

# Other Regression Models

- function glm: generalized linear models
  - logit, probit
  - poisson
- packages nlme and lme4: non-linear mixed effects models
  - random and fixed effects, hierarchical
- Other specialized packages

```
library(lubridate)
library(qdapTools)
```

```
safi <- read.csv("data/SAFI_clean.csv",
                na = c("", "NULL", "NA"),
                stringsAsFactors = FALSE)
```

```
safi$village <- factor(safi$village)
safi$respondent_wall_type <- factor(trimws(safi$respondent_wall_type))
safi$affect_conflicts <- factor(safi$affect_conflicts, ordered=TRUE,
                               levels=c("never", "once", "more_once", "frequently"))
safi$interview_date <- ymd_hms(safi$interview_date)
safi$memb_assoc <- ifelse(is.na(safi$memb_assoc), NA,
                          ifelse(safi$memb_assoc == "yes", TRUE, FALSE))
```

```
month_indicators <- mtabulate(strsplit(safi$months_lack_food, ";"))
month_indicators <- month_indicators[,-10]
names(month_indicators) <- substr(names(month_indicators), 0, 3)
month_indicators <- month_indicators[,month.abb]
safi <- cbind(safi, month_indicators)
```

```
safi$months_lack_food_count <- apply(month_indicators, 1, sum)
```