

Supplementary Information: File 2

R Code for Analysis

```
#####  
# Comparing food resilience response actions by country according to response  
# coding in Lloyd et al. (2023).  
#  
# This code is intended to analyze individual country actions across the  
# resilience categories  
#  
# Code prepared by Lyndsey Dowell for research conducted in Lloyd et al. (2023)  
# Last Updated: January 2023  
#####  
  
#install.packages("dplyr")  
library(dplyr)  
  
# Set data directory  
  
# Read in issue and action data  
raw <- read.csv("FSR_Coding.csv")  
  
# Replace NAs with 0 - recommended step  
# raw <- raw %>%
```

```

# mutate_at(c(4:47), ~replace(., is.na(.), 0))

# Read in categorization for issue and action coding
cat <- read.csv("cat_ids.csv")

# Subset action data for analysis

cat_list <- unique(cat[,1])

data_list <- list()

# Loop through to create data frames for each analysis category
for(i in 1:length(cat_list)){
  df <- raw[,c(1,4)]
  c = 2
  for(j in 1:nrow(cat)){

    if(cat[j,1] == cat_list[i]){
      c = c + 1
      df <- cbind(df,raw[,which(colnames(raw) == cat[j,2])])
      colnames(df)[c] <- as.character(cat[j,2])
    }
  }
  data_list[[length(data_list)+1]] <- df
  names(data_list)[i] <- as.character(cat_list[i])
}

```

```

# Function to create actions pivot table

pivot <- function(data){

  table <- data %>%

  filter(ACTION == 1) %>% # Only looking at actions

  group_by(COUNTRY) %>% # Grouping results by country

  summarize_at(c(1:(ncol(data)-1)),sum, na.rm = TRUE) # Calculating action frequency

}

# Create and export pivot tables for each analysis category

for(i in 1: length(data_list)){

  pv <- pivot(data_list[[i]])

  write.csv(pv, paste(as.character(cat_list[[i]]), 'pivot', 'csv', sep = '.'))

}

#####

# Looking for repeated action attribute combinations across and within countries

# (Lloyd et al., 2023).

#

# This code is intended to count the repetitions of identical attribute

# combinations across all resilience categories

#

# Code prepared by Lyndsey Dowell for research conducted in Lloyd et al.(2023)

# Last Updated: January 2023

#####

```

```

#install.packages("dplyr")
#install.packages("tidyr")
library(dplyr)
library(tidyr)

# Set data directory

# Read in issue and action data
df <- read.csv("FSR_Coding.csv")

# Narrow list down to just actions
df2 <- df %>% drop_na(ACTION)

# Look for combinations of a subset of attributes

# Combination set 1: look at frequency of identical action coding across all
# countries to identify where countries have the same responses
## (remove country, policy descriptors, time frame, and other descriptors)

combo_all <- df2[,c(5:13,15:25,26:32,34:39)] %>% #sub-setting to desired attributes
  group_by_all() %>%
  summarise(count = n()) %>%
  arrange(desc(count))

# Assign combination ID

```

```
combo_sub1 <- combo_sub1 %>%  
  mutate(ID = row_number())  
  
# Combination set 2: include country in subset to see frequencies of identical  
# action coding specific to individual countries  
## (remove policy descriptors, time frame, and other descriptors)  
  
combo_by_country <- df2[,c(1,5:13,15:25,26:32,34:39)] %>% #sub-setting to desired attributes  
  group_by_all() %>%  
  summarise(count = n()) %>%  
  arrange(desc(count))  
  
## Export results tables  
write.csv(combo_all, "attribute_combinations_altogether.csv")  
write.csv(combo_by_country, "attribute_combinations_individual.csv")
```