Summary listing from Jamaica

Michael Rahija May 25, 2016

What the data looks like

```
#set wd
if(Sys.info()[5] == "x86_64"){
  setwd("~/Dropbox/CROP/Jamaica/cropJam")
  data.dir <- "~/Dropbox/CROP/Jamaica/data_area/"</pre>
} else {
  setwd("C:/Users/Rahija/Dropbox/CROP/Jamaica/cropJam")
  data.dir <- "C:/Users/Rahija/Dropbox/CROP/Jamaica/data_area/"</pre>
#grab list of files
data.files <- list.files(data.dir, pattern = ".tab")</pre>
#read in files in order, and merge
farmer <- read.delim(paste0(data.dir,data.files[[1]]),</pre>
                   header = TRUE,
                   sep = "\t")
colnames(farmer)[1] <- "farm_id"</pre>
parcel <- read.delim(paste0(data.dir,data.files[[7]]),</pre>
                   header = TRUE,
                   sep = "\t")
colnames(parcel)[length(colnames(parcel))] <- "farm_id"</pre>
```

```
colnames(parcel)[1] <- "parcel_id"</pre>
master <- merge(farmer, parcel, by = "farm_id")</pre>
crop <- read.delim(paste0(data.dir,data.files[[2]]),</pre>
                   header = TRUE,
                   sep = "\t")
colnames(crop)[1] <- "crop_id"</pre>
colnames(crop)[length(colnames(crop))] <- "farm_id"</pre>
colnames(crop)[length(colnames(crop))-1] <- "parcel_id"</pre>
master <- merge(master, crop, by = c("farm_id", "parcel_id"))</pre>
master <- arrange(master, farm_id, parcel_id, crop_id)</pre>
#keep only relevant column to filter harvest dates, and count parcels
master <- select(master,</pre>
                  Farmer_name_3,
                  farm_id,
                  parcel_id,
                  Parcel_ID_3,
                  crop_id,
                  harvest_date_current_3
#show what the data looks like
knitr::kable(head(master[], n = 10))
```

Farmer_name_3	farm_id	parcel_id	Parcel_ID_3	crop_id	harvest_date_current_3
Sonia Robinson	006a0dc2894d4f2c9397f08aa5b5cb94	0	behind her son's house	3	11/6/2016 12:00:00 AM
Sonia Robinson	006 a 0 d c 289 4 d 4 f 2 c 9397 f 08 a a 5 b 5 c b 94	0	behind her son's house	4	2/6/2017 12:00:00 AM
Sonia Robinson	006 a 0 d c 289 4 d 4 f 2 c 9397 f 08 a a 5 b 5 c b 94	1	before you cross the spring	4	11/6/2016 12:00:00 AM
Sonia Robinson	006 a 0 d c 289 4 d 4 f 2 c 9397 f 08 a a 5 b 5 c b 94	2	after you cross the river	3	7/6/2016 12:00:00 AM
Sonia Robinson	006 a 0 d c 2894 d 4f 2c 9397 f 08 a a 5b 5cb 94	3	on the right hand side behind a board house	3	8/5/2016 12:00:00 AM
Conroy Grandison	00 eb1 cd30 dc446 a69 be47586390338 be	0	opposite Johnson house	3	4/27/2016 12:00:00 AM

Farmer_name_3	farm_id	$parcel_id$	Parcel_ID_3	${\rm crop_id}$	harvest_date_current_3
Clifford Jackson #2	03 abd 292 c 4b 7448 d 9 dbc e 295 fb 2 db 1 e 3	0	away from mango tree	3	5/6/2016 12:00:00 AM
Clifford Jackson $\#2$	03 abd 292 c4 b7448 d9 db ce 295 fb 2 db 1 e3	1	adjacent to blue and white house	3	10/22/2016 12:00:00 AM
Cecile Lemonius	040 b d c 633 e 9442 f a b 018 c e 353 d d b 07 e 1	0	Oppisite Babu Ferguson poperty	3	7/13/2016 12:00:00 AM
Winston Ennis	043 b 164 d e a b 4443 c 86812 a 79 d e f 6b 428	0	Beside Jeffrey Ennis	1	6/8/2016 12:00:00 AM

After filtering for the harvest dates that lie in June and July, we should be able to just count the unique number of parcel and farm ids.

```
#convert harvest date to computer readable for filtering
master$harvest_date_current_3 <- as.Date(master$harvest_date_current_3, format = "%m/%d/%Y %H:%M:%S")

temp <- subset(master, harvest_date_current_3 > as.Date("2016-06-01"))

temp <- subset(temp, harvest_date_current_3 < as.Date("2016-08-01"))

to.count <- select(temp, farm_id, parcel_id)

#count unique rows
nrow(unique(to.count))</pre>
```

To me, I count 99 unique parcels that harvest from June to July.

[1] 99