

## XUẤT FILE RA PDF

```
library(kableExtra)
library(formattable)
load("top20_rice.Rdata")
# options(width = 200)

top20_rice -> rice_topen

rice_compare <- subset(rice_topen, year == 2020 | year == 2000)

rice_compare
```

##		area	item	year	production	area_harvested
## 694		Bangladesh	Rice	2020	54905891	11417745
## 754		Bangladesh	Rice	2000	37627500	10801214
## 1382		Brazil	Rice	2020	11091011	1677705
## 1442		Brazil	Rice	2000	11134588	3664804
## 2062		Cambodia	Rice	2020	11248000	3322800
## 2110		Cambodia	Rice	2000	4026092	1903159
## 2995		China, mainland	Rice	2020	211860000	30080000
## 3055		China, mainland	Rice	2000	187908000	29961890
## 3817	Democratic People's Republic of Korea	Rice	2020	2113019	470295	
## 3873	Democratic People's Republic of Korea	Rice	2000	1690000	535000	
## 4346		Egypt	Rice	2020	4804000	499361
## 4406		Egypt	Rice	2000	6000490	659217
## 6417		India	Rice	2020	186500000	45070000
## 6477		India	Rice	2000	127464896	44712000
## 6570		Indonesia	Rice	2020	54649202	10657275
## 6599		Indonesia	Rice	2000	51898000	11793000
## 7246		Japan	Rice	2020	10469000	1462000
## 7290		Japan	Rice	2000	11863000	1770000
## 7964		Madagascar	Rice	2020	4227927	1674540
## 8010		Madagascar	Rice	2000	2480470	1209300
## 9111		Myanmar	Rice	2020	25982696	6829904
## 9171		Myanmar	Rice	2000	20986900	6302175
## 9264		Nepal	Rice	2020	5550878	1458915
## 9324		Nepal	Rice	2000	4216465	1560044
## 9715		Nigeria	Rice	2020	8171800	4195100
## 9775		Nigeria	Rice	2000	3298000	2199000
## 9953		Pakistan	Rice	2020	12629514	3335105
## 10013		Pakistan	Rice	2000	7203900	2376600
## 10583		Philippines	Rice	2020	19294856	4718896
## 10643		Philippines	Rice	2000	12389412	4038085
## 10924		Republic of Korea	Rice	2020	4713162	726432
## 10984		Republic of Korea	Rice	2000	7196582	1072363
## 12097		Sri Lanka	Rice	2020	5120924	1066403
## 12155		Sri Lanka	Rice	2000	2859900	832000
## 12655		Thailand	Rice	2020	30231025	10401653
## 12713		Thailand	Rice	2000	25843878	9891200
## 13759		United States of America	Rice	2020	10319860	1208400
## 13819		United States of America	Rice	2000	8657810	1229850
## 14305		Viet Nam	Rice	2020	42765000	7222403
## 14365		Viet Nam	Rice	2000	32529500	7666300

```

row.names(rice_compare) <- NULL

rice_compare <- rice_compare[- c(2)]

rice_compare$yield <- round(rice_compare$production / rice_compare$area_harvested,
                           digits = 2)

rice_compare$production <- round(rice_compare$production / 1000,
                                digits = 0)

rice_compare$area_harvested <- round(rice_compare$area_harvested / 1000,
                                   digits = 0)

rice_wide <- reshape(data = rice_compare,
                    idvar = c("area"),
                    # v.names = c("production"),
                    timevar = "year",
                    direction = "wide")

rice_wide <- rice_wide[c(1, 5, 2, 6, 3, 7, 4)]

rice_wide$percent_1 <- round(100 * (rice_wide$production.2020 - rice_wide$production.2000) / rice_wide$production.2000)

rice_wide$percent_2 <- round(100 * (rice_wide$area_harvested.2020 - rice_wide$area_harvested.2000) / rice_wide$area_harvested.2000)

rice_wide$percent_3 <- round(100 * (rice_wide$yield.2020 - rice_wide$yield.2000) / rice_wide$yield.2000)

rice_wide <- rice_wide[c(1, 2, 3, 8, 4, 5, 9, 6, 7, 10)]

rank_1 <- order(rice_wide$production.2020, decreasing = TRUE)

rice_wide <- rice_wide[rank_1, ]

row.names(rice_wide) <- NULL

rice_wide -> rice_wide_ok

rice_wide_ok -> rice_wide

###

rice_wide$production.2020 <- color_bar("lightgreen")(rice_wide$production.2020)
rice_wide$production.2000 <- color_bar("lightgreen")(rice_wide$production.2000)

rice_wide$area_harvested.2020 <- color_bar("orange")(rice_wide$area_harvested.2020)
rice_wide$area_harvested.2000 <- color_bar("orange")(rice_wide$area_harvested.2000)

rice_wide$yield.2020 <- color_bar("pink")(rice_wide$yield.2020)
rice_wide$yield.2000 <- color_bar("pink")(rice_wide$yield.2000)

rice_wide$percent_1 <- color_tile("white", "lightgreen")(rice_wide$percent_1)

