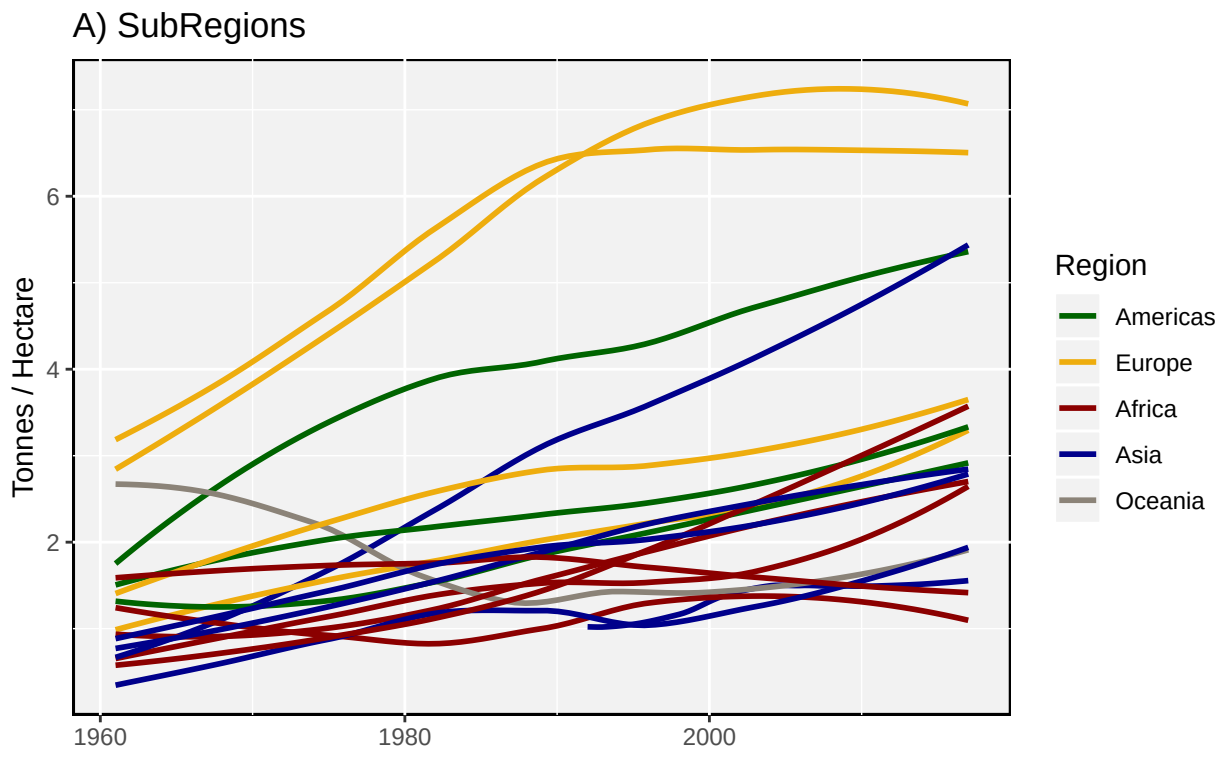

Figure 1: Wheat yields.

```
# Prep data
xx <- agData_FAO_Crops %>%
  filter(Crop == "Wheat", Measurement == "Yield",
         Area %in% agData_FAO_Country_Table$Country) %>%
```

```
  left_join(agData_FAO_Country_Table, by = c("Area"="Country"))
x1 <- xx %>% filter(Region == "Americas")
x2 <- xx %>% filter(Region == "Europe")
x3 <- xx %>% filter(Region == "Africa")
x4 <- xx %>% filter(Region %in% c("Asia", "Oceania"))
# Create plot function
my_ggplot <- function(x){
  ggplot(x, aes(x = Year, y = Value, color = SubRegion) ) +
    geom_line() +
  facet_wrap(Area~., ncol = 6) +
  theme_agData() +
  theme(legend.position = "none",
        axis.text.x = element_text(angle = 90, vjust = 0.5),
        plot.caption = element_text(vjust = 1)) +
  scale_color_manual(values = agData_Colors) +
  scale_x_continuous(breaks = seq(1965, 2015, by = 10), minor_breaks = NULL) +
  scale_y_continuous(breaks = c(2, 4, 6, 8, 10)) +
  coord_cartesian(ylim = c(0,11)) +
  labs(caption = "\xa9 www.dblogr.com/  |  Data: www.fao.org/faostat/",
       y = "Tonnes / Hectare", x = NULL)
}
# Plot
my_ggplot(x1) + labs(title = "Wheat Yields - Americas")
```

