Profitability-Identifying profit-influencing categories using stepwise regression (PRECOVID and COVID periods)

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REQUIRED STEPS AND DATA PREPARATION (Click here)

STEPS TO PREPARE DATA FOR THE ANALYSIS AND RUN THE MODEL

1. Filter the data to specific period
2. Remove unneeded column
3. Convert categorical variables to numeric/dummies
4. Select needed variable from the new dataframe for the model
5. Run the regression model
6. Use the model in stepwise regression (forward OR backward)

Know your working directory

```r
getwd()
```

LOAD DATA —-

```r
CorRegdat <- read.csv("Rel.data4.csv")
```

```r
names(CorRegdat)
```

```
##  [1] "S.N"             "Farm.ID"         "T_Efficiency"     "SCR"
##  [5] "FCR"             "Lab.kg"          "Fingcost.kg"      "FeedC.kg"
##  [9] "LabC.kg"         "OtherC.kg"       "Harvest"          "Culturedays.kg"
## [13] "Rent.kg"         "DepreOwned.kg"   "TotVarC.kg"       "FixedC.kg"
## [17] "TotCost.kg"      "Profit.kg"       "GrossMargin.kg"   "Price"
## [21] "BenefitCostRatio" "ROI"            "OperProfitMargin" "ExpenseRatio"
## [25] "GrossRatio"      "ProdScale"       "Experience"       "FeedUsage"
## [29] "State"           "Region"          "ProdPeriod"       "AnnualProd"
## [33] "ProfitStatus"    "MainOccup"       "Education"        "LabourXtics"
## [37] "AgeRange"        "Ownership"       "MarketType"       "Gender"
## [41] "Pond.Type"       "FarmType"        "FingSource"       "StockingYear"
```

INSTALL PACKAGES —-

```
#install.packages("tidyverse")
#install.packages("corrplot")
#install.packages("caret")
#install.packages("polycor")
```

LOAD PACKAGE

```
library("tidyverse")
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.4.4     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.0
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

PREPARE DATA FOR PreCOVID PERIOD ANALYSIS

STEP 1

Using the existing (initial) CorRegdat file, select variables to work within (PreCOVID)

```
CorRegdatPx<- CorRegdat %>%
          select(T_Efficiency:FingSource

) %>%
filter(ProdPeriod %in% "PreCOVID")
names(CorRegdatPx)
```

```
##  [1] "T_Efficiency"    "SCR"            "FCR"              "Lab.kg"
##  [5] "Fingcost.kg"     "FeedC.kg"       "LabC.kg"          "OtherC.kg"
##  [9] "Harvest"         "Culturedays.kg" "Rent.kg"          "DepreOwned.kg"
## [13] "TotVarC.kg"      "FixedC.kg"      "TotCost.kg"       "Profit.kg"
## [17] "GrossMargin.kg"  "Price"          "BenefitCostRatio" "ROI"
## [21] "OperProfitMargin" "ExpenseRatio"  "GrossRatio"       "ProdScale"
## [25] "Experience"      "FeedUsage"      "State"            "Region"
## [29] "ProdPeriod"      "AnnualProd"     "ProfitStatus"     "MainOccup"
## [33] "Education"       "LabourXtics"    "AgeRange"         "Ownership"
## [37] "MarketType"      "Gender"         "Pond.Type"        "FarmType"
## [41] "FingSource"
```

```r
unique(CorRegdatPx$ProdPeriod )
```

```
## [1] "PreCOVID"
```

STEP 2

Remove column "ProdPeriod" since its only one value and other unnecessary columns

```r
CorDatP<- CorRegdatPx %>%
            select(T_Efficiency:FingSource, -State, -AnnualProd,-ProdPeriod, -ProfitStatus)


names(CorDatP)
```

```
##  [1] "T_Efficiency"      "SCR"               "FCR"               "Lab.kg"
##  [5] "Fingcost.kg"       "FeedC.kg"          "LabC.kg"           "OtherC.kg"
##  [9] "Harvest"           "Culturedays.kg"    "Rent.kg"           "DepreOwned.kg"
## [13] "TotVarC.kg"        "FixedC.kg"         "TotCost.kg"        "Profit.kg"
## [17] "GrossMargin.kg"    "Price"             "BenefitCostRatio"  "ROI"
## [21] "OperProfitMargin"  "ExpenseRatio"      "GrossRatio"        "ProdScale"
## [25] "Experience"        "FeedUsage"         "Region"            "MainOccup"
## [29] "Education"         "LabourXtics"       "AgeRange"          "Ownership"
## [33] "MarketType"        "Gender"            "Pond.Type"         "FarmType"
## [37] "FingSource"
```

Have a glimpse to see if the data in the variable are still in order

```r
#glimpse(CorDatP)
```

STEP 3

Convert categorical variables to dummy variables using "caret" package

```r
library("caret")
```

```
## Loading required package: lattice
```

```
##
## Attaching package: 'caret'
```

```
## The following object is masked from 'package:purrr':
##
##     lift
```

```r
dmyP<- dummyVars("~ .", data = CorDatP)


CorDatPTr<-data.frame(predict(dmyP, newdata = CorDatP))
```

Confirm the number or observations and columns

```
dim(CorDatPTr)
```

```
## [1] 609  72
```

```
#head(CorDatPTr)
```

STEP 4

Select needed variable from the existing data that has been converted from categories to numeric

```
RegDatP <- CorDatPTr %>%
            select( Profit.kg, ProdScaleLarge:FingSourceOther.farms.or.hatcheries)
names(RegDatP)
```

```
##  [1] "Profit.kg"
##  [2] "ProdScaleLarge"
##  [3] "ProdScaleMedium"
##  [4] "ProdScaleMicro.Small"
##  [5] "ProdScaleSmall"
##  [6] "Experience11.to.15"
##  [7] "Experience16.and.above"
##  [8] "Experience5.and.below"
##  [9] "Experience6.to.10"
## [10] "FeedUsageAdds.local.feed"
## [11] "FeedUsageCommercial.feed.only"
## [12] "RegionNorth"
## [13] "RegionSouth"
## [14] "MainOccupCivil.Servant"
## [15] "MainOccupEmployed.in.a.private.organization"
## [16] "MainOccupFish.Farming"
## [17] "MainOccupOther.Agric.Ventures"
## [18] "MainOccupOther.enterprise"
## [19] "MainOccupPersonal.Business"
## [20] "EducationArabic"
## [21] "EducationDegree"
## [22] "EducationMSC.Above.Grad.studies."
## [23] "EducationND.NCE"
## [24] "EducationNone"
## [25] "EducationPrimary"
## [26] "EducationSecondary"
## [27] "LabourXticsHired"
## [28] "LabourXticsHousehold"
## [29] "AgeRange31.40.Yrs"
## [30] "AgeRange41.50.Yrs"
## [31] "AgeRange51.60.Yrs"
## [32] "AgeRangeAbove.60.Yrs"
## [33] "AgeRangeLess.than.30.Yrs"
## [34] "OwnershipOwned"
## [35] "OwnershipRented.Leased"
## [36] "MarketTypeIndividuals"
```

```
## [37] "MarketTypeProcessors"
## [38] "MarketTypeRestaurants..Eateries.or.Hotels"
## [39] "MarketTypeRetailers"
## [40] "MarketTypeWholesalers..Bulk.buyers."
## [41] "GenderFemale"
## [42] "GenderMale"
## [43] "Pond.TypeConcrete.pond"
## [44] "Pond.TypeEarthen.pond"
## [45] "Pond.TypeMobile.pond"
## [46] "FarmTypeCluster"
## [47] "FarmTypeFarm.Site"
## [48] "FarmTypeHomestead"
## [49] "FingSourceOn.Farm"
## [50] "FingSourceOther.farms.or.hatcheries"
```

PREPARE DATA FOR COVID PERIOD ANALYSIS

STEP 1

Using the existing CorRegdat file, select variables to work with (PreCOVID)

```
CorRegdatCx<- CorRegdat %>%
           select(T_Efficiency:FingSource

) %>%
filter(ProdPeriod %in% "COVID")
names(CorRegdatCx)
```

```
##  [1] "T_Efficiency"      "SCR"              "FCR"               "Lab.kg"
##  [5] "Fingcost.kg"       "FeedC.kg"         "LabC.kg"           "OtherC.kg"
##  [9] "Harvest"           "Culturedays.kg"   "Rent.kg"           "DepreOwned.kg"
## [13] "TotVarC.kg"        "FixedC.kg"        "TotCost.kg"        "Profit.kg"
## [17] "GrossMargin.kg"    "Price"            "BenefitCostRatio"  "ROI"
## [21] "OperProfitMargin"  "ExpenseRatio"     "GrossRatio"        "ProdScale"
## [25] "Experience"        "FeedUsage"        "State"             "Region"
## [29] "ProdPeriod"        "AnnualProd"       "ProfitStatus"      "MainOccup"
## [33] "Education"         "LabourXtics"      "AgeRange"          "Ownership"
## [37] "MarketType"        "Gender"           "Pond.Type"         "FarmType"
## [41] "FingSource"
```

```
unique(CorRegdatCx$ProdPeriod )
```

```
## [1] "COVID"
```

STEP 2

Remove column "ProdPeriod" since its only one value and others not needed

```
CorDatC<- CorRegdatCx %>%
            select(T_Efficiency:FingSource, -State, -AnnualProd,-ProdPeriod, -ProfitStatus)


names(CorDatC)
```

```
##  [1] "T_Efficiency"     "SCR"              "FCR"               "Lab.kg"
##  [5] "Fingcost.kg"      "FeedC.kg"         "LabC.kg"           "OtherC.kg"
##  [9] "Harvest"          "Culturedays.kg"   "Rent.kg"           "DepreOwned.kg"
## [13] "TotVarC.kg"       "FixedC.kg"        "TotCost.kg"        "Profit.kg"
## [17] "GrossMargin.kg"   "Price"            "BenefitCostRatio"  "ROI"
## [21] "OperProfitMargin" "ExpenseRatio"     "GrossRatio"        "ProdScale"
## [25] "Experience"       "FeedUsage"        "Region"            "MainOccup"
## [29] "Education"        "LabourXtics"      "AgeRange"          "Ownership"
## [33] "MarketType"       "Gender"           "Pond.Type"         "FarmType"
## [37] "FingSource"
```

Have a glimpse to see if the data in the variable are still in order

```
#glimpse(CorDatC)
```

STEP 3

Create categorical dummies from the new data

```
dmyC<- dummyVars("~ .", data = CorDatC)

CorDatCTr<-data.frame(predict(dmyC, newdata = CorDatC))
```

Confirm the number or observations and columns

```
dim(CorDatCTr)
```

```
## [1] 509  72
```

```
#head(CorDatCTr)
```

STEP 4

Select needed variable from the existing data that has converted categories to numeric

```
RegDatC <- CorDatCTr %>%
            select( Profit.kg, ProdScaleLarge:FingSourceOther.farms.or.hatcheries)
names(RegDatC)
```

```
##  [1] "Profit.kg"
##  [2] "ProdScaleLarge"
##  [3] "ProdScaleMedium"
##  [4] "ProdScaleMicro.Small"
##  [5] "ProdScaleSmall"
##  [6] "Experience11.to.15"
##  [7] "Experience16.and.above"
##  [8] "Experience5.and.below"
##  [9] "Experience6.to.10"
## [10] "FeedUsageAdds.local.feed"
## [11] "FeedUsageCommercial.feed.only"
## [12] "RegionNorth"
## [13] "RegionSouth"
## [14] "MainOccupCivil.Servant"
## [15] "MainOccupEmployed.in.a.private.organization"
## [16] "MainOccupFish.Farming"
## [17] "MainOccupOther.Agric.Ventures"
## [18] "MainOccupOther.enterprise"
## [19] "MainOccupPersonal.Business"
## [20] "EducationArabic"
## [21] "EducationDegree"
## [22] "EducationMSC.Above.Grad.studies."
## [23] "EducationND.NCE"
## [24] "EducationNone"
## [25] "EducationPrimary"
## [26] "EducationSecondary"
## [27] "LabourXticsHired"
## [28] "LabourXticsHousehold"
## [29] "AgeRange31.40.Yrs"
## [30] "AgeRange41.50.Yrs"
## [31] "AgeRange51.60.Yrs"
## [32] "AgeRangeAbove.60.Yrs"
## [33] "AgeRangeLess.than.30.Yrs"
## [34] "OwnershipOwned"
## [35] "OwnershipRented.Leased"
## [36] "MarketTypeIndividuals"
## [37] "MarketTypeProcessors"
## [38] "MarketTypeRestaurants..Eateries.or.Hotels"
## [39] "MarketTypeRetailers"
## [40] "MarketTypeWholesalers..Bulk.buyers."
## [41] "GenderFemale"
## [42] "GenderMale"
## [43] "Pond.TypeConcrete.pond"
## [44] "Pond.TypeEarthen.pond"
## [45] "Pond.TypeMobile.pond"
## [46] "FarmTypeCluster"
## [47] "FarmTypeFarm.Site"
## [48] "FarmTypeHomestead"
## [49] "FingSourceOn.Farm"
## [50] "FingSourceOther.farms.or.hatcheries"
```

STEP-WISE REGRESSION OF DATA

Running stepwise regression in stats package - PRECOVID

```
library(stats)
```

STEP 5 - PRECOVID

Regression model - PRECOVID

Because I have many variable to be included in the model, there are many ways of including them without typing them all out. You can use dot [.] to represent all, or use myData[,2:71] to select the columns you wish to include- 2 to 71 in that case.

