Statistics

```
> cor(africa[,-1:-2])
          gdp_2017  pop_2017      area rail      road
gdp_2017 1.0000000 0.6660203 0.3838423   NA 0.8159500
pop_2017 0.6660203 1.0000000 0.4618159   NA 0.6359208
area     0.3838423 0.4618159 1.0000000   NA 0.4943773
rail            NA        NA        NA    1        NA
road     0.8159500 0.6359208 0.4943773   NA 1.0000000
```

```
> cor(africa[,-1:-2], use="pairwise")
          gdp_2017  pop_2017      area      rail      road
gdp_2017 1.0000000 0.6660203 0.3838423 0.7676654 0.8159500
pop_2017 0.6660203 1.0000000 0.4618159 0.2834323 0.6359208
area     0.3838423 0.4618159 1.0000000 0.4003553 0.4943773
rail     0.7676654 0.2834323 0.4003553 1.0000000 0.8474765
road     0.8159500 0.6359208 0.4943773 0.8474765 1.0000000
```

T Test

```
t.test(safi$months_lack_food_count[safi$village == "Chirodzo"],
       safi$months_lack_food_count[safi$village == "Ruaca"])
```

```
   Welch Two Sample t-test

data:  safi$months_lack_food_count[safi$village == "Chirodzo"] and
safi$months_lack_food_count[safi$village == "Ruaca"]
t = 0.53747, df = 74.124, p-value = 0.5926
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.5539014  0.9631113
sample estimates:
mean of x mean of y
 2.102564  1.897959
```