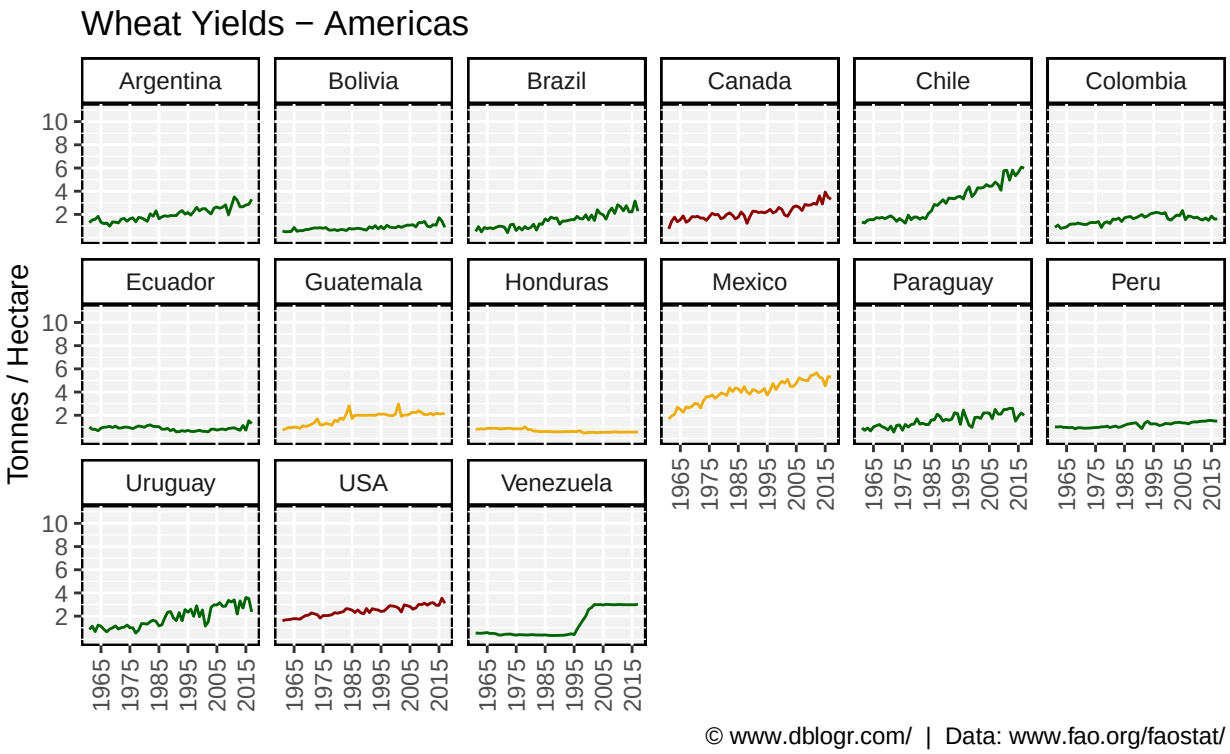

Figure 2: Wheat yields.

```
# Plot
my_ggplot(x2) + labs(title = "Wheat Yields - Europe")
```