```
modelP = lm(Profit.kg ~ ., data = RegDatP)
summary(modelP)
```

```
##
## Call:
## lm(formula = Profit.kg ~ ., data = RegDatP)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1040.37   -97.32     6.34   102.63   657.21
##
## Coefficients: (14 not defined because of singularities)
##                                          Estimate Std. Error t value
## (Intercept)                                80.504     56.572   1.423
## ProdScaleLarge                             45.253     54.882   0.825
## ProdScaleMedium                            43.338     25.829   1.678
## ProdScaleMicro.Small                      -99.348     20.353  -4.881
## ProdScaleSmall                                 NA         NA      NA
## Experience11.to.15                         55.317     28.278   1.956
## Experience16.and.above                     62.148     31.466   1.975
## Experience5.and.below                     -29.268     19.687  -1.487
## Experience6.to.10                              NA         NA      NA
## FeedUsageAdds.local.feed                   -4.359     24.331  -0.179
## FeedUsageCommercial.feed.only                  NA         NA      NA
## RegionNorth                               -33.989     20.337  -1.671
## RegionSouth                                    NA         NA      NA
## MainOccupCivil.Servant                     31.429     28.469   1.104
## MainOccupEmployed.in.a.private.organization -27.357     43.414  -0.630
## MainOccupFish.Farming                      -1.103     22.846  -0.048
## MainOccupOther.Agric.Ventures              43.997     29.771   1.478
## MainOccupOther.enterprise                  32.587     47.165   0.691
## MainOccupPersonal.Business                     NA         NA      NA
## EducationArabic                           -28.901     84.639  -0.341
## EducationDegree                            24.950     24.482   1.019
## EducationMSC.Above.Grad.studies.           18.443     35.730   0.516
## EducationND.NCE                            28.600     26.589   1.076
```

```
## EducationNone                                            51.659   201.178   0.257
## EducationPrimary                                        -23.128    59.860  -0.386
## EducationSecondary                                           NA        NA      NA
## LabourXticsHired                                        -12.172    18.576  -0.655
## LabourXticsHousehold                                        NA        NA      NA
## AgeRange31.40.Yrs                                        46.054    36.291   1.269
## AgeRange41.50.Yrs                                        27.111    37.825   0.717
## AgeRange51.60.Yrs                                        48.579    40.358   1.204
## AgeRangeAbove.60.Yrs                                     51.603    47.719   1.081
## AgeRangeLess.than.30.Yrs                                     NA        NA      NA
## OwnershipOwned                                           90.897    23.232   3.913
## OwnershipRented.Leased                                       NA        NA      NA
## MarketTypeIndividuals                                   148.003    31.821   4.651
## MarketTypeProcessors                                     -6.137    64.195  -0.096
## MarketTypeRestaurants..Eateries.or.Hotels               60.529    37.209   1.627
## MarketTypeRetailers                                    -126.642    21.962  -5.766
## MarketTypeWholesalers..Bulk.buyers.                          NA        NA      NA
## GenderFemale                                            -40.605    22.411  -1.812
## GenderMale                                                   NA        NA      NA
## Pond.TypeConcrete.pond                                  -15.358    22.128  -0.694
## Pond.TypeEarthen.pond                                    39.302    26.113   1.505
## Pond.TypeMobile.pond                                         NA        NA      NA
## FarmTypeCluster                                           5.720    32.570   0.176
## FarmTypeFarm.Site                                       -23.139    21.596  -1.071
## FarmTypeHomestead                                            NA        NA      NA
## FingSourceOn.Farm                                       -59.731    21.183  -2.820
## FingSourceOther.farms.or.hatcheries                          NA        NA      NA
##                                                    Pr(>|t|)
## (Intercept)                                        0.155269
## ProdScaleLarge                                     0.409967
## ProdScaleMedium                                    0.093920 .
## ProdScaleMicro.Small                               1.37e-06 ***
## ProdScaleSmall                                           NA
## Experience11.to.15                                 0.050928 .
## Experience16.and.above                             0.048739 *
## Experience5.and.below                              0.137644
## Experience6.to.10                                        NA
## FeedUsageAdds.local.feed                           0.857892
## FeedUsageCommercial.feed.only                            NA
## RegionNorth                                        0.095209 .
## RegionSouth                                              NA
## MainOccupCivil.Servant                             0.270075
## MainOccupEmployed.in.a.private.organization 0.528845
## MainOccupFish.Farming                              0.961518
## MainOccupOther.Agric.Ventures                      0.139993
## MainOccupOther.enterprise                          0.489904
## MainOccupPersonal.Business                               NA
## EducationArabic                                    0.732879
## EducationDegree                                    0.308588
## EducationMSC.Above.Grad.studies.                   0.605930
## EducationND.NCE                                    0.282552
## EducationNone                                      0.797438
## EducationPrimary                                   0.699369
## EducationSecondary                                       NA
```

```
## LabourXticsHired                              0.512593
## LabourXticsHousehold                                NA
## AgeRange31.40.Yrs                              0.204951
## AgeRange41.50.Yrs                              0.473824
## AgeRange51.60.Yrs                              0.229195
## AgeRangeAbove.60.Yrs                           0.279980
## AgeRangeLess.than.30.Yrs                             NA
## OwnershipOwned                                 0.000102 ***
## OwnershipRented.Leased                               NA
## MarketTypeIndividuals                          4.10e-06 ***
## MarketTypeProcessors                           0.923875
## MarketTypeRestaurants..Eateries.or.Hotels      0.104348
## MarketTypeRetailers                            1.32e-08 ***
## MarketTypeWholesalers..Bulk.buyers.                  NA
## GenderFemale                                   0.070537 .
## GenderMale                                           NA
## Pond.TypeConcrete.pond                         0.487949
## Pond.TypeEarthen.pond                          0.132861
## Pond.TypeMobile.pond                                 NA
## FarmTypeCluster                                0.860647
## FarmTypeFarm.Site                              0.284419
## FarmTypeHomestead                                    NA
## FingSourceOn.Farm                              0.004973 **
## FingSourceOther.farms.or.hatcheries                  NA
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 196.6 on 573 degrees of freedom
## Multiple R-squared:  0.2756, Adjusted R-squared:  0.2313
## F-statistic: 6.228 on 35 and 573 DF,  p-value: < 2.2e-16
```

STEP 6 - PRECOVID

Stepwise regression - BACKWARD - PRECOVID

```
stepwise_modelPb <- step(modelP, direction = "backward", k = log(nrow(RegDatP)))
```

```
## Start:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     MainOccupPersonal.Business + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + EducationSecondary + LabourXticsHired +
##     LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##     OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
```

```
##      GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FarmTypeHomestead + FingSourceOn.Farm + FingSourceOther.farms.or.hatcheries
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FarmTypeHomestead + FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
```

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```
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
```

```
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##      MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
```

```
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##      AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##      EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + MainOccupCivil.Servant +
##      MainOccupEmployed.in.a.private.organization + MainOccupFish.Farming +
##      MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##      EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##      EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
```