```

```

rice_wide$percent_2 <- color_tile("white", "orange")(rice_wide$percent_2)

rice_wide$percent_3 <- color_tile("white", "pink")(rice_wide$percent_3)

file_image <- list.files("E:\\GITHUB\\project-neo\\r\\faostat\\png", full.names = TRUE)

gsub(".png", "", basename(file_image))[order(match(gsub(".png", "", basename(file_image)),
                                                    rice_wide$area))] -> file_image_2

file_image_3 <- paste0("png/", file_image_2, ".png")

rice_wide$rank <- 1:20

rice_wide$flag <- ""

rice_wide[c(11, 1, 2:10)] -> rice_wide

names(rice_wide) <- c("Xếp hạng", "Quốc gia", "Năm 2000", "Năm 2020", "Tỷ lệ tăng trưởng (%)",
                     "Năm 2000", "Năm 2020", "Tỷ lệ tăng trưởng (%)",
                     "Năm 2000", "Năm 2020", "Tỷ lệ tăng trưởng (%)")

# colnames(rice_wide) <- stringr::str_replace_all(colnames(rice_wide), "\\n", "<br>")

kbl(rice_wide)

```

Xếp hạng	Quốc gia	Năm 2000
1	China, mainland	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
2	India	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
3	Bangladesh	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
4	Indonesia	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
5	Viet Nam	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
6	Thailand	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
7	Myanmar	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
8	Philippines	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
9	Pakistan	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
10	Cambodia	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
11	Brazil	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
12	Japan	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
13	United States of America	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
14	Nigeria	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
15	Nepal	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
16	Sri Lanka	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
17	Egypt	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
18	Republic of Korea	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
19	Madagascar	<span style="display: inline-block; direction: rtl; unicode-bidi: plain
20	Democratic People's Republic of Korea	<span style="display: inline-block; direction: rtl; unicode-bidi: plain

```

# kbl(rice_wide, escape = FALSE, caption = "Top 20 quốc gia sản xuất lúa gạo trên thế giới | Dữ liệu FA

# %>%
#   kable_styling(bootstrap_options = c("striped", "hover", "condensed", "responsive",

```

```

#                                     position = "float_left")) %>%
#   # kbl(caption = "Recreating booktabs style table") %>%
#   kable_classic(full_width = F, html_font = "arial") %>%
#   # kable_paper("hover", full_width = TRUE) %>%
#   column_spec(1, width = "2cm") %>%
#   column_spec(2, width = "8cm", border_right = TRUE) %>%
#   column_spec(5, border_right = TRUE) %>%
#   column_spec(8, border_right = TRUE) %>%
#   column_spec(1, image = spec_image(file_image_3 , 96, 72)) %>%
#   row_spec(0:20, bold = TRUE) %>%
#   row_spec(5, background = "yellow") %>%
#   add_header_above(c("", "", "Sản lượng thu hoạch (nghìn tấn)" = 3, "Diện tích canh tác (nghìn ha)" =
#     bold = TRUE) %>% save_kable("test_kable.pdf")
#
#
# kable(mtcars[1:5, ], "html") %>%
#   kable_styling("striped") %>%
#   row_spec(1, color = "red")

```