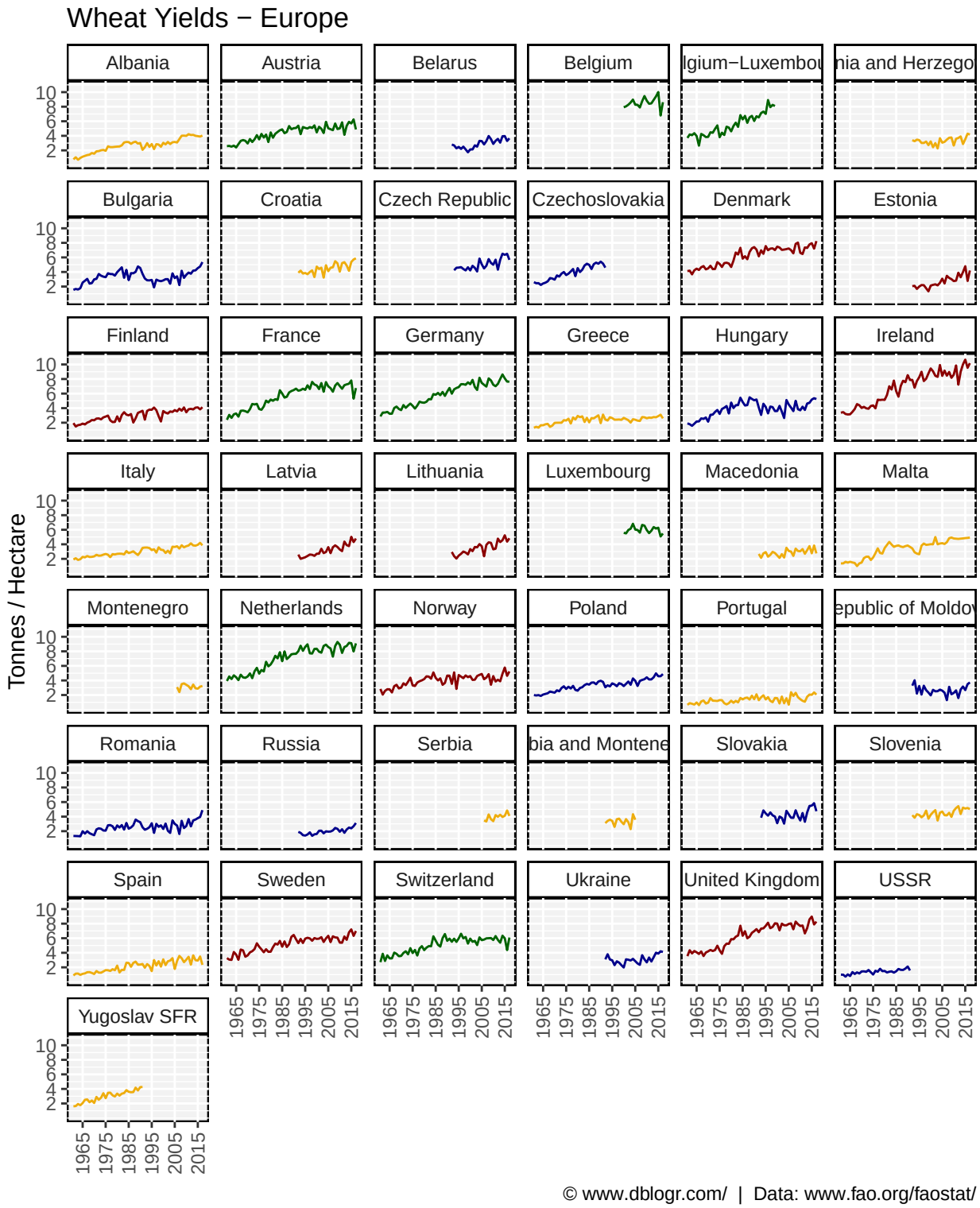

Figure 3: Wheat yields.

```
# Plot
my_ggplot(x3) + labs(title = "Wheat Yields - Africa")
```