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```
##       AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##       MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##       MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##       Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##       FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##       ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##       Experience5.and.below + FeedUsageAdds.local.feed + RegionNorth +
##       MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##       MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##       EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##       EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##       AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##       AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##       MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##       MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##       Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##       FingSourceOn.Farm
##
##
## Step:  AIC=6626.37
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##       Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##       FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##       MainOccupEmployed.in.a.private.organization + MainOccupFish.Farming +
##       MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##       EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##       EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##       AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##       AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##       MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##       MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##       Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##       FingSourceOn.Farm
##
##                                                 Df Sum of Sq       RSS    AIC
## - MainOccupFish.Farming                          1        90  22154327 6620.0
## - MarketTypeProcessors                           1       353  22154590 6620.0
## - FarmTypeCluster                                1      1193  22155430 6620.0
## - FeedUsageAdds.local.feed                       1      1241  22155478 6620.0
## - EducationNone                                  1      2549  22156786 6620.0
## - EducationArabic                                1      4508  22158745 6620.1
## - EducationPrimary                               1      5772  22160009 6620.1
## - EducationMSC.Above.Grad.studies.               1     10301  22164538 6620.2
## - MainOccupEmployed.in.a.private.organization    1     15353  22169590 6620.4
## - LabourXticsHired                               1     16599  22170836 6620.4
## - MainOccupOther.enterprise                      1     18456  22172693 6620.5
## - Pond.TypeConcrete.pond                         1     18623  22172860 6620.5
## - AgeRange41.50.Yrs                              1     19862  22174099 6620.5
## - ProdScaleLarge                                 1     26287  22180524 6620.7
## - EducationDegree                                1     40154  22194391 6621.1
```

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```
## - FarmTypeFarm.Site                                     1      44386 22198623 6621.2
## - EducationND.NCE                                        1      44732 22198969 6621.2
## - AgeRangeAbove.60.Yrs                                   1      45213 22199450 6621.2
## - MainOccupCivil.Servant                                 1      47120 22201357 6621.3
## - AgeRange51.60.Yrs                                      1      56021 22210258 6621.5
## - AgeRange31.40.Yrs                                      1      62264 22216501 6621.7
## - MainOccupOther.Agric.Ventures                          1      84445 22238682 6622.3
## - Experience5.and.below                                  1      85457 22239694 6622.3
## - Pond.TypeEarthen.pond                                  1      87580 22241817 6622.4
## - MarketTypeRestaurants..Eateries.or.Hotels              1     102311 22256548 6622.8
## - RegionNorth                                            1     107996 22262233 6622.9
## - ProdScaleMedium                                        1     108846 22263083 6622.9
## - GenderFemale                                           1     126921 22281158 6623.4
## - Experience11.to.15                                     1     147953 22302190 6624.0
## - Experience16.and.above                                 1     150824 22305061 6624.1
## <none>                                                                22154237 6626.4
## - FingSourceOn.Farm                                      1     307404 22461641 6628.4
## - OwnershipOwned                                         1     591874 22746111 6636.0
## - MarketTypeIndividuals                                  1     836431 22990668 6642.5
## - ProdScaleMicro.Small                                   1     921212 23075449 6644.8
## - MarketTypeRetailers                                    1    1285646 23439883 6654.3
##
## Step:  AIC=6619.96
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupEmployed.in.a.private.organization + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq      RSS    AIC
## - MarketTypeProcessors                          1        351 22154678 6613.6
## - FarmTypeCluster                               1       1156 22155484 6613.6
## - FeedUsageAdds.local.feed                      1       1208 22155535 6613.6
## - EducationNone                                 1       2626 22156953 6613.6
## - EducationArabic                               1       4493 22158820 6613.7
## - EducationPrimary                              1       5796 22160123 6613.7
## - EducationMSC.Above.Grad.studies.              1      10447 22164774 6613.8
## - MainOccupEmployed.in.a.private.organization   1      15504 22169831 6614.0
## - LabourXticsHired                              1      16622 22170949 6614.0
## - Pond.TypeConcrete.pond                        1      18540 22172867 6614.1
## - AgeRange41.50.Yrs                             1      19994 22174321 6614.1
## - MainOccupOther.enterprise                     1      20489 22174816 6614.1
## - ProdScaleLarge                                1      26200 22180527 6614.3
## - EducationDegree                               1      40838 22195165 6614.7
## - FarmTypeFarm.Site                             1      44651 22198978 6614.8
## - EducationND.NCE                               1      44725 22199052 6614.8
## - AgeRangeAbove.60.Yrs                          1      45289 22199616 6614.8
```

```
## - MainOccupCivil.Servant                                    1      52962 22207289 6615.0
## - AgeRange51.60.Yrs                                          1      56547 22210874 6615.1
## - AgeRange31.40.Yrs                                          1      62327 22216654 6615.3
## - Experience5.and.below                                      1      86386 22240713 6615.9
## - Pond.TypeEarthen.pond                                      1      87585 22241912 6616.0
## - MarketTypeRestaurants..Eateries.or.Hotels                  1     102232 22256559 6616.4
## - MainOccupOther.Agric.Ventures                              1     103535 22257862 6616.4
## - ProdScaleMedium                                            1     109065 22263393 6616.5
## - RegionNorth                                                1     112304 22266632 6616.6
## - GenderFemale                                               1     127193 22281521 6617.0
## - Experience11.to.15                                         1     148013 22302340 6617.6
## - Experience16.and.above                                     1     150801 22305128 6617.7
## <none>                                                                 22154327 6620.0
## - FingSourceOn.Farm                                          1     310683 22465010 6622.0
## - OwnershipOwned                                             1     595210 22749537 6629.7
## - MarketTypeIndividuals                                      1     839060 22993387 6636.2
## - ProdScaleMicro.Small                                       1     942636 23096963 6638.9
## - MarketTypeRetailers                                        1    1285603 23439930 6647.9
##
## Step:  AIC=6613.56
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupEmployed.in.a.private.organization + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                                  Df Sum of Sq      RSS    AIC
## - FarmTypeCluster                                 1       1230 22155908 6607.2
## - FeedUsageAdds.local.feed                        1       1235 22155914 6607.2
## - EducationNone                                   1       2641 22157320 6607.2
## - EducationArabic                                 1       4476 22159155 6607.3
## - EducationPrimary                                1       5747 22160426 6607.3
## - EducationMSC.Above.Grad.studies.                1      10304 22164983 6607.4
## - MainOccupEmployed.in.a.private.organization     1      15416 22170095 6607.6
## - LabourXticsHired                                1      16352 22171030 6607.6
## - Pond.TypeConcrete.pond                          1      18717 22173396 6607.7
## - AgeRange41.50.Yrs                               1      19833 22174512 6607.7
## - MainOccupOther.enterprise                       1      20631 22175309 6607.7
## - ProdScaleLarge                                  1      26387 22181065 6607.9
## - EducationDegree                                 1      40627 22195305 6608.3
## - FarmTypeFarm.Site                               1      44748 22199426 6608.4
## - EducationND.NCE                                 1      44802 22199480 6608.4
## - AgeRangeAbove.60.Yrs                            1      45148 22199827 6608.4
## - MainOccupCivil.Servant                          1      52797 22207475 6608.6
## - AgeRange51.60.Yrs                               1      56403 22211082 6608.7
## - AgeRange31.40.Yrs                               1      62254 22216932 6608.9
## - Experience5.and.below                           1      86122 22240800 6609.5
```

```
## - Pond.TypeEarthen.pond                               1      87269 22241948 6609.5
## - MarketTypeRestaurants..Eateries.or.Hotels           1     103038 22257717 6610.0
## - MainOccupOther.Agric.Ventures                       1     103560 22258238 6610.0
## - ProdScaleMedium                                     1     109453 22264132 6610.2
## - RegionNorth                                         1     113095 22267774 6610.3
## - GenderFemale                                        1     128243 22282922 6610.7
## - Experience11.to.15                                  1     149150 22303828 6611.2
## - Experience16.and.above                             1     150450 22305128 6611.3
## <none>                                                         22154678 6613.6
## - FingSourceOn.Farm                                   1     310509 22465187 6615.6
## - OwnershipOwned                                      1     596347 22751025 6623.3
## - MarketTypeIndividuals                               1     844726 22999405 6629.9
## - ProdScaleMicro.Small                                1     942749 23097427 6632.5
## - MarketTypeRetailers                                 1    1290719 23445398 6641.6
##
## Step:  AIC=6607.18
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupEmployed.in.a.private.organization + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                 Df Sum of Sq      RSS    AIC
## - FeedUsageAdds.local.feed                       1       1168 22157076 6600.8
## - EducationNone                                  1       2703 22158611 6600.8
## - EducationArabic                                1       4412 22160320 6600.9
## - EducationPrimary                               1       5510 22161418 6600.9
## - EducationMSC.Above.Grad.studies.               1      10192 22166100 6601.1
## - MainOccupEmployed.in.a.private.organization    1      15018 22170926 6601.2
## - LabourXticsHired                               1      15156 22171064 6601.2
## - Pond.TypeConcrete.pond                         1      19309 22175218 6601.3
## - AgeRange41.50.Yrs                              1      20644 22176552 6601.3
## - MainOccupOther.enterprise                      1      20667 22176575 6601.3
## - ProdScaleLarge                                 1      26534 22182443 6601.5
## - EducationDegree                                1      40569 22196477 6601.9
## - AgeRangeAbove.60.Yrs                           1      44948 22200856 6602.0
## - EducationND.NCE                                1      45529 22201438 6602.0
## - MainOccupCivil.Servant                         1      51953 22207861 6602.2
## - AgeRange51.60.Yrs                              1      57837 22213745 6602.4
## - AgeRange31.40.Yrs                              1      63349 22219257 6602.5
## - FarmTypeFarm.Site                              1      75670 22231578 6602.8
## - Experience5.and.below                          1      85645 22241554 6603.1
## - Pond.TypeEarthen.pond                          1      95490 22251398 6603.4
## - MarketTypeRestaurants..Eateries.or.Hotels      1     102376 22258284 6603.6
## - MainOccupOther.Agric.Ventures                  1     103496 22259404 6603.6
## - ProdScaleMedium                                1     110841 22266749 6603.8
## - RegionNorth                                    1     112148 22268057 6603.8
## - GenderFemale                                   1     130756 22286664 6604.4
```

```
## - Experience16.and.above                               1      149316 22305224 6604.9
## - Experience11.to.15                                    1      149458 22305366 6604.9
## <none>                                                                22155908 6607.2
## - FingSourceOn.Farm                                     1      309498 22465406 6609.2
## - OwnershipOwned                                        1      632089 22787997 6617.9
## - MarketTypeIndividuals                                 1      851281 23007189 6623.7
## - ProdScaleMicro.Small                                  1      969421 23125329 6626.9
## - MarketTypeRetailers                                   1     1320066 23475975 6636.0
##
## Step:  AIC=6600.8
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
## - EducationNone                                1        2776 22159852 6594.5
## - EducationArabic                              1        4418 22161494 6594.5
## - EducationPrimary                             1        5162 22162238 6594.5
## - EducationMSC.Above.Grad.studies.             1       10378 22167454 6594.7
## - LabourXticsHired                             1       15095 22172171 6594.8
## - MainOccupEmployed.in.a.private.organization  1       15189 22172265 6594.8
## - Pond.TypeConcrete.pond                       1       19818 22176894 6594.9
## - MainOccupOther.enterprise                    1       20530 22177606 6595.0
## - AgeRange41.50.Yrs                            1       20673 22177748 6595.0
## - ProdScaleLarge                               1       26912 22183987 6595.1
## - EducationDegree                              1       41541 22198617 6595.5
## - EducationND.NCE                              1       45054 22202129 6595.6
## - AgeRangeAbove.60.Yrs                         1       45260 22202336 6595.6
## - MainOccupCivil.Servant                       1       52850 22209926 6595.8
## - AgeRange51.60.Yrs                            1       57937 22215013 6596.0
## - AgeRange31.40.Yrs                            1       63010 22220085 6596.1
## - FarmTypeFarm.Site                            1       74594 22231670 6596.4
## - Experience5.and.below                        1       86130 22243206 6596.8
## - Pond.TypeEarthen.pond                        1       96194 22253270 6597.0
## - MarketTypeRestaurants..Eateries.or.Hotels    1      101467 22258542 6597.2
## - MainOccupOther.Agric.Ventures                1      104119 22261194 6597.2
## - ProdScaleMedium                              1      111469 22268544 6597.4
## - RegionNorth                                  1      111564 22268640 6597.5
## - GenderFemale                                 1      130374 22287450 6598.0
## - Experience11.to.15                           1      149168 22306244 6598.5
## - Experience16.and.above                       1      151971 22309047 6598.6
## <none>                                                           22157076 6600.8
## - FingSourceOn.Farm                            1      308782 22465858 6602.8
## - OwnershipOwned                               1      643097 22800172 6611.8
## - MarketTypeIndividuals                        1      860477 23017553 6617.6
## - ProdScaleMicro.Small                         1      969085 23126161 6620.5
```

```
## - MarketTypeRetailers                                 1    1332215 23489291 6630.0
##
## Step:  AIC=6594.47
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                              Df Sum of Sq      RSS    AIC
## - EducationArabic                             1      4504 22164355 6588.2
## - EducationPrimary                            1      5384 22165236 6588.2
## - EducationMSC.Above.Grad.studies.            1      9806 22169657 6588.3
## - LabourXticsHired                            1     14522 22174374 6588.5
## - MainOccupEmployed.in.a.private.organization 1     15087 22174939 6588.5
## - Pond.TypeConcrete.pond                      1     19028 22178880 6588.6
## - MainOccupOther.enterprise                   1     20367 22180218 6588.6
## - AgeRange41.50.Yrs                           1     21223 22181075 6588.6
## - ProdScaleLarge                              1     26541 22186393 6588.8
## - EducationDegree                             1     39985 22199837 6589.2
## - EducationND.NCE                             1     43618 22203469 6589.3
## - AgeRangeAbove.60.Yrs                        1     45647 22205499 6589.3
## - MainOccupCivil.Servant                      1     52672 22212524 6589.5
## - AgeRange51.60.Yrs                           1     58151 22218003 6589.7
## - AgeRange31.40.Yrs                           1     63335 22223186 6589.8
## - FarmTypeFarm.Site                           1     73648 22233499 6590.1
## - Experience5.and.below                       1     84647 22244499 6590.4
## - Pond.TypeEarthen.pond                       1     95888 22255739 6590.7
## - MarketTypeRestaurants..Eateries.or.Hotels   1    100931 22260783 6590.8
## - MainOccupOther.Agric.Ventures               1    103588 22263439 6590.9
## - ProdScaleMedium                             1    110027 22269879 6591.1
## - RegionNorth                                 1    112533 22272385 6591.1
## - GenderFemale                                1    128129 22287981 6591.6
## - Experience11.to.15                          1    148869 22308720 6592.1
## - Experience16.and.above                      1    152308 22312159 6592.2
## <none>                                                    22159852 6594.5
## - FingSourceOn.Farm                           1    309497 22469349 6596.5
## - OwnershipOwned                              1    644570 22804422 6605.5
## - MarketTypeIndividuals                       1    859313 23019165 6611.2
## - ProdScaleMicro.Small                        1    977211 23137062 6614.3
## - MarketTypeRetailers                         1   1338998 23498849 6623.8
##
## Step:  AIC=6588.18
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
```

```
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq      RSS    AIC
## - EducationPrimary                              1      4514 22168870 6581.9
## - EducationMSC.Above.Grad.studies.              1     11566 22175922 6582.1
## - LabourXticsHired                              1     14211 22178566 6582.2
## - MainOccupEmployed.in.a.private.organization   1     14625 22178980 6582.2
## - Pond.TypeConcrete.pond                        1     19109 22183464 6582.3
## - AgeRange41.50.Yrs                             1     20204 22184559 6582.3
## - MainOccupOther.enterprise                     1     21155 22185511 6582.3
## - ProdScaleLarge                                1     26443 22190798 6582.5
## - AgeRangeAbove.60.Yrs                          1     43749 22208105 6583.0
## - EducationDegree                               1     45862 22210217 6583.0
## - EducationND.NCE                               1     49859 22214214 6583.1
## - MainOccupCivil.Servant                        1     54746 22219101 6583.3
## - AgeRange51.60.Yrs                             1     56043 22220398 6583.3
## - AgeRange31.40.Yrs                             1     62808 22227164 6583.5
## - FarmTypeFarm.Site                             1     73640 22237996 6583.8
## - Experience5.and.below                         1     83873 22248228 6584.1
## - Pond.TypeEarthen.pond                         1     94791 22259146 6584.4
## - MarketTypeRestaurants..Eateries.or.Hotels     1    100247 22264603 6584.5
## - MainOccupOther.Agric.Ventures                 1    103467 22267822 6584.6
## - ProdScaleMedium                               1    110926 22275281 6584.8
## - RegionNorth                                   1    117728 22282083 6585.0
## - GenderFemale                                  1    126635 22290990 6585.2
## - Experience11.to.15                            1    148958 22313313 6585.8
## - Experience16.and.above                        1    155722 22320077 6586.0
## <none>                                                    22164355 6588.2
## - FingSourceOn.Farm                             1    314849 22479204 6590.4
## - OwnershipOwned                                1    644671 22809026 6599.2
## - MarketTypeIndividuals                         1    856704 23021059 6604.9
## - ProdScaleMicro.Small                          1    981050 23145405 6608.1
## - MarketTypeRetailers                           1   1338868 23503223 6617.5
##
## Step:  AIC=6581.89
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     LabourXticsHired + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq      RSS    AIC
## - LabourXticsHired                              1     14302 22183172 6575.9
## - MainOccupEmployed.in.a.private.organization   1     14844 22183713 6575.9
## - EducationMSC.Above.Grad.studies.              1     15204 22184074 6575.9
## - Pond.TypeConcrete.pond                        1     19329 22188198 6576.0
```

```
## - AgeRange41.50.Yrs                                          1     19643 22188513 6576.0
## - MainOccupOther.enterprise                                  1     20309 22189178 6576.0
## - ProdScaleLarge                                             1     26607 22195476 6576.2
## - AgeRangeAbove.60.Yrs                                       1     43210 22212080 6576.7
## - MainOccupCivil.Servant                                     1     55077 22223946 6577.0
## - AgeRange51.60.Yrs                                          1     55393 22224263 6577.0
## - EducationDegree                                            1     58083 22226953 6577.1
## - EducationND.NCE                                            1     61783 22230653 6577.2
## - AgeRange31.40.Yrs                                          1     62464 22231334 6577.2
## - FarmTypeFarm.Site                                          1     73150 22242020 6577.5
## - Experience5.and.below                                      1     82340 22251210 6577.7
## - Pond.TypeEarthen.pond                                      1     96224 22265093 6578.1
## - MainOccupOther.Agric.Ventures                              1    100434 22269304 6578.2
## - MarketTypeRestaurants..Eateries.or.Hotels                  1    101370 22270240 6578.3
## - ProdScaleMedium                                            1    111484 22280354 6578.5
## - RegionNorth                                                1    125756 22294626 6578.9
## - GenderFemale                                               1    126411 22295281 6578.9
## - Experience11.to.15                                         1    150142 22319012 6579.6
## - Experience16.and.above                                     1    153744 22322614 6579.7
## <none>                                                              22168870 6581.9
## - FingSourceOn.Farm                                          1    325214 22494084 6584.4
## - OwnershipOwned                                             1    646828 22815697 6593.0
## - MarketTypeIndividuals                                      1    860437 23029307 6598.7
## - ProdScaleMicro.Small                                       1    978505 23147374 6601.8
## - MarketTypeRetailers                                        1   1334485 23503354 6611.1
##
## Step:  AIC=6575.87
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                  Df Sum of Sq      RSS    AIC
## - MainOccupEmployed.in.a.private.organization     1     12838 22196010 6569.8
## - EducationMSC.Above.Grad.studies.                1     12989 22196161 6569.8
## - AgeRange41.50.Yrs                               1     19009 22202181 6570.0
## - Pond.TypeConcrete.pond                          1     20232 22203403 6570.0
## - MainOccupOther.enterprise                       1     21189 22204361 6570.0
## - ProdScaleLarge                                  1     24811 22207983 6570.1
## - AgeRangeAbove.60.Yrs                            1     44596 22227767 6570.7
## - EducationDegree                                 1     55670 22238842 6571.0
## - AgeRange51.60.Yrs                               1     56305 22239477 6571.0
## - MainOccupCivil.Servant                          1     57191 22240363 6571.0
## - EducationND.NCE                                 1     61422 22244594 6571.1
## - AgeRange31.40.Yrs                               1     62370 22245542 6571.2
## - Experience5.and.below                           1     80077 22263249 6571.7
## - Pond.TypeEarthen.pond                           1     94009 22277181 6572.0
## - FarmTypeFarm.Site                               1     95029 22278201 6572.1
```

```
## - MainOccupOther.Agric.Ventures              1       99502 22282673 6572.2
## - MarketTypeRestaurants..Eateries.or.Hotels  1      102699 22285871 6572.3
## - ProdScaleMedium                            1      103594 22286766 6572.3
## - GenderFemale                               1      123505 22306677 6572.8
## - RegionNorth                                1      134410 22317582 6573.1
## - Experience16.and.above                     1      149883 22333055 6573.6
## - Experience11.to.15                         1      152744 22335916 6573.6
## <none>                                              22183172 6575.9
## - FingSourceOn.Farm                          1      326059 22509230 6578.3
## - OwnershipOwned                             1      702154 22885326 6588.4
## - MarketTypeIndividuals                      1      862579 23045751 6592.7
## - ProdScaleMicro.Small                       1      964273 23147445 6595.4
## - MarketTypeRetailers                        1     1325702 23508874 6604.8
##
## Step:  AIC=6569.81
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                              Df Sum of Sq      RSS    AIC
## - EducationMSC.Above.Grad.studies.            1        9328 22205338 6563.7
## - Pond.TypeConcrete.pond                      1       18451 22214461 6563.9
## - AgeRange41.50.Yrs                           1       18508 22214518 6563.9
## - MainOccupOther.enterprise                   1       23412 22219422 6564.0
## - ProdScaleLarge                              1       26341 22222351 6564.1
## - AgeRangeAbove.60.Yrs                        1       47159 22243169 6564.7
## - EducationDegree                             1       49825 22245835 6564.8
## - AgeRange51.60.Yrs                           1       56549 22252559 6565.0
## - EducationND.NCE                             1       58580 22254590 6565.0
## - AgeRange31.40.Yrs                           1       63782 22259792 6565.2
## - MainOccupCivil.Servant                      1       69729 22265739 6565.3
## - Experience5.and.below                       1       84448 22280458 6565.7
## - FarmTypeFarm.Site                           1       92419 22288429 6565.9
## - Pond.TypeEarthen.pond                       1       96654 22292664 6566.0
## - MarketTypeRestaurants..Eateries.or.Hotels   1      102388 22298398 6566.2
## - ProdScaleMedium                             1      104272 22300282 6566.3
## - MainOccupOther.Agric.Ventures               1      106107 22302117 6566.3
## - GenderFemale                                1      117735 22313745 6566.6
## - RegionNorth                                 1      134585 22330594 6567.1
## - Experience16.and.above                      1      152723 22348733 6567.6
## - Experience11.to.15                          1      153361 22349371 6567.6
## <none>                                               22196010 6569.8
## - FingSourceOn.Farm                           1      327508 22523518 6572.3
## - OwnershipOwned                              1      699118 22895128 6582.3
## - MarketTypeIndividuals                       1      850904 23046914 6586.3
## - ProdScaleMicro.Small                        1      972638 23168648 6589.5
## - MarketTypeRetailers                         1     1329904 23525914 6598.8
##
```

```
## Step:  AIC=6563.66
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##      RegionNorth + MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##      MainOccupOther.enterprise + EducationDegree + EducationND.NCE +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
## - AgeRange41.50.Yrs                            1     18620 22223958 6557.8
## - Pond.TypeConcrete.pond                       1     19260 22224598 6557.8
## - MainOccupOther.enterprise                    1     25806 22231144 6558.0
## - ProdScaleLarge                               1     32721 22238059 6558.1
## - EducationDegree                              1     41188 22246526 6558.4
## - EducationND.NCE                              1     49338 22254676 6558.6
## - AgeRangeAbove.60.Yrs                         1     50878 22256216 6558.6
## - AgeRange51.60.Yrs                            1     57202 22262540 6558.8
## - AgeRange31.40.Yrs                            1     63916 22269254 6559.0
## - Experience5.and.below                        1     83457 22288795 6559.5
## - Pond.TypeEarthen.pond                        1     89500 22294838 6559.7
## - FarmTypeFarm.Site                            1     92770 22298108 6559.8
## - MainOccupCivil.Servant                       1     94097 22299435 6559.8
## - MarketTypeRestaurants..Eateries.or.Hotels    1    100292 22305630 6560.0
## - MainOccupOther.Agric.Ventures                1    105059 22310397 6560.1
## - ProdScaleMedium                              1    114215 22319553 6560.4
## - GenderFemale                                 1    120407 22325745 6560.5
## - RegionNorth                                  1    130590 22335928 6560.8
## - Experience11.to.15                           1    153801 22359139 6561.5
## - Experience16.and.above                       1    161598 22366936 6561.7
## <none>                                                   22205338 6563.7
## - FingSourceOn.Farm                            1    329532 22534870 6566.2
## - OwnershipOwned                               1    694377 22899715 6576.0
## - MarketTypeIndividuals                        1    842066 23047404 6579.9
## - ProdScaleMicro.Small                         1    971193 23176531 6583.3
## - MarketTypeRetailers                          1   1327253 23532591 6592.6
##
## Step:  AIC=6557.76
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##      RegionNorth + MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##      MainOccupOther.enterprise + EducationDegree + EducationND.NCE +
##      AgeRange31.40.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
## - Pond.TypeConcrete.pond                       1     19406 22243364 6551.9
## - MainOccupOther.enterprise                    1     25037 22248994 6552.0
## - ProdScaleLarge                               1     32585 22256543 6552.2
## - AgeRangeAbove.60.Yrs                         1     32687 22256645 6552.2
```

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```
## - EducationDegree                                    1        42086 22266044 6552.5
## - EducationND.NCE                                     1        46976 22270933 6552.6
## - AgeRange51.60.Yrs                                   1        47714 22271671 6552.7
## - AgeRange31.40.Yrs                                   1        65749 22289707 6553.1
## - FarmTypeFarm.Site                                   1        86312 22310270 6553.7
## - Pond.TypeEarthen.pond                               1        89280 22313238 6553.8
## - Experience5.and.below                               1        90952 22314910 6553.8
## - MarketTypeRestaurants..Eateries.or.Hotels           1        95143 22319101 6553.9
## - MainOccupOther.Agric.Ventures                       1       110574 22334532 6554.4
## - MainOccupCivil.Servant                              1       112626 22336584 6554.4
## - ProdScaleMedium                                     1       118068 22342026 6554.6
## - GenderFemale                                        1       125152 22349110 6554.8
## - RegionNorth                                         1       132410 22356368 6555.0
## - Experience11.to.15                                  1       160004 22383962 6555.7
## - Experience16.and.above                             1       165827 22389784 6555.9
## <none>                                                          22223958 6557.8
## - FingSourceOn.Farm                                   1       326871 22550828 6560.2
## - OwnershipOwned                                      1       698540 22922498 6570.2
## - MarketTypeIndividuals                               1       824675 23048632 6573.5
## - ProdScaleMicro.Small                                1      1007947 23231905 6578.4
## - MarketTypeRetailers                                 1      1358031 23581988 6587.5
##
## Step:  AIC=6551.88
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationDegree + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq     RSS    AIC
## - MainOccupOther.enterprise                     1        24125 22267489 6546.1
## - ProdScaleLarge                                1        33778 22277142 6546.4
## - AgeRangeAbove.60.Yrs                          1        34863 22278227 6546.4
## - EducationDegree                               1        45775 22289139 6546.7
## - EducationND.NCE                               1        46471 22289835 6546.7
## - AgeRange51.60.Yrs                             1        47687 22291051 6546.8
## - AgeRange31.40.Yrs                             1        67548 22310912 6547.3
## - FarmTypeFarm.Site                             1        87576 22330940 6547.9
## - Experience5.and.below                         1        90066 22333430 6547.9
## - MarketTypeRestaurants..Eateries.or.Hotels     1       102290 22345654 6548.3
## - MainOccupOther.Agric.Ventures                 1       107080 22350444 6548.4
## - GenderFemale                                  1       113330 22356694 6548.6
## - MainOccupCivil.Servant                        1       113896 22357260 6548.6
## - ProdScaleMedium                               1       119842 22363206 6548.7
## - Experience11.to.15                            1       156121 22399485 6549.7
## - Experience16.and.above                        1       159421 22402785 6549.8
## - RegionNorth                                   1       160815 22404179 6549.9
## - Pond.TypeEarthen.pond                         1       231778 22475142 6551.8
## <none>                                                            22243364 6551.9
## - FingSourceOn.Farm                             1       335448 22578812 6554.6
## - OwnershipOwned                                1       698424 22941788 6564.3
```

```
## - MarketTypeIndividuals                          1      830147 23073511 6567.8
## - ProdScaleMicro.Small                            1     1004382 23247746 6572.4
## - MarketTypeRetailers                             1     1343716 23587080 6581.2
##
## Step:  AIC=6546.13
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     RegionNorth + MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     EducationDegree + EducationND.NCE + AgeRange31.40.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - ProdScaleLarge                             1       32024 22299513 6540.6
## - EducationDegree                            1       42358 22309847 6540.9
## - EducationND.NCE                            1       43554 22311043 6540.9
## - AgeRangeAbove.60.Yrs                       1       47107 22314596 6541.0
## - AgeRange51.60.Yrs                          1       49588 22317076 6541.1
## - AgeRange31.40.Yrs                          1       65230 22332718 6541.5
## - FarmTypeFarm.Site                          1       87329 22354817 6542.1
## - Experience5.and.below                      1       90093 22357581 6542.2
## - MainOccupOther.Agric.Ventures              1      100362 22367851 6542.5
## - MainOccupCivil.Servant                     1      106510 22373998 6542.6
## - MarketTypeRestaurants..Eateries.or.Hotels  1      108110 22375599 6542.7
## - GenderFemale                               1      111685 22379173 6542.8
## - ProdScaleMedium                            1      119329 22386818 6543.0
## - Experience16.and.above                     1      151873 22419362 6543.9
## - Experience11.to.15                         1      155560 22423049 6544.0
## - RegionNorth                                1      162480 22429968 6544.1
## - Pond.TypeEarthen.pond                      1      230863 22498352 6546.0
## <none>                                                   22267489 6546.1
## - FingSourceOn.Farm                          1      331703 22599192 6548.7
## - OwnershipOwned                             1      713264 22980752 6558.9
## - MarketTypeIndividuals                      1      843085 23110574 6562.3
## - ProdScaleMicro.Small                       1     1003095 23270583 6566.5
## - MarketTypeRetailers                        1     1352077 23619566 6575.6
##
## Step:  AIC=6540.59
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + Experience5.and.below + RegionNorth +
##     MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     EducationDegree + EducationND.NCE + AgeRange31.40.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - EducationDegree                            1       41964 22341477 6535.3
## - EducationND.NCE                            1       43052 22342565 6535.4
## - AgeRangeAbove.60.Yrs                       1       47097 22346609 6535.5
## - AgeRange51.60.Yrs                          1       49215 22348728 6535.5
```

```
## - AgeRange31.40.Yrs                              1       66154 22365666 6536.0
## - FarmTypeFarm.Site                              1       80911 22380424 6536.4
## - Experience5.and.below                          1       87264 22386777 6536.6
## - ProdScaleMedium                                1      101336 22400849 6536.9
## - MainOccupOther.Agric.Ventures                  1      101408 22400921 6536.9
## - MainOccupCivil.Servant                         1      104512 22404025 6537.0
## - MarketTypeRestaurants..Eateries.or.Hotels      1      106028 22405540 6537.1
## - GenderFemale                                   1      108441 22407953 6537.1
## - Experience16.and.above                         1      159042 22458555 6538.5
## - RegionNorth                                    1      160450 22459963 6538.5
## - Experience11.to.15                             1      176629 22476141 6539.0
## - Pond.TypeEarthen.pond                          1      222666 22522179 6540.2
## <none>                                                         22299513 6540.6
## - FingSourceOn.Farm                              1      324829 22624342 6543.0
## - OwnershipOwned                                 1      721451 23020964 6553.6
## - MarketTypeIndividuals                          1      829930 23129443 6556.4
## - ProdScaleMicro.Small                           1     1110927 23410440 6563.8
## - MarketTypeRetailers                            1     1410768 23710280 6571.5
##
## Step:  AIC=6535.32
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + Experience5.and.below + RegionNorth +
##     MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     EducationND.NCE + AgeRange31.40.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                              Df Sum of Sq      RSS    AIC
## - EducationND.NCE                              1       14296 22355773 6529.3
## - AgeRangeAbove.60.Yrs                         1       41106 22382584 6530.0
## - AgeRange51.60.Yrs                            1       46907 22388384 6530.2
## - AgeRange31.40.Yrs                            1       67401 22408878 6530.7
## - Experience5.and.below                        1       79525 22421002 6531.1
## - FarmTypeFarm.Site                            1       83391 22424868 6531.2
## - MainOccupOther.Agric.Ventures                1      100548 22442025 6531.6
## - MainOccupCivil.Servant                       1      104661 22446138 6531.8
## - ProdScaleMedium                              1      107299 22448776 6531.8
## - GenderFemale                                 1      110530 22452007 6531.9
## - MarketTypeRestaurants..Eateries.or.Hotels    1      115819 22457296 6532.1
## - RegionNorth                                  1      162888 22504365 6533.3
## - Experience16.and.above                       1      171203 22512680 6533.6
## - Experience11.to.15                           1      185521 22526999 6533.9
## - Pond.TypeEarthen.pond                        1      197586 22539063 6534.3
## <none>                                                         22341477 6535.3
## - FingSourceOn.Farm                            1      337081 22678558 6538.0
## - OwnershipOwned                               1      719766 23061243 6548.2
## - MarketTypeIndividuals                        1      803767 23145244 6550.4
## - ProdScaleMicro.Small                         1     1094912 23436389 6558.0
## - MarketTypeRetailers                          1     1435456 23776933 6566.8
##
## Step:  AIC=6529.3
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
```

```
##      Experience16.and.above + Experience5.and.below + RegionNorth +
##      MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##      AgeRange31.40.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##      FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                 Df Sum of Sq      RSS    AIC
## - AgeRangeAbove.60.Yrs                           1      37380 22393153 6523.9
## - AgeRange51.60.Yrs                              1      44037 22399810 6524.1
## - AgeRange31.40.Yrs                              1      64018 22419791 6524.6
## - Experience5.and.below                          1      79949 22435722 6525.1
## - FarmTypeFarm.Site                              1      80857 22436631 6525.1
## - MainOccupCivil.Servant                         1      98326 22454099 6525.6
## - MainOccupOther.Agric.Ventures                  1     101131 22456905 6525.6
## - ProdScaleMedium                                1     104499 22460272 6525.7
## - GenderFemale                                   1     111740 22467513 6525.9
## - MarketTypeRestaurants..Eateries.or.Hotels      1     112036 22467810 6525.9
## - RegionNorth                                    1     159778 22515551 6527.2
## - Experience16.and.above                         1     173007 22528780 6527.6
## - Experience11.to.15                             1     183700 22539474 6527.9
## - Pond.TypeEarthen.pond                          1     195957 22551730 6528.2
## <none>                                                    22355773 6529.3
## - FingSourceOn.Farm                              1     332719 22688492 6531.9
## - OwnershipOwned                                 1     707720 23063493 6541.9
## - MarketTypeIndividuals                          1     808507 23164281 6544.5
## - ProdScaleMicro.Small                           1    1085035 23440808 6551.8
## - MarketTypeRetailers                            1    1434108 23789881 6560.8
##
## Step:  AIC=6523.91
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##      Experience16.and.above + Experience5.and.below + RegionNorth +
##      MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##      AgeRange31.40.Yrs + AgeRange51.60.Yrs + OwnershipOwned +
##      MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##      FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                 Df Sum of Sq      RSS    AIC
## - AgeRange51.60.Yrs                              1      27914 22421067 6518.3
## - AgeRange31.40.Yrs                              1      45369 22438522 6518.7
## - MainOccupCivil.Servant                         1      89452 22482605 6519.9
## - Experience5.and.below                          1      89722 22482875 6519.9
## - FarmTypeFarm.Site                              1      92391 22485544 6520.0
## - MainOccupOther.Agric.Ventures                  1      99803 22492956 6520.2
## - MarketTypeRestaurants..Eateries.or.Hotels      1     106651 22499804 6520.4
## - ProdScaleMedium                                1     111852 22505005 6520.5
## - GenderFemale                                   1     117895 22511048 6520.7
## - RegionNorth                                    1     185710 22578863 6522.5
## - Experience16.and.above                         1     185733 22578886 6522.5
## - Experience11.to.15                             1     187558 22580711 6522.6
## - Pond.TypeEarthen.pond                          1     192949 22586102 6522.7
## <none>                                                    22393153 6523.9
## - FingSourceOn.Farm                              1     336451 22729604 6526.6
```

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## - OwnershipOwned                                     1    715443 23108596 6536.6
## - MarketTypeIndividuals                               1    806897 23200050 6539.1
## - ProdScaleMicro.Small                                1   1061161 23454314 6545.7
## - MarketTypeRetailers                                 1   1433212 23826365 6555.3
##
## Step:  AIC=6518.25
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + Experience5.and.below + RegionNorth +
##     MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     AgeRange31.40.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - AgeRange31.40.Yrs                          1     29799 22450866 6512.6
## - Experience5.and.below                      1     91811 22512877 6514.3
## - FarmTypeFarm.Site                          1     96213 22517279 6514.4
## - MainOccupCivil.Servant                     1    102939 22524006 6514.6
## - MainOccupOther.Agric.Ventures              1    103870 22524936 6514.7
## - MarketTypeRestaurants..Eateries.or.Hotels  1    104252 22525319 6514.7
## - ProdScaleMedium                            1    112474 22533541 6514.9
## - GenderFemale                               1    122598 22543665 6515.2
## - Pond.TypeEarthen.pond                      1    179856 22600923 6516.7
## - Experience11.to.15                         1    189685 22610751 6517.0
## - RegionNorth                                1    204737 22625804 6517.4
## - Experience16.and.above                     1    204868 22625934 6517.4
## <none>                                                    22421067 6518.3
## - FingSourceOn.Farm                          1    343895 22764961 6521.1
## - OwnershipOwned                             1    721245 23142311 6531.1
## - MarketTypeIndividuals                      1    829041 23250108 6534.0
## - ProdScaleMicro.Small                       1   1078833 23499900 6540.5
## - MarketTypeRetailers                        1   1420631 23841698 6549.3
##
## Step:  AIC=6512.65
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + Experience5.and.below + RegionNorth +
##     MainOccupCivil.Servant + MainOccupOther.Agric.Ventures +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - MainOccupCivil.Servant                     1     87480 22538346 6508.6
## - Experience5.and.below                      1     88361 22539227 6508.6
## - FarmTypeFarm.Site                          1    101445 22552311 6509.0
## - ProdScaleMedium                            1    103300 22554166 6509.0
## - MainOccupOther.Agric.Ventures              1    106774 22557640 6509.1
## - MarketTypeRestaurants..Eateries.or.Hotels  1    111945 22562811 6509.3
## - GenderFemale                               1    140126 22590992 6510.0
## - Experience11.to.15                         1    175420 22626286 6511.0
## - Pond.TypeEarthen.pond                      1    179594 22630461 6511.1
## - RegionNorth                                1    181502 22632368 6511.1
## - Experience16.and.above                     1    184166 22635032 6511.2
```

```
## <none>                                                       22450866 6512.6
## - FingSourceOn.Farm                              1       332511 22783377 6515.2
## - OwnershipOwned                                 1       707059 23157926 6525.1
## - MarketTypeIndividuals                          1       813462 23264328 6527.9
## - ProdScaleMicro.Small                           1      1076779 23527645 6534.8
## - MarketTypeRetailers                            1      1451936 23902802 6544.4
##
## Step:  AIC=6508.61
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + Experience5.and.below + RegionNorth +
##     MainOccupOther.Agric.Ventures + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - Experience5.and.below                      1     79443 22617790 6504.3
## - MainOccupOther.Agric.Ventures              1     81094 22619441 6504.4
## - ProdScaleMedium                            1     97636 22635982 6504.8
## - FarmTypeFarm.Site                          1    106171 22644517 6505.1
## - MarketTypeRestaurants..Eateries.or.Hotels  1    117992 22656339 6505.4
## - GenderFemale                               1    124890 22663237 6505.6
## - RegionNorth                                1    142491 22680837 6506.0
## - Pond.TypeEarthen.pond                      1    177041 22715387 6507.0
## - Experience11.to.15                         1    197869 22736215 6507.5
## - Experience16.and.above                     1    198444 22736790 6507.5
## <none>                                                   22538346 6508.6
## - FingSourceOn.Farm                          1    325574 22863920 6510.9
## - OwnershipOwned                             1    712727 23251073 6521.2
## - MarketTypeIndividuals                      1    840909 23379255 6524.5
## - ProdScaleMicro.Small                       1   1046156 23584502 6529.8
## - MarketTypeRetailers                        1   1446031 23984377 6540.1
##
## Step:  AIC=6504.34
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + RegionNorth + MainOccupOther.Agric.Ventures +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                             Df Sum of Sq      RSS    AIC
## - MainOccupOther.Agric.Ventures              1     91691 22709480 6500.4
## - ProdScaleMedium                            1    104630 22722420 6500.7
## - MarketTypeRestaurants..Eateries.or.Hotels  1    106993 22724782 6500.8
## - FarmTypeFarm.Site                          1    110396 22728185 6500.9
## - GenderFemale                               1    140018 22757807 6501.7
## - RegionNorth                                1    166436 22784226 6502.4
## - Pond.TypeEarthen.pond                      1    200352 22818141 6503.3
## <none>                                                   22617790 6504.3
## - Experience16.and.above                     1    268408 22886197 6505.1
## - FingSourceOn.Farm                          1    282978 22900767 6505.5
## - Experience11.to.15                         1    297587 22915377 6505.9
## - OwnershipOwned                             1    730454 23348244 6517.3
## - MarketTypeIndividuals                      1    896327 23514117 6521.6
```

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## - ProdScaleMicro.Small                            1    1160675 23778464 6528.4
## - MarketTypeRetailers                             1    1475688 24093477 6536.4
##
## Step:  AIC=6500.39
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + RegionNorth + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
## - FarmTypeFarm.Site                            1     100003 22809484 6496.7
## - ProdScaleMedium                              1     102708 22812188 6496.7
## - MarketTypeRestaurants..Eateries.or.Hotels    1     114329 22823810 6497.0
## - GenderFemale                                 1     129914 22839394 6497.5
## - RegionNorth                                  1     157841 22867321 6498.2
## - Pond.TypeEarthen.pond                        1     204693 22914173 6499.4
## <none>                                                     22709480 6500.4
## - Experience16.and.above                       1     296056 23005537 6501.9
## - FingSourceOn.Farm                            1     300598 23010079 6502.0
## - Experience11.to.15                           1     322044 23031525 6502.6
## - OwnershipOwned                               1     721924 23431405 6513.0
## - MarketTypeIndividuals                        1     917347 23626827 6518.1
## - ProdScaleMicro.Small                         1    1130980 23840461 6523.6
## - MarketTypeRetailers                          1    1502607 24212087 6533.0
##
## Step:  AIC=6496.65
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + RegionNorth + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
## - ProdScaleMedium                              1      99722 22909205 6492.9
## - MarketTypeRestaurants..Eateries.or.Hotels    1     107989 22917473 6493.1
## - GenderFemale                                 1     113675 22923158 6493.3
## - RegionNorth                                  1     138365 22947848 6493.9
## - Pond.TypeEarthen.pond                        1     150322 22959805 6494.2
## <none>                                                     22809484 6496.7
## - Experience11.to.15                           1     302184 23111667 6498.3
## - Experience16.and.above                       1     307422 23116906 6498.4
## - FingSourceOn.Farm                            1     311569 23121053 6498.5
## - OwnershipOwned                               1     680329 23489813 6508.1
## - MarketTypeIndividuals                        1     928587 23738071 6514.5
## - ProdScaleMicro.Small                         1    1071787 23881270 6518.2
## - MarketTypeRetailers                          1    1643846 24453330 6532.6
##
## Step:  AIC=6492.9
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + Experience16.and.above +
##     RegionNorth + OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels
##     MarketTypeRetailers + GenderFemale + Pond.TypeEarthen.pond +
##     FingSourceOn.Farm
##
##                                               Df Sum of Sq      RSS    AIC
```

```
## - MarketTypeRestaurants..Eateries.or.Hotels  1     102267 23011472 6489.2
## - GenderFemale                               1     108405 23017610 6489.4
## - RegionNorth                                1     135534 23044739 6490.1
## - Pond.TypeEarthen.pond                      1     138867 23048072 6490.2
## <none>                                                22909205 6492.9
## - FingSourceOn.Farm                          1     298855 23208060 6494.4
## - Experience11.to.15                         1     312924 23222129 6494.7
## - Experience16.and.above                     1     323573 23232778 6495.0
## - OwnershipOwned                             1     695684 23604889 6504.7
## - MarketTypeIndividuals                      1     883482 23792687 6509.5
## - ProdScaleMicro.Small                       1    1644685 24553890 6528.7
## - MarketTypeRetailers                        1    1712238 24621443 6530.4
##
## Step:  AIC=6489.2
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + Experience16.and.above +
##     RegionNorth + OwnershipOwned + MarketTypeIndividuals + MarketTypeRetailers +
##     GenderFemale + Pond.TypeEarthen.pond + FingSourceOn.Farm
##
##                         Df Sum of Sq      RSS    AIC
## - GenderFemale           1     98624 23110096 6485.4
## - Pond.TypeEarthen.pond  1    123025 23134497 6486.0
## - RegionNorth            1    145134 23156607 6486.6
## <none>                             23011472 6489.2
## - FingSourceOn.Farm      1    304992 23316464 6490.8
## - Experience11.to.15     1    316625 23328097 6491.1
## - Experience16.and.above 1    345928 23357400 6491.9
## - OwnershipOwned         1    697448 23708920 6501.0
## - MarketTypeIndividuals  1    837978 23849450 6504.6
## - ProdScaleMicro.Small   1   1638590 24650062 6524.7
## - MarketTypeRetailers    1   1841135 24852607 6529.7
##
## Step:  AIC=6485.39
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + Experience16.and.above +
##     RegionNorth + OwnershipOwned + MarketTypeIndividuals + MarketTypeRetailers +
##     Pond.TypeEarthen.pond + FingSourceOn.Farm
##
##                         Df Sum of Sq      RSS    AIC
## - RegionNorth            1    118157 23228253 6482.1
## - Pond.TypeEarthen.pond  1    163485 23273581 6483.3
## <none>                             23110096 6485.4
## - FingSourceOn.Farm      1    266194 23376290 6486.0
## - Experience11.to.15     1    324876 23434972 6487.5
## - Experience16.and.above 1    378057 23488153 6488.9
## - OwnershipOwned         1    694295 23804391 6497.0
## - MarketTypeIndividuals  1    828509 23938605 6500.4
## - ProdScaleMicro.Small   1   1630855 24740951 6520.5
## - MarketTypeRetailers    1   1857363 24967459 6526.1
##
## Step:  AIC=6482.08
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + Experience16.and.above +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRetailers +
##     Pond.TypeEarthen.pond + FingSourceOn.Farm
##
##                           Df Sum of Sq      RSS    AIC
```

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```
## - Pond.TypeEarthen.pond   1    148324 23376577 6479.5
## <none>                               23228253 6482.1
## - FingSourceOn.Farm        1    274267 23502521 6482.8
## - Experience11.to.15       1    396967 23625220 6486.0
## - Experience16.and.above   1    456384 23684637 6487.5
## - OwnershipOwned           1    721415 23949668 6494.3
## - MarketTypeIndividuals    1    734165 23962418 6494.6
## - ProdScaleMicro.Small     1   1793276 25021529 6521.0
## - MarketTypeRetailers      1   1982884 25211137 6525.6
##
## Step:  AIC=6479.55
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + Experience16.and.above +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRetailers +
##     FingSourceOn.Farm
##
##                          Df Sum of Sq      RSS    AIC
## <none>                               23376577 6479.5
## - FingSourceOn.Farm        1    301723 23678300 6480.9
## - Experience11.to.15       1    453406 23829983 6484.8
## - OwnershipOwned           1    589410 23965987 6488.3
## - Experience16.and.above   1    599968 23976545 6488.6
## - MarketTypeIndividuals    1    707653 24084231 6491.3
## - ProdScaleMicro.Small     1   1953452 25330029 6522.0
## - MarketTypeRetailers      1   1999977 25376555 6523.1
```

```r
summary(stepwise_modelPb)
```

```
##
## Call:
## lm(formula = Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRetailers + FingSourceOn.Farm, data = RegDatP)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1097.26   -94.67     8.43   107.24   651.97
##
## Coefficients:
##                       Estimate Std. Error t value Pr(>|t|)
## (Intercept)             131.77      21.37   6.167 1.28e-09 ***
## ProdScaleMicro.Small   -119.05      16.80  -7.087 3.86e-12 ***
## Experience11.to.15       87.61      25.66   3.414 0.000683 ***
## Experience16.and.above  107.16      27.28   3.927 9.58e-05 ***
## OwnershipOwned           79.67      20.47   3.893 0.000110 ***
## MarketTypeIndividuals   124.17      29.11   4.265 2.32e-05 ***
## MarketTypeRetailers    -148.30      20.68  -7.171 2.20e-12 ***
## FingSourceOn.Farm       -56.57      20.31  -2.785 0.005519 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 197.2 on 601 degrees of freedom
## Multiple R-squared:  0.2356, Adjusted R-squared:  0.2267
## F-statistic: 26.46 on 7 and 601 DF,  p-value: < 2.2e-16
```

Running stepwise regression in stats package - COVID

```
library(stats)
```

STEP 5 - COVID

Regression model- COVID

Because I have many variable to be included in the model, there are many ways of including them without typing them all out. You can use dot [.] to represent all, or use myData[,2:71] to select the columns you wish to include - 2 to 71 in that case.

```
modelC = lm(Profit.kg ~ ., data = RegDatC)
summary(modelC)
```

```
##
## Call:
## lm(formula = Profit.kg ~ ., data = RegDatC)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1043.36  -124.05    10.62   161.69   958.30
##
## Coefficients: (14 not defined because of singularities)
##                                        Estimate Std. Error t value
## (Intercept)                             185.488     86.934   2.134
## ProdScaleLarge                          -64.943     96.462  -0.673
## ProdScaleMedium                          41.920     41.348   1.014
## ProdScaleMicro.Small                   -108.629     30.574  -3.553
## ProdScaleSmall                               NA         NA      NA
## Experience11.to.15                       78.954     43.710   1.806
## Experience16.and.above                   43.981     49.287   0.892
## Experience5.and.below                    -7.294     29.843  -0.244
## Experience6.to.10                            NA         NA      NA
## FeedUsageAdds.local.feed                 -9.564     37.132  -0.258
## FeedUsageCommercial.feed.only                NA         NA      NA
## RegionNorth                               7.584     30.898   0.245
## RegionSouth                                  NA         NA      NA
## MainOccupCivil.Servant                  -13.214     43.734  -0.302
## MainOccupEmployed.in.a.private.organization  1.732   65.685   0.026
## MainOccupFish.Farming                   -28.169     33.812  -0.833
## MainOccupOther.Agric.Ventures           150.108     47.093   3.187
## MainOccupOther.enterprise               -66.054     74.427  -0.888
## MainOccupPersonal.Business                   NA         NA      NA
## EducationArabic                          50.969    127.534   0.400
## EducationDegree                          60.638     36.944   1.641
## EducationMSC.Above.Grad.studies.        132.749     55.111   2.409
## EducationND.NCE                          29.701     39.309   0.756
## EducationNone                             6.268    278.745   0.022
## EducationPrimary                         11.533     86.404   0.133
## EducationSecondary                           NA         NA      NA
```

```
## LabourXticsHired                                  -4.097   29.286  -0.140
## LabourXticsHousehold                                  NA       NA      NA
## AgeRange31.40.Yrs                                 -61.926   54.309  -1.140
## AgeRange41.50.Yrs                                 -95.242   56.618  -1.682
## AgeRange51.60.Yrs                                 -92.411   60.698  -1.522
## AgeRangeAbove.60.Yrs                              -59.293   72.443  -0.818
## AgeRangeLess.than.30.Yrs                              NA       NA      NA
## OwnershipOwned                                    122.850   35.423   3.468
## OwnershipRented.Leased                                NA       NA      NA
## MarketTypeIndividuals                             123.933   48.112   2.576
## MarketTypeProcessors                              -57.844   99.458  -0.582
## MarketTypeRestaurants..Eateries.or.Hotels         124.993   53.459   2.338
## MarketTypeRetailers                              -168.398   32.916  -5.116
## MarketTypeWholesalers..Bulk.buyers.                   NA       NA      NA
## GenderFemale                                      -13.410   33.868  -0.396
## GenderMale                                            NA       NA      NA
## Pond.TypeConcrete.pond                            -72.990   33.451  -2.182
## Pond.TypeEarthen.pond                              17.869   38.673   0.462
## Pond.TypeMobile.pond                                  NA       NA      NA
## FarmTypeCluster                                   -11.963   51.588  -0.232
## FarmTypeFarm.Site                                 -22.194   32.528  -0.682
## FarmTypeHomestead                                     NA       NA      NA
## FingSourceOn.Farm                                  -5.032   32.727  -0.154
## FingSourceOther.farms.or.hatcheries                   NA       NA      NA
##                                                  Pr(>|t|)
## (Intercept)                                      0.033385 *
## ProdScaleLarge                                   0.501115
## ProdScaleMedium                                  0.311175
## ProdScaleMicro.Small                             0.000419 ***
## ProdScaleSmall                                         NA
## Experience11.to.15                               0.071505 .
## Experience16.and.above                           0.372666
## Experience5.and.below                            0.807012
## Experience6.to.10                                      NA
## FeedUsageAdds.local.feed                         0.796852
## FeedUsageCommercial.feed.only                          NA
## RegionNorth                                      0.806208
## RegionSouth                                            NA
## MainOccupCivil.Servant                           0.762673
## MainOccupEmployed.in.a.private.organization      0.978978
## MainOccupFish.Farming                            0.405211
## MainOccupOther.Agric.Ventures                    0.001530 **
## MainOccupOther.enterprise                        0.375259
## MainOccupPersonal.Business                             NA
## EducationArabic                                  0.689592
## EducationDegree                                  0.101385
## EducationMSC.Above.Grad.studies.                 0.016389 *
## EducationND.NCE                                  0.450266
## EducationNone                                    0.982071
## EducationPrimary                                 0.893870
## EducationSecondary                                     NA
## LabourXticsHired                                 0.888811
## LabourXticsHousehold                                   NA
## AgeRange31.40.Yrs                                0.254759
```

```
## AgeRange41.50.Yrs                          0.093194 .
## AgeRange51.60.Yrs                          0.128563
## AgeRangeAbove.60.Yrs                        0.413490
## AgeRangeLess.than.30.Yrs                          NA
## OwnershipOwned                             0.000572 ***
## OwnershipRented.Leased                            NA
## MarketTypeIndividuals                      0.010300 *
## MarketTypeProcessors                       0.561116
## MarketTypeRestaurants..Eateries.or.Hotels  0.019798 *
## MarketTypeRetailers                        4.54e-07 ***
## MarketTypeWholesalers..Bulk.buyers.               NA
## GenderFemale                               0.692331
## GenderMale                                       NA
## Pond.TypeConcrete.pond                     0.029600 *
## Pond.TypeEarthen.pond                      0.644247
## Pond.TypeMobile.pond                             NA
## FarmTypeCluster                            0.816721
## FarmTypeFarm.Site                          0.495384
## FarmTypeHomestead                                NA
## FingSourceOn.Farm                          0.877864
## FingSourceOther.farms.or.hatcheries              NA
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 271.1 on 473 degrees of freedom
## Multiple R-squared:  0.2182, Adjusted R-squared:  0.1604
## F-statistic: 3.773 on 35 and 473 DF,  p-value: 2.631e-11
```

STEP 6 - COVID

Stepwise regression - BACKWARD - COVID

```
stepwise_modelCb <- step(modelC, direction = "backward", k = log(nrow(RegDatC)))
```

```
## Start:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     MainOccupPersonal.Business + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + EducationSecondary + LabourXticsHired +
##     LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##     OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##     GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FarmTypeHomestead + FingSourceOn.Farm + FingSourceOther.farms.or.hatcheries
```

```
##
##
## Step:   AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     MainOccupPersonal.Business + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + EducationSecondary + LabourXticsHired +
##     LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##     OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##     GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FarmTypeHomestead + FingSourceOn.Farm
##
##
## Step:   AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     MainOccupPersonal.Business + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + EducationSecondary + LabourXticsHired +
##     LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##     OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##     GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     Pond.TypeMobile.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##
## Step:   AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     MainOccupPersonal.Business + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##     EducationPrimary + EducationSecondary + LabourXticsHired +
##     LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
```

```
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + GenderMale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + MarketTypeWholesalers..Bulk.buyers. +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + OwnershipRented.Leased + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
```

```
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + AgeRangeLess.than.30.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##      FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      LabourXticsHousehold + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##      MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
##      EducationPrimary + EducationSecondary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##      FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      MainOccupPersonal.Business + EducationArabic + EducationDegree +
##      EducationMSC.Above.Grad.studies. + EducationND.NCE + EducationNone +
```

```
##     EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + RegionSouth +
##     MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     FeedUsageCommercial.feed.only + RegionNorth + MainOccupCivil.Servant +
##     MainOccupEmployed.in.a.private.organization + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##     FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##     Experience5.and.below + Experience6.to.10 + FeedUsageAdds.local.feed +
##     RegionNorth + MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
```

```
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      ProdScaleSmall + Experience11.to.15 + Experience16.and.above +
##      Experience5.and.below + FeedUsageAdds.local.feed + RegionNorth +
##      MainOccupCivil.Servant + MainOccupEmployed.in.a.private.organization +
##      MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##      EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##
## Step:  AIC=5890.21
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##      Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##      FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##      MainOccupEmployed.in.a.private.organization + MainOccupFish.Farming +
##      MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##      EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##      EducationND.NCE + EducationNone + EducationPrimary + LabourXticsHired +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##      Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site +
##      FingSourceOn.Farm
##
##                                                 Df Sum of Sq      RSS    AIC
## - EducationNone                                  1        37 34752584 5884.0
## - MainOccupEmployed.in.a.private.organization    1        51 34752598 5884.0
## - EducationPrimary                               1      1309 34753856 5884.0
## - LabourXticsHired                               1      1438 34753985 5884.0
## - FingSourceOn.Farm                              1      1737 34754284 5884.0
## - FarmTypeCluster                                1      3951 34756498 5884.0
## - Experience5.and.below                          1      4389 34756936 5884.0
## - RegionNorth                                    1      4427 34756974 5884.0
## - FeedUsageAdds.local.feed                       1      4874 34757421 5884.0
## - MainOccupCivil.Servant                         1      6708 34759254 5884.1
## - GenderFemale                                   1     11518 34764065 5884.1
## - EducationArabic                                1     11735 34764282 5884.1
## - Pond.TypeEarthen.pond                          1     15687 34768234 5884.2
## - MarketTypeProcessors                           1     24852 34777399 5884.3
## - ProdScaleLarge                                 1     33303 34785850 5884.5
## - FarmTypeFarm.Site                              1     34204 34786751 5884.5
## - EducationND.NCE                                1     41948 34794495 5884.6
## - AgeRangeAbove.60.Yrs                           1     49221 34801768 5884.7
```

```
## - MainOccupFish.Farming                                  1      50994 34803540 5884.7
## - MainOccupOther.enterprise                               1      57872 34810419 5884.8
## - Experience16.and.above                                  1      58504 34811051 5884.8
## - ProdScaleMedium                                         1      75521 34828068 5885.1
## - AgeRange31.40.Yrs                                       1      95527 34848074 5885.4
## - AgeRange51.60.Yrs                                       1     170301 34922847 5886.5
## - EducationDegree                                         1     197943 34950490 5886.9
## - AgeRange41.50.Yrs                                       1     207907 34960454 5887.0
## - Experience11.to.15                                      1     239723 34992270 5887.5
## - Pond.TypeConcrete.pond                                  1     349817 35102364 5889.1
## - MarketTypeRestaurants..Eateries.or.Hotels              1     401653 35154200 5889.8
## - EducationMSC.Above.Grad.studies.                        1     426291 35178838 5890.2
## <none>                                                            34752547 5890.2
## - MarketTypeIndividuals                                   1     487517 35240064 5891.1
## - MainOccupOther.Agric.Ventures                           1     746470 35499016 5894.8
## - OwnershipOwned                                          1     883705 35636252 5896.8
## - ProdScaleMicro.Small                                    1     927509 35680056 5897.4
## - MarketTypeRetailers                                     1    1923081 36675628 5911.4
##
## Step:  AIC=5883.98
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupEmployed.in.a.private.organization + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq      RSS    AIC
## - MainOccupEmployed.in.a.private.organization  1         51 34752635 5877.7
## - EducationPrimary                             1       1295 34753879 5877.8
## - LabourXticsHired                             1       1421 34754005 5877.8
## - FingSourceOn.Farm                            1       1732 34754316 5877.8
## - FarmTypeCluster                              1       3943 34756527 5877.8
## - Experience5.and.below                        1       4357 34756941 5877.8
## - RegionNorth                                  1       4398 34756982 5877.8
## - FeedUsageAdds.local.feed                     1       4901 34757485 5877.8
## - MainOccupCivil.Servant                       1       6748 34759332 5877.8
## - GenderFemale                                 1      11500 34764084 5877.9
## - EducationArabic                              1      11715 34764299 5877.9
## - Pond.TypeEarthen.pond                        1      15691 34768275 5878.0
## - MarketTypeProcessors                         1      24884 34777468 5878.1
## - ProdScaleLarge                               1      33364 34785948 5878.2
## - FarmTypeFarm.Site                            1      34170 34786754 5878.2
## - EducationND.NCE                              1      42050 34794634 5878.4
## - AgeRangeAbove.60.Yrs                         1      49190 34801774 5878.5
## - MainOccupFish.Farming                        1      51440 34804024 5878.5
## - MainOccupOther.enterprise                    1      57997 34810581 5878.6
## - Experience16.and.above                       1      58563 34811147 5878.6
```

```
## - ProdScaleMedium                                1     75535 34828119 5878.8
## - AgeRange31.40.Yrs                               1     95498 34848082 5879.1
## - AgeRange51.60.Yrs                               1    170287 34922871 5880.2
## - EducationDegree                                 1    199692 34952276 5880.7
## - AgeRange41.50.Yrs                               1    207947 34960531 5880.8
## - Experience11.to.15                              1    239687 34992271 5881.2
## - Pond.TypeConcrete.pond                          1    350850 35103434 5882.9
## - MarketTypeRestaurants..Eateries.or.Hotels       1    401623 35154207 5883.6
## - EducationMSC.Above.Grad.studies.                1    427821 35180405 5884.0
## <none>                                                     34752584 5884.0
## - MarketTypeIndividuals                           1    487528 35240112 5884.8
## - MainOccupOther.Agric.Ventures                   1    747733 35500317 5888.6
## - OwnershipOwned                                  1    884084 35636668 5890.5
## - ProdScaleMicro.Small                            1    933663 35686247 5891.2
## - MarketTypeRetailers                             1   1927041 36679625 5905.2
##
## Step:  AIC=5877.74
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + EducationPrimary + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                          Df Sum of Sq      RSS    AIC
## - EducationPrimary                        1      1299 34753934 5871.5
## - LabourXticsHired                        1      1498 34754133 5871.5
## - FingSourceOn.Farm                       1      1706 34754341 5871.5
## - FarmTypeCluster                         1      3893 34756528 5871.6
## - Experience5.and.below                   1      4348 34756983 5871.6
## - RegionNorth                             1      4375 34757009 5871.6
## - FeedUsageAdds.local.feed                1      4997 34757632 5871.6
## - MainOccupCivil.Servant                  1      7425 34760060 5871.6
## - EducationArabic                         1     11670 34764305 5871.7
## - GenderFemale                            1     11676 34764311 5871.7
## - Pond.TypeEarthen.pond                   1     15731 34768366 5871.7
## - MarketTypeProcessors                    1     24981 34777616 5871.9
## - ProdScaleLarge                          1     33399 34786033 5872.0
## - FarmTypeFarm.Site                       1     34123 34786758 5872.0
## - EducationND.NCE                         1     42310 34794945 5872.1
## - AgeRangeAbove.60.Yrs                    1     49710 34802345 5872.2
## - MainOccupFish.Farming                   1     54447 34807082 5872.3
## - Experience16.and.above                  1     58539 34811174 5872.4
## - MainOccupOther.enterprise               1     59333 34811968 5872.4
## - ProdScaleMedium                         1     75773 34828408 5872.6
## - AgeRange31.40.Yrs                       1     96199 34848834 5872.9
## - AgeRange51.60.Yrs                       1    170784 34923419 5874.0
## - EducationDegree                         1    202294 34954929 5874.5
## - AgeRange41.50.Yrs                       1    208308 34960943 5874.6
```

```
## - Experience11.to.15                            1     239743 34992378 5875.0
## - Pond.TypeConcrete.pond                        1     352013 35104648 5876.6
## - MarketTypeRestaurants..Eateries.or.Hotels     1     402183 35154817 5877.4
## <none>                                                   34752635 5877.7
## - EducationMSC.Above.Grad.studies.              1     443118 35195752 5878.0
## - MarketTypeIndividuals                         1     496194 35248829 5878.7
## - MainOccupOther.Agric.Ventures                 1     761093 35513728 5882.5
## - OwnershipOwned                                1     884278 35636913 5884.3
## - ProdScaleMicro.Small                          1     933672 35686307 5885.0
## - MarketTypeRetailers                           1    1927121 36679756 5899.0
##
## Step:  AIC=5871.53
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site + FingSourceOn.Farm
##
##                                                Df Sum of Sq      RSS    AIC
## - FingSourceOn.Farm                             1       1537 34755471 5865.3
## - LabourXticsHired                              1       1631 34755565 5865.3
## - FarmTypeCluster                               1       3662 34757596 5865.4
## - Experience5.and.below                         1       4504 34758437 5865.4
## - RegionNorth                                   1       4993 34758927 5865.4
## - FeedUsageAdds.local.feed                      1       5514 34759448 5865.4
## - MainOccupCivil.Servant                        1       7424 34761358 5865.4
## - EducationArabic                               1      11130 34765064 5865.5
## - GenderFemale                                  1      11666 34765600 5865.5
## - Pond.TypeEarthen.pond                         1      15612 34769546 5865.5
## - MarketTypeProcessors                          1      25402 34779336 5865.7
## - ProdScaleLarge                                1      33477 34787411 5865.8
## - FarmTypeFarm.Site                             1      33775 34787709 5865.8
## - EducationND.NCE                               1      41370 34795304 5865.9
## - AgeRangeAbove.60.Yrs                          1      49371 34803305 5866.0
## - MainOccupFish.Farming                         1      54171 34808105 5866.1
## - MainOccupOther.enterprise                     1      58697 34812631 5866.2
## - Experience16.and.above                        1      60439 34814373 5866.2
## - ProdScaleMedium                               1      76043 34829977 5866.4
## - AgeRange31.40.Yrs                             1      96267 34850201 5866.7
## - AgeRange51.60.Yrs                             1     171043 34924977 5867.8
## - AgeRange41.50.Yrs                             1     207742 34961676 5868.3
## - EducationDegree                               1     209116 34963050 5868.4
## - Experience11.to.15                            1     239592 34993526 5868.8
## - Pond.TypeConcrete.pond                        1     351165 35105099 5870.4
## - MarketTypeRestaurants..Eateries.or.Hotels     1     401336 35155270 5871.1
## <none>                                                   34753934 5871.5
## - EducationMSC.Above.Grad.studies.              1     450349 35204283 5871.9
## - MarketTypeIndividuals                         1     494927 35248861 5872.5
```

```
## - MainOccupOther.Agric.Ventures             1      774352 35528285 5876.5
## - OwnershipOwned                             1      883525 35637459 5878.1
## - ProdScaleMicro.Small                       1      938989 35692923 5878.9
## - MarketTypeRetailers                        1     1939467 36693401 5892.9
##
## Step:  AIC=5865.32
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##     FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + LabourXticsHired + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site
##
##                                             Df Sum of Sq      RSS    AIC
## - LabourXticsHired                           1        1469 34756940 5859.1
## - Experience5.and.below                      1        3665 34759136 5859.1
## - FarmTypeCluster                            1        3940 34759411 5859.1
## - RegionNorth                                1        5057 34760528 5859.2
## - FeedUsageAdds.local.feed                   1        5226 34760697 5859.2
## - MainOccupCivil.Servant                     1        7929 34763399 5859.2
## - EducationArabic                            1       10612 34766083 5859.2
## - GenderFemale                               1       10941 34766412 5859.2
## - Pond.TypeEarthen.pond                      1       16631 34772102 5859.3
## - MarketTypeProcessors                       1       25131 34780602 5859.5
## - ProdScaleLarge                             1       34350 34789821 5859.6
## - FarmTypeFarm.Site                          1       34511 34789982 5859.6
## - EducationND.NCE                            1       40577 34796048 5859.7
## - AgeRangeAbove.60.Yrs                       1       49263 34804734 5859.8
## - MainOccupFish.Farming                      1       55683 34811154 5859.9
## - MainOccupOther.enterprise                  1       59008 34814479 5860.0
## - Experience16.and.above                     1       59114 34814584 5860.0
## - ProdScaleMedium                            1       75403 34830874 5860.2
## - AgeRange31.40.Yrs                          1       96649 34852119 5860.5
## - AgeRange51.60.Yrs                          1      170200 34925670 5861.6
## - AgeRange41.50.Yrs                          1      207260 34962731 5862.1
## - EducationDegree                            1      208952 34964423 5862.1
## - Experience11.to.15                         1      238085 34993556 5862.6
## - Pond.TypeConcrete.pond                     1      352493 35107964 5864.2
## - MarketTypeRestaurants..Eateries.or.Hotels  1      400200 35155671 5864.9
## <none>                                                    34755471 5865.3
## - EducationMSC.Above.Grad.studies.           1      449231 35204702 5865.6
## - MarketTypeIndividuals                      1      496643 35252114 5866.3
## - MainOccupOther.Agric.Ventures              1      775140 35530611 5870.3
## - OwnershipOwned                             1      884379 35639850 5871.9
## - ProdScaleMicro.Small                       1      938558 35694029 5872.7
## - MarketTypeRetailers                        1     1957708 36713179 5887.0
##
## Step:  AIC=5859.11
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
```

```
##        Experience11.to.15 + Experience16.and.above + Experience5.and.below +
##        FeedUsageAdds.local.feed + RegionNorth + MainOccupCivil.Servant +
##        MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##        EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##        EducationND.NCE + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##        AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##        MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##        MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##        Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site
##
##                                                Df Sum of Sq      RSS    AIC
## - Experience5.and.below                         1      3539 34760479 5852.9
## - RegionNorth                                   1      4517 34761457 5852.9
## - FeedUsageAdds.local.feed                      1      4979 34761919 5853.0
## - FarmTypeCluster                               1      5281 34762221 5853.0
## - MainOccupCivil.Servant                        1      7750 34764690 5853.0
## - EducationArabic                               1     10731 34767671 5853.0
## - GenderFemale                                  1     11015 34767955 5853.0
## - Pond.TypeEarthen.pond                         1     16631 34773571 5853.1
## - MarketTypeProcessors                          1     24305 34781245 5853.2
## - ProdScaleLarge                                1     36119 34793059 5853.4
## - EducationND.NCE                               1     40717 34797657 5853.5
## - FarmTypeFarm.Site                             1     45082 34802022 5853.5
## - AgeRangeAbove.60.Yrs                          1     49576 34806516 5853.6
## - MainOccupFish.Farming                         1     55769 34812709 5853.7
## - MainOccupOther.enterprise                     1     58344 34815284 5853.7
## - Experience16.and.above                        1     58375 34815315 5853.7
## - ProdScaleMedium                               1     73985 34830925 5854.0
## - AgeRange31.40.Yrs                             1     95945 34852885 5854.3
## - AgeRange51.60.Yrs                             1    169339 34926279 5855.4
## - AgeRange41.50.Yrs                             1    207602 34964542 5855.9
## - EducationDegree                               1    207959 34964899 5855.9
## - Experience11.to.15                            1    237729 34994669 5856.3
## - Pond.TypeConcrete.pond                        1    357457 35114397 5858.1
## - MarketTypeRestaurants..Eateries.or.Hotels     1    399012 35155952 5858.7
## <none>                                                      34756940 5859.1
## - EducationMSC.Above.Grad.studies.              1    449106 35206046 5859.4
## - MarketTypeIndividuals                         1    497193 35254133 5860.1
## - MainOccupOther.Agric.Ventures                 1    773718 35530658 5864.1
## - OwnershipOwned                                1    919920 35676860 5866.2
## - ProdScaleMicro.Small                          1    940358 35697298 5866.5
## - MarketTypeRetailers                           1   1956246 36713187 5880.7
##
## Step:  AIC=5852.93
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + FeedUsageAdds.local.feed +
##     RegionNorth + MainOccupCivil.Servant + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeCluster + FarmTypeFarm.Site
```

```
##
##                                              Df Sum of Sq        RSS     AIC
## - RegionNorth                                1       4358 34764837 5846.8
## - FeedUsageAdds.local.feed                   1       5130 34765609 5846.8
## - FarmTypeCluster                            1       5597 34766076 5846.8
## - MainOccupCivil.Servant                     1       7837 34768316 5846.8
## - EducationArabic                            1      11051 34771530 5846.9
## - GenderFemale                               1      12332 34772811 5846.9
## - Pond.TypeEarthen.pond                      1      17482 34777961 5847.0
## - MarketTypeProcessors                       1      23765 34784244 5847.0
## - ProdScaleLarge                             1      36479 34796959 5847.2
## - EducationND.NCE                            1      39635 34800114 5847.3
## - FarmTypeFarm.Site                          1      46183 34806662 5847.4
## - AgeRangeAbove.60.Yrs                       1      47283 34807762 5847.4
## - MainOccupFish.Farming                      1      52613 34813092 5847.5
## - MainOccupOther.enterprise                  1      57241 34817720 5847.5
## - Experience16.and.above                     1      68133 34828612 5847.7
## - ProdScaleMedium                            1      73967 34834446 5847.8
## - AgeRange31.40.Yrs                          1      93515 34853994 5848.1
## - AgeRange51.60.Yrs                          1     166069 34926548 5849.1
## - AgeRange41.50.Yrs                          1     204126 34964605 5849.7
## - EducationDegree                            1     205825 34966305 5849.7
## - Experience11.to.15                         1     273345 35033824 5850.7
## - Pond.TypeConcrete.pond                     1     355489 35115968 5851.9
## - MarketTypeRestaurants..Eateries.or.Hotels  1     395854 35156333 5852.5
## <none>                                                  34760479 5852.9
## - EducationMSC.Above.Grad.studies.           1     447211 35207690 5853.2
## - MarketTypeIndividuals                      1     500586 35261065 5854.0
## - MainOccupOther.Agric.Ventures              1     789983 35550462 5858.1
## - OwnershipOwned                             1     926366 35686845 5860.1
## - ProdScaleMicro.Small                       1     973559 35734038 5860.8
## - MarketTypeRetailers                        1    1978073 36738552 5874.9
##
## Step:  AIC=5846.76
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + FeedUsageAdds.local.feed +
##     MainOccupCivil.Servant + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeCluster + FarmTypeFarm.Site
##
##                                              Df Sum of Sq        RSS     AIC
## - FarmTypeCluster                            1       3881 34768718 5840.6
## - MainOccupCivil.Servant                     1       6587 34771424 5840.6
## - FeedUsageAdds.local.feed                   1       7034 34771870 5840.6
## - EducationArabic                            1      12147 34776984 5840.7
## - GenderFemale                               1      13133 34777970 5840.7
## - Pond.TypeEarthen.pond                      1      21101 34785938 5840.8
## - MarketTypeProcessors                       1      22829 34787665 5840.9
## - ProdScaleLarge                             1      36381 34801218 5841.1
```

```
## - EducationND.NCE                                     1       41420 34806257 5841.1
## - FarmTypeFarm.Site                                    1       45750 34810587 5841.2
## - AgeRangeAbove.60.Yrs                                 1       51722 34816558 5841.3
## - MainOccupOther.enterprise                            1       58817 34823653 5841.4
## - MainOccupFish.Farming                                1       61244 34826081 5841.4
## - Experience16.and.above                               1       66949 34831786 5841.5
## - ProdScaleMedium                                      1       74717 34839553 5841.6
## - AgeRange31.40.Yrs                                    1       91877 34856714 5841.9
## - AgeRange51.60.Yrs                                    1      177239 34942075 5843.1
## - EducationDegree                                      1      207308 34972144 5843.6
## - AgeRange41.50.Yrs                                    1      208685 34973522 5843.6
## - Experience11.to.15                                   1      269210 35034047 5844.5
## - Pond.TypeConcrete.pond                               1      352858 35117694 5845.7
## - MarketTypeRestaurants..Eateries.or.Hotels  1      392843 35157680 5846.2
## <none>                                                          34764837 5846.8
## - EducationMSC.Above.Grad.studies.             1      451697 35216533 5847.1
## - MarketTypeIndividuals                              1      528507 35293344 5848.2
## - MainOccupOther.Agric.Ventures                   1      790105 35554941 5852.0
## - OwnershipOwned                                     1      934256 35699093 5854.0
## - ProdScaleMicro.Small                              1      969705 35734542 5854.5
## - MarketTypeRetailers                              1     2003232 36768069 5869.0
##
## Step:  AIC=5840.58
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + FeedUsageAdds.local.feed +
##     MainOccupCivil.Servant + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationArabic + EducationDegree +
##     EducationMSC.Above.Grad.studies. + EducationND.NCE + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeProcessors +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     GenderFemale + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site
##
##                                                       Df Sum of Sq      RSS    AIC
## - MainOccupCivil.Servant                              1        6335 34775052 5834.4
## - FeedUsageAdds.local.feed                            1        7544 34776261 5834.5
## - GenderFemale                                        1       11719 34780436 5834.5
## - EducationArabic                                     1       11829 34780546 5834.5
## - Pond.TypeEarthen.pond                               1       18900 34787617 5834.6
## - MarketTypeProcessors                                1       21693 34790410 5834.7
## - ProdScaleLarge                                      1       35392 34804109 5834.9
## - EducationND.NCE                                     1       40458 34809176 5834.9
## - FarmTypeFarm.Site                                   1       44434 34813151 5835.0
## - AgeRangeAbove.60.Yrs                                1       50313 34819030 5835.1
## - MainOccupOther.enterprise                           1       60174 34828892 5835.2
## - MainOccupFish.Farming                               1       61486 34830204 5835.3
## - Experience16.and.above                              1       69925 34838643 5835.4
## - ProdScaleMedium                                     1       74466 34843183 5835.4
## - AgeRange31.40.Yrs                                   1       95346 34864064 5835.7
## - AgeRange51.60.Yrs                                   1      178398 34947116 5837.0
## - EducationDegree                                     1      209553 34978271 5837.4
## - AgeRange41.50.Yrs                                   1      214902 34983619 5837.5
## - Experience11.to.15                                  1      274478 35043196 5838.4
```

```
## - Pond.TypeConcrete.pond                       1      350185 35118903 5839.5
## - MarketTypeRestaurants..Eateries.or.Hotels  1      399648 35168365 5840.2
## <none>                                                 34768718 5840.6
## - EducationMSC.Above.Grad.studies.            1      453265 35221982 5840.9
## - MarketTypeIndividuals                       1      541224 35309942 5842.2
## - MainOccupOther.Agric.Ventures               1      786482 35555200 5845.7
## - ProdScaleMicro.Small                        1      994170 35762888 5848.7
## - OwnershipOwned                              1     1106810 35875528 5850.3
## - MarketTypeRetailers                         1     2010177 36778895 5863.0
##
## Step:  AIC=5834.45
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + FeedUsageAdds.local.feed +
##     MainOccupFish.Farming + MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site
##
##                                               Df Sum of Sq      RSS    AIC
## - FeedUsageAdds.local.feed                     1        6312 34781365 5828.3
## - EducationArabic                             1       12962 34788014 5828.4
## - GenderFemale                                1       13287 34788339 5828.4
## - Pond.TypeEarthen.pond                       1       17065 34792117 5828.5
## - MarketTypeProcessors                        1       20914 34795967 5828.5
## - ProdScaleLarge                              1       34839 34809892 5828.7
## - EducationND.NCE                             1       38912 34813964 5828.8
## - FarmTypeFarm.Site                           1       42928 34817981 5828.8
## - AgeRangeAbove.60.Yrs                        1       50678 34825730 5829.0
## - MainOccupFish.Farming                       1       55333 34830385 5829.0
## - MainOccupOther.enterprise                   1       55636 34830688 5829.0
## - Experience16.and.above                      1       70447 34845500 5829.2
## - ProdScaleMedium                             1       78972 34854025 5829.4
## - AgeRange31.40.Yrs                           1       98530 34873582 5829.7
## - AgeRange51.60.Yrs                           1      192277 34967329 5831.0
## - EducationDegree                             1      204225 34979277 5831.2
## - AgeRange41.50.Yrs                           1      231762 35006814 5831.6
## - Experience11.to.15                          1      270622 35045675 5832.2
## - Pond.TypeConcrete.pond                      1      351002 35126054 5833.3
## - MarketTypeRestaurants..Eateries.or.Hotels  1      394261 35169314 5834.0
## <none>                                                 34775052 5834.4
## - EducationMSC.Above.Grad.studies.            1      458235 35233287 5834.9
## - MarketTypeIndividuals                       1      535460 35310513 5836.0
## - MainOccupOther.Agric.Ventures               1      856591 35631644 5840.6
## - ProdScaleMicro.Small                        1      992696 35767749 5842.5
## - OwnershipOwned                              1     1115650 35890702 5844.3
## - MarketTypeRetailers                         1     2012129 36787181 5856.8
##
## Step:  AIC=5828.31
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
```

```
##     EducationArabic + EducationDegree + EducationMSC.Above.Grad.studies. +
##     EducationND.NCE + AgeRange31.40.Yrs + AgeRange41.50.Yrs +
##     AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site
##
##                                               Df Sum of Sq      RSS    AIC
## - EducationArabic                              1     13133 34794498 5822.3
## - Pond.TypeEarthen.pond                        1     13677 34795042 5822.3
## - GenderFemale                                 1     13853 34795218 5822.3
## - MarketTypeProcessors                         1     19714 34801078 5822.4
## - ProdScaleLarge                               1     33859 34815224 5822.6
## - EducationND.NCE                              1     37313 34818678 5822.6
## - FarmTypeFarm.Site                            1     41189 34822554 5822.7
## - AgeRangeAbove.60.Yrs                         1     49652 34831017 5822.8
## - MainOccupOther.enterprise                    1     54111 34835476 5822.9
## - MainOccupFish.Farming                        1     55336 34836701 5822.9
## - Experience16.and.above                       1     64151 34845516 5823.0
## - ProdScaleMedium                              1     82140 34863504 5823.3
## - AgeRange31.40.Yrs                            1     98604 34879969 5823.5
## - AgeRange51.60.Yrs                            1    191555 34972920 5824.9
## - EducationDegree                              1    208400 34989765 5825.1
## - AgeRange41.50.Yrs                            1    228915 35010279 5825.4
## - Experience11.to.15                           1    266212 35047577 5826.0
## - Pond.TypeConcrete.pond                       1    351567 35132932 5827.2
## - MarketTypeRestaurants..Eateries.or.Hotels    1    390139 35171503 5827.8
## <none>                                                     34781365 5828.3
## - EducationMSC.Above.Grad.studies.             1    459895 35241259 5828.8
## - MarketTypeIndividuals                        1    555112 35336477 5830.1
## - MainOccupOther.Agric.Ventures                1    863815 35645180 5834.6
## - ProdScaleMicro.Small                         1    986455 35767820 5836.3
## - OwnershipOwned                               1   1139295 35920659 5838.5
## - MarketTypeRetailers                          1   2019392 36800756 5850.8
##
## Step:  AIC=5822.26
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + GenderFemale + Pond.TypeConcrete.pond +
##     Pond.TypeEarthen.pond + FarmTypeFarm.Site
##
##                                               Df Sum of Sq      RSS    AIC
## - GenderFemale                                 1     14779 34809277 5816.2
## - Pond.TypeEarthen.pond                        1     15306 34809804 5816.3
## - MarketTypeProcessors                         1     19906 34814404 5816.3
## - EducationND.NCE                              1     31842 34826340 5816.5
## - ProdScaleLarge                               1     33425 34827922 5816.5
## - FarmTypeFarm.Site                            1     40925 34835423 5816.6
## - AgeRangeAbove.60.Yrs                         1     48659 34843157 5816.7
```

```
## - MainOccupFish.Farming                             1       56057 34850555 5816.9
## - MainOccupOther.enterprise                          1       56311 34850809 5816.9
## - Experience16.and.above                             1       61501 34855999 5816.9
## - ProdScaleMedium                                    1       81653 34876151 5817.2
## - AgeRange31.40.Yrs                                  1       97738 34892236 5817.5
## - AgeRange51.60.Yrs                                  1      186289 34980787 5818.8
## - EducationDegree                                    1      197407 34991905 5818.9
## - AgeRange41.50.Yrs                                  1      224926 35019424 5819.3
## - Experience11.to.15                                 1      267998 35062496 5819.9
## - Pond.TypeConcrete.pond                             1      349971 35144469 5821.1
## - MarketTypeRestaurants..Eateries.or.Hotels          1      391406 35185904 5821.7
## <none>                                                             34794498 5822.3
## - EducationMSC.Above.Grad.studies.                   1      448295 35242793 5822.5
## - MarketTypeIndividuals                              1      578652 35373150 5824.4
## - MainOccupOther.Agric.Ventures                      1      854507 35649005 5828.4
## - ProdScaleMicro.Small                               1      981677 35776175 5830.2
## - OwnershipOwned                                     1     1141655 35936153 5832.5
## - MarketTypeRetailers                                1     2016425 36810923 5844.7
##
## Step:  AIC=5816.25
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeProcessors + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond + Pond.TypeEarthen.pond +
##     FarmTypeFarm.Site
##
##                                               Df Sum of Sq      RSS    AIC
## - MarketTypeProcessors                         1       22663 34831940 5810.3
## - Pond.TypeEarthen.pond                        1       23627 34832904 5810.4
## - EducationND.NCE                              1       33029 34842306 5810.5
## - ProdScaleLarge                               1       34860 34844137 5810.5
## - FarmTypeFarm.Site                            1       35841 34845118 5810.5
## - AgeRangeAbove.60.Yrs                         1       44721 34853998 5810.7
## - MainOccupFish.Farming                        1       55491 34864768 5810.8
## - MainOccupOther.enterprise                    1       58010 34867287 5810.9
## - Experience16.and.above                       1       67497 34876774 5811.0
## - ProdScaleMedium                              1       79340 34888617 5811.2
## - AgeRange31.40.Yrs                            1       89432 34898709 5811.3
## - AgeRange51.60.Yrs                            1      180112 34989389 5812.6
## - EducationDegree                              1      199434 35008711 5812.9
## - AgeRange41.50.Yrs                            1      219861 35029138 5813.2
## - Experience11.to.15                           1      272274 35081551 5814.0
## - Pond.TypeConcrete.pond                       1      335204 35144481 5814.9
## - MarketTypeRestaurants..Eateries.or.Hotels    1      387246 35196523 5815.6
## <none>                                                       34809277 5816.2
## - EducationMSC.Above.Grad.studies.             1      453446 35262723 5816.6
## - MarketTypeIndividuals                        1      588831 35398108 5818.6
## - MainOccupOther.Agric.Ventures                1      845319 35654596 5822.2
## - ProdScaleMicro.Small                         1      989109 35798386 5824.3
## - OwnershipOwned                               1     1138222 35947499 5826.4
```

```
## - MarketTypeRetailers                          1    2013171 36822448 5838.6
##
## Step:  AIC=5810.35
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     Pond.TypeConcrete.pond + Pond.TypeEarthen.pond + FarmTypeFarm.Site
##
##                                            Df Sum of Sq      RSS    AIC
## - Pond.TypeEarthen.pond                     1      21458 34853398 5804.4
## - EducationND.NCE                           1      33086 34865026 5804.6
## - ProdScaleLarge                            1      33130 34865070 5804.6
## - FarmTypeFarm.Site                         1      37728 34869668 5804.7
## - AgeRangeAbove.60.Yrs                      1      46643 34878583 5804.8
## - MainOccupFish.Farming                     1      55268 34887208 5804.9
## - MainOccupOther.enterprise                 1      56347 34888287 5804.9
## - Experience16.and.above                    1      66102 34898042 5805.1
## - ProdScaleMedium                           1      81088 34913028 5805.3
## - AgeRange31.40.Yrs                         1      88792 34920732 5805.4
## - AgeRange51.60.Yrs                         1     180559 35012499 5806.7
## - EducationDegree                           1     193296 35025236 5806.9
## - AgeRange41.50.Yrs                         1     225384 35057324 5807.4
## - Experience11.to.15                        1     281903 35113843 5808.2
## - Pond.TypeConcrete.pond                    1     337469 35169409 5809.0
## - MarketTypeRestaurants..Eateries.or.Hotels 1     396070 35228010 5809.9
## <none>                                                   34831940 5810.3
## - EducationMSC.Above.Grad.studies.          1     446984 35278924 5810.6
## - MarketTypeIndividuals                     1     599262 35431202 5812.8
## - MainOccupOther.Agric.Ventures             1     842629 35674569 5816.3
## - ProdScaleMicro.Small                      1     990232 35822172 5818.4
## - OwnershipOwned                            1    1138085 35970025 5820.5
## - MarketTypeRetailers                       1    1992709 36824649 5832.4
##
## Step:  AIC=5804.43
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + EducationND.NCE +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     Pond.TypeConcrete.pond + FarmTypeFarm.Site
##
##                                            Df Sum of Sq      RSS    AIC
## - EducationND.NCE                           1      27676 34881074 5798.6
## - FarmTypeFarm.Site                         1      29646 34883044 5798.6
## - ProdScaleLarge                            1      37381 34890779 5798.7
## - AgeRangeAbove.60.Yrs                      1      47296 34900694 5798.9
## - MainOccupOther.enterprise                 1      52753 34906151 5799.0
## - MainOccupFish.Farming                     1      57613 34911011 5799.0
```

```
## - ProdScaleMedium                                  1      76343 34929741 5799.3
## - AgeRange31.40.Yrs                                 1      86499 34939897 5799.5
## - Experience16.and.above                            1      91115 34944513 5799.5
## - EducationDegree                                   1     173384 35026782 5800.7
## - AgeRange51.60.Yrs                                 1     185137 35038535 5800.9
## - AgeRange41.50.Yrs                                 1     223601 35076999 5801.5
## - Experience11.to.15                                1     288370 35141768 5802.4
## - MarketTypeRestaurants..Eateries.or.Hotels 1        384277 35237675 5803.8
## <none>                                                     34853398 5804.4
## - EducationMSC.Above.Grad.studies.          1        430292 35283690 5804.4
## - MarketTypeIndividuals                      1       593705 35447103 5806.8
## - Pond.TypeConcrete.pond                     1       651150 35504548 5807.6
## - MainOccupOther.Agric.Ventures              1       840146 35693544 5810.3
## - ProdScaleMicro.Small                       1      1034566 35887964 5813.1
## - OwnershipOwned                             1      1136485 35989883 5814.5
## - MarketTypeRetailers                        1      2025329 36878727 5826.9
##
## Step:  AIC=5798.6
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + AgeRange31.40.Yrs +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond + FarmTypeFarm.Site
##
##                                              Df Sum of Sq      RSS    AIC
## - FarmTypeFarm.Site                           1      28393 34909468 5792.8
## - ProdScaleLarge                              1      34840 34915914 5792.9
## - AgeRangeAbove.60.Yrs                        1      52211 34933285 5793.1
## - MainOccupOther.enterprise                   1      59010 34940084 5793.2
## - MainOccupFish.Farming                       1      60474 34941548 5793.2
## - ProdScaleMedium                             1      83407 34964481 5793.6
## - AgeRange31.40.Yrs                           1      94912 34975986 5793.8
## - Experience16.and.above                      1      96222 34977296 5793.8
## - EducationDegree                             1     155551 35036626 5794.6
## - AgeRange51.60.Yrs                           1     198040 35079114 5795.2
## - AgeRange41.50.Yrs                           1     231554 35112628 5795.7
## - Experience11.to.15                          1     284070 35165144 5796.5
## - MarketTypeRestaurants..Eateries.or.Hotels 1       385133 35266207 5798.0
## - EducationMSC.Above.Grad.studies.          1       412884 35293958 5798.4
## <none>                                                     34881074 5798.6
## - MarketTypeIndividuals                      1       583498 35464573 5800.8
## - Pond.TypeConcrete.pond                     1       630408 35511482 5801.5
## - MainOccupOther.Agric.Ventures              1       827324 35708398 5804.3
## - ProdScaleMicro.Small                       1      1017979 35899053 5807.0
## - OwnershipOwned                             1      1122529 36003604 5808.5
## - MarketTypeRetailers                        1      2017042 36898116 5821.0
##
## Step:  AIC=5792.78
## Profit.kg ~ ProdScaleLarge + ProdScaleMedium + ProdScaleMicro.Small +
##     Experience11.to.15 + Experience16.and.above + MainOccupFish.Farming +
##     MainOccupOther.Agric.Ventures + MainOccupOther.enterprise +
##     EducationDegree + EducationMSC.Above.Grad.studies. + AgeRange31.40.Yrs +
```

```
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + AgeRangeAbove.60.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                              Df Sum of Sq      RSS    AIC
## - ProdScaleLarge                              1      39691 34949158 5787.1
## - AgeRangeAbove.60.Yrs                        1      52842 34962309 5787.3
## - MainOccupOther.enterprise                   1      61570 34971037 5787.4
## - MainOccupFish.Farming                       1      64715 34974182 5787.5
## - ProdScaleMedium                             1      80547 34990014 5787.7
## - Experience16.and.above                      1      89859 34999326 5787.9
## - AgeRange31.40.Yrs                           1     103287 35012754 5788.1
## - EducationDegree                             1     162535 35072003 5788.9
## - AgeRange51.60.Yrs                           1     209275 35118743 5789.6
## - AgeRange41.50.Yrs                           1     256195 35165662 5790.3
## - Experience11.to.15                          1     272261 35181729 5790.5
## - MarketTypeRestaurants..Eateries.or.Hotels   1     382774 35292241 5792.1
## <none>                                                    34909468 5792.8
## - EducationMSC.Above.Grad.studies.            1     430587 35340054 5792.8
## - MarketTypeIndividuals                       1     584913 35494380 5795.0
## - Pond.TypeConcrete.pond                      1     606559 35516027 5795.3
## - MainOccupOther.Agric.Ventures               1     809749 35719216 5798.2
## - ProdScaleMicro.Small                        1     994994 35904462 5800.9
## - OwnershipOwned                              1    1106757 36016225 5802.4
## - MarketTypeRetailers                         1    2127500 37036967 5816.7
##
## Step:  AIC=5787.13
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     Experience16.and.above + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##     MainOccupOther.enterprise + EducationDegree + EducationMSC.Above.Grad.studies. +
##     AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##     AgeRangeAbove.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     Pond.TypeConcrete.pond
##
##                                              Df Sum of Sq      RSS    AIC
## - AgeRangeAbove.60.Yrs                        1      51733 35000892 5781.6
## - MainOccupOther.enterprise                   1      60688 35009846 5781.8
## - MainOccupFish.Farming                       1      74218 35023376 5782.0
## - Experience16.and.above                      1      85412 35034571 5782.1
## - ProdScaleMedium                             1     100246 35049404 5782.4
## - AgeRange31.40.Yrs                           1     104130 35053289 5782.4
## - EducationDegree                             1     150057 35099215 5783.1
## - AgeRange51.60.Yrs                           1     204680 35153839 5783.9
## - AgeRange41.50.Yrs                           1     254475 35203633 5784.6
## - Experience11.to.15                          1     265270 35214428 5784.7
## - MarketTypeRestaurants..Eateries.or.Hotels   1     397759 35346917 5786.7
## - EducationMSC.Above.Grad.studies.            1     401308 35350467 5786.7
## <none>                                                    34949158 5787.1
## - MarketTypeIndividuals                       1     594196 35543354 5789.5
## - Pond.TypeConcrete.pond                      1     598361 35547520 5789.5
## - MainOccupOther.Agric.Ventures               1     811007 35760166 5792.6
## - ProdScaleMicro.Small                        1     959205 35908363 5794.7
## - OwnershipOwned                              1    1085917 36035076 5796.5
```

```
## - MarketTypeRetailers                           1    2095792 37044951 5810.5
##
## Step:  AIC=5781.65
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##      Experience16.and.above + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##      MainOccupOther.enterprise + EducationDegree + EducationMSC.Above.Grad.studies. +
##      AgeRange31.40.Yrs + AgeRange41.50.Yrs + AgeRange51.60.Yrs +
##      OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                                  Df Sum of Sq      RSS    AIC
## - AgeRange31.40.Yrs                               1      52930 35053822 5776.2
## - Experience16.and.above                          1      70689 35071581 5776.4
## - MainOccupOther.enterprise                       1      73836 35074727 5776.5
## - MainOccupFish.Farming                           1      78706 35079598 5776.6
## - ProdScaleMedium                                 1      98331 35099223 5776.8
## - EducationDegree                                 1     134575 35135467 5777.4
## - AgeRange51.60.Yrs                               1     158310 35159202 5777.7
## - AgeRange41.50.Yrs                               1     222067 35222959 5778.6
## - Experience11.to.15                              1     240570 35241462 5778.9
## - EducationMSC.Above.Grad.studies.                1     369805 35370697 5780.8
## - MarketTypeRestaurants..Eateries.or.Hotels       1     427130 35428021 5781.6
## <none>                                                          35000892 5781.6
## - Pond.TypeConcrete.pond                          1     580797 35581689 5783.8
## - MarketTypeIndividuals                           1     631234 35632125 5784.5
## - MainOccupOther.Agric.Ventures                   1     789805 35790697 5786.8
## - ProdScaleMicro.Small                            1     942904 35943796 5788.9
## - OwnershipOwned                                  1    1069647 36070539 5790.7
## - MarketTypeRetailers                             1    2064086 37064978 5804.6
##
## Step:  AIC=5776.18
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##      Experience16.and.above + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##      MainOccupOther.enterprise + EducationDegree + EducationMSC.Above.Grad.studies. +
##      AgeRange41.50.Yrs + AgeRange51.60.Yrs + OwnershipOwned +
##      MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##      MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                                  Df Sum of Sq      RSS    AIC
## - MainOccupOther.enterprise                       1      56948 35110770 5770.8
## - MainOccupFish.Farming                           1      72751 35126573 5771.0
## - Experience16.and.above                          1      83875 35137696 5771.2
## - ProdScaleMedium                                 1      98805 35152626 5771.4
## - AgeRange51.60.Yrs                               1     106576 35160398 5771.5
## - EducationDegree                                 1     139281 35193102 5772.0
## - AgeRange41.50.Yrs                               1     196596 35250417 5772.8
## - Experience11.to.15                              1     256440 35310261 5773.7
## - EducationMSC.Above.Grad.studies.                1     387437 35441258 5775.5
## - MarketTypeRestaurants..Eateries.or.Hotels       1     420638 35474460 5776.0
## <none>                                                          35053822 5776.2
## - Pond.TypeConcrete.pond                          1     600007 35653828 5778.6
## - MarketTypeIndividuals                           1     642912 35696734 5779.2
## - MainOccupOther.Agric.Ventures                   1     781875 35835697 5781.2
## - ProdScaleMicro.Small                            1     911064 35964885 5783.0
```

```
## - OwnershipOwned                                 1   1101395 36155216 5785.7
## - MarketTypeRetailers                             1   2032240 37086061 5798.6
##
## Step:  AIC=5770.78
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##      Experience16.and.above + MainOccupFish.Farming + MainOccupOther.Agric.Ventures +
##      EducationDegree + EducationMSC.Above.Grad.studies. + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      Pond.TypeConcrete.pond
##
##                                                   Df Sum of Sq      RSS    AIC
## - MainOccupFish.Farming                            1     55983 35166753 5765.4
## - Experience16.and.above                           1     82083 35192853 5765.7
## - ProdScaleMedium                                  1     90105 35200875 5765.9
## - AgeRange51.60.Yrs                                1    100322 35211092 5766.0
## - EducationDegree                                  1    149348 35260118 5766.7
## - AgeRange41.50.Yrs                                1    183397 35294167 5767.2
## - Experience11.to.15                               1    249029 35359799 5768.1
## - EducationMSC.Above.Grad.studies.                 1    375387 35486157 5770.0
## - MarketTypeRestaurants..Eateries.or.Hotels        1    403609 35514379 5770.4
## <none>                                                        35110770 5770.8
## - Pond.TypeConcrete.pond                           1    589798 35700568 5773.0
## - MarketTypeIndividuals                            1    629019 35739789 5773.6
## - MainOccupOther.Agric.Ventures                    1    833686 35944456 5776.5
## - ProdScaleMicro.Small                             1    910645 36021415 5777.6
## - OwnershipOwned                                   1   1072645 36183415 5779.9
## - MarketTypeRetailers                              1   2025395 37136165 5793.1
##
## Step:  AIC=5765.36
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##      Experience16.and.above + MainOccupOther.Agric.Ventures +
##      EducationDegree + EducationMSC.Above.Grad.studies. + AgeRange41.50.Yrs +
##      AgeRange51.60.Yrs + OwnershipOwned + MarketTypeIndividuals +
##      MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##      Pond.TypeConcrete.pond
##
##                                                   Df Sum of Sq      RSS    AIC
## - Experience16.and.above                           1     65126 35231879 5760.1
## - ProdScaleMedium                                  1     77963 35244716 5760.3
## - AgeRange51.60.Yrs                                1     84716 35251469 5760.3
## - AgeRange41.50.Yrs                                1    162845 35329597 5761.5
## - EducationDegree                                  1    205073 35371826 5762.1
## - Experience11.to.15                               1    232165 35398918 5762.5
## - MarketTypeRestaurants..Eateries.or.Hotels        1    404328 35571081 5764.9
## <none>                                                        35166753 5765.4
## - EducationMSC.Above.Grad.studies.                 1    479850 35646603 5766.0
## - Pond.TypeConcrete.pond                           1    547341 35714094 5767.0
## - MarketTypeIndividuals                            1    703323 35870076 5769.2
## - ProdScaleMicro.Small                             1    855083 36021836 5771.4
## - MainOccupOther.Agric.Ventures                    1   1059269 36226022 5774.2
## - OwnershipOwned                                   1   1111580 36278332 5775.0
## - MarketTypeRetailers                              1   1988053 37154806 5787.1
##
```

```
## Step:  AIC=5760.07
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     MainOccupOther.Agric.Ventures + EducationDegree + EducationMSC.Above.Grad.studies. +
##     AgeRange41.50.Yrs + AgeRange51.60.Yrs + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                                Df Sum of Sq      RSS    AIC
## - AgeRange51.60.Yrs                             1      59860 35291739 5754.7
## - ProdScaleMedium                               1      75890 35307769 5754.9
## - AgeRange41.50.Yrs                             1     143871 35375750 5755.9
## - Experience11.to.15                            1     200046 35431925 5756.7
## - EducationDegree                               1     206569 35438448 5756.8
## - MarketTypeRestaurants..Eateries.or.Hotels     1     415369 35647248 5759.8
## <none>                                                       35231879 5760.1
## - EducationMSC.Above.Grad.studies.              1     480536 35712415 5760.7
## - Pond.TypeConcrete.pond                        1     576485 35808364 5762.1
## - MarketTypeIndividuals                         1     681329 35913208 5763.6
## - ProdScaleMicro.Small                          1     895237 36127116 5766.6
## - OwnershipOwned                                