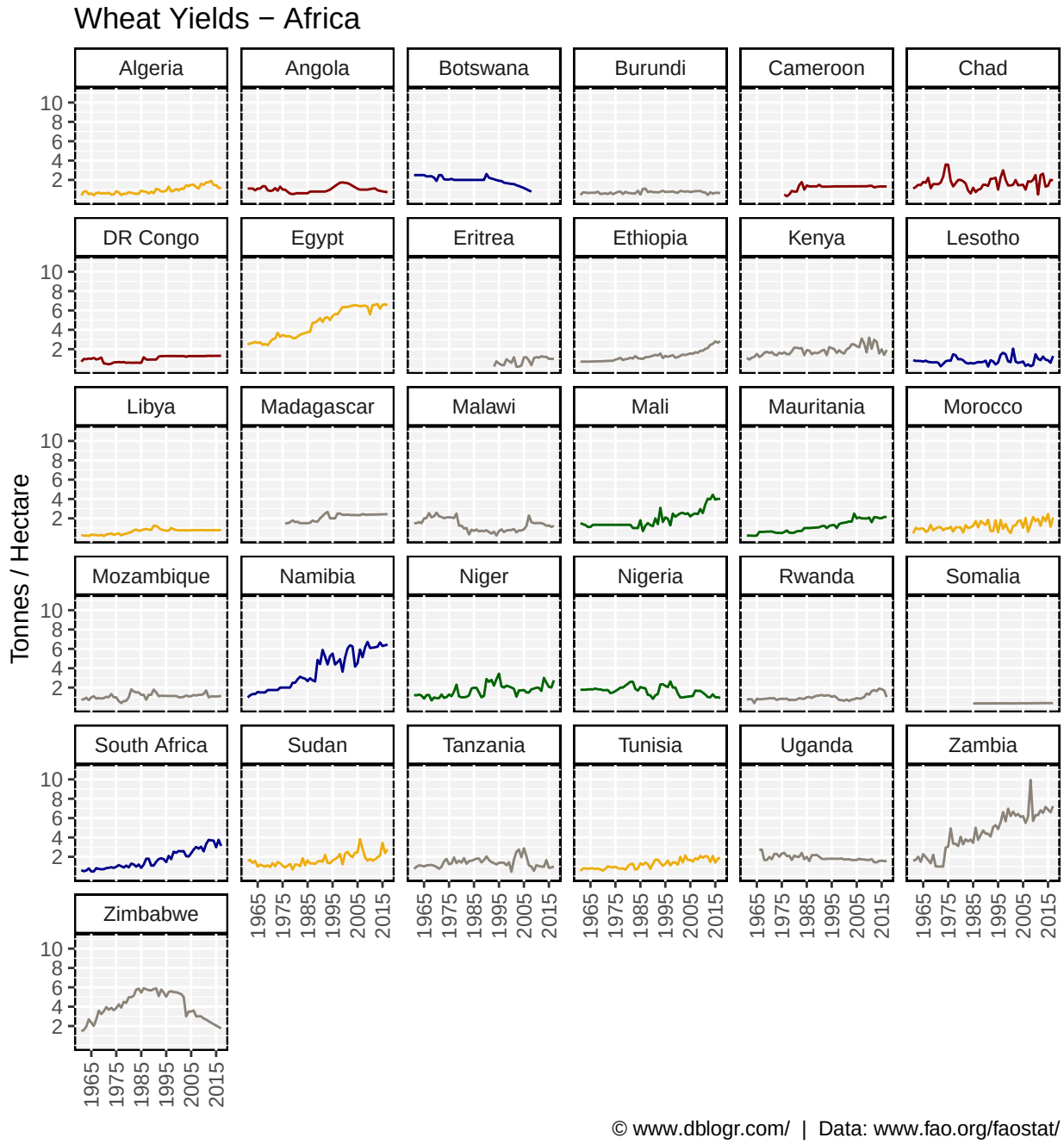

Figure 4: Wheat yields.

```
# Plot
my_ggplot(x4) + labs(title = "Wheat Yields - Asia + Oceania")
```

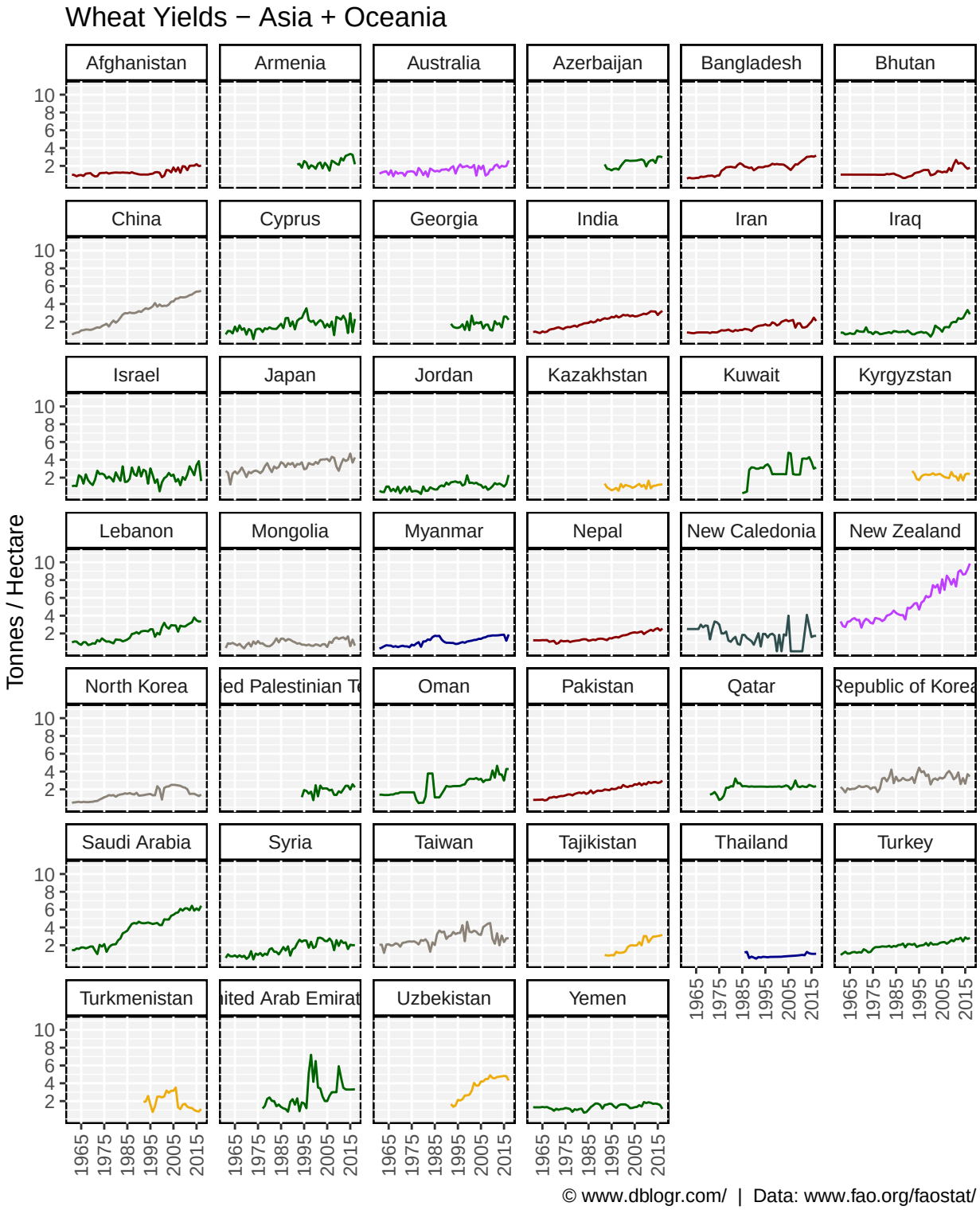

Figure 5: Wheat yields.

```
# Prep data
xx <- agData_FAO_Crops %>%
  filter(Crop == "Wheat", Measurement == "Yield",
         Area %in% agData_FAO_Country_Table$SubRegion) %>%
  left_join(agData_FAO_Country_Table, by = c("Area"="SubRegion")) %>%
  arrange(Region) %>%
  mutate(Area = factor(Area, levels = unique(Area)))
# Plot
ggplot(xx, aes(x = Year, y = Value, color = Region) ) +
  geom_line() + facet_wrap(Area~., ncol = 6) + theme_agData() +
  theme(legend.position = "none",
        axis.text.x = element_text(angle = 90, vjust = 0.5),
        plot.caption = element_text(vjust = 1)) +
  scale_color_manual(values = agData_Colors) +
  scale_x_continuous(breaks = seq(1965, 2015, by = 10), minor_breaks = NULL) +
  scale_y_continuous(breaks = c(2, 4, 6, 8)) +
  labs(title = "Wheat Yields", y = "Tonnes / Hectare", x = NULL,
       caption = "\xa9 www.dblogr.com/  |  Data: www.fao.org/faostat/")
```

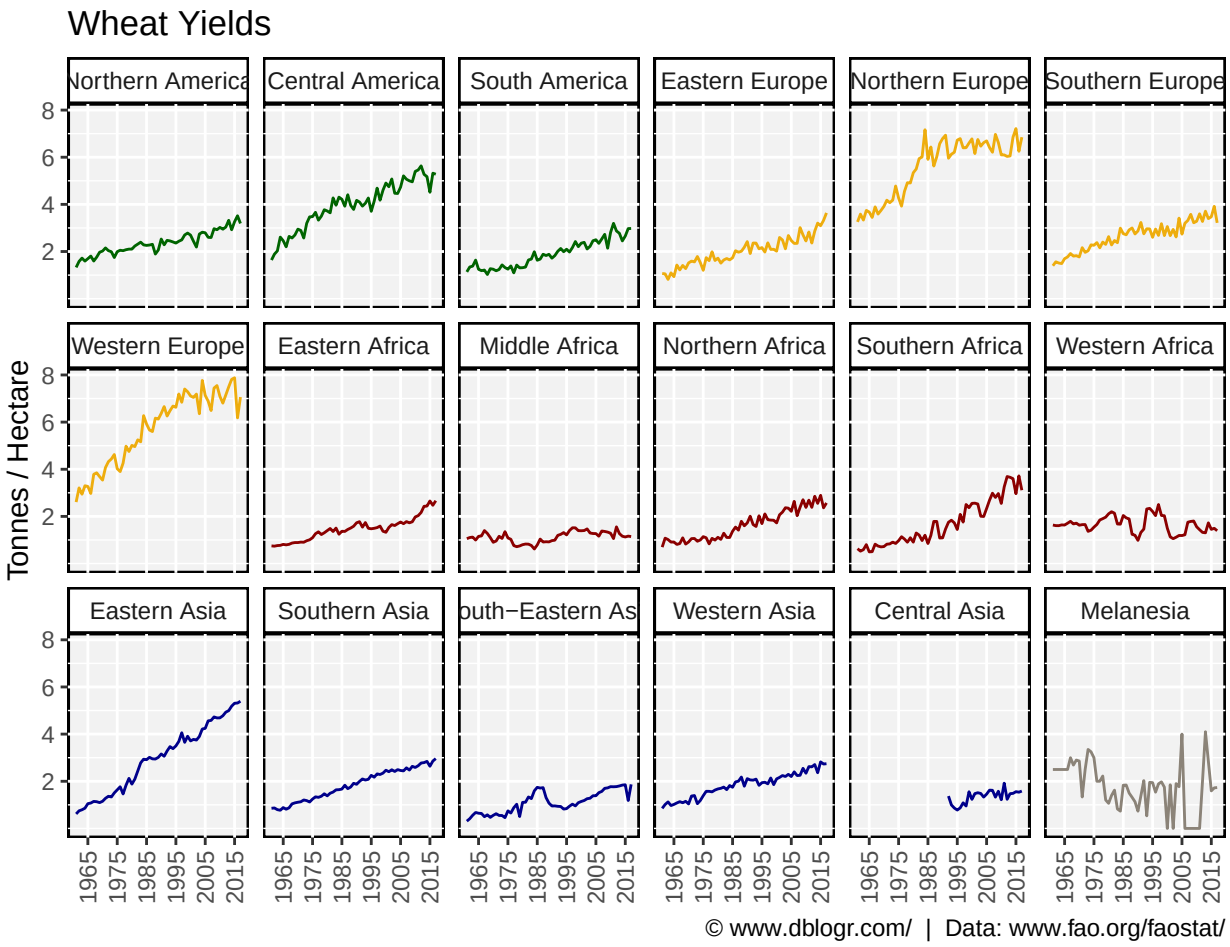

Figure 6: Wheat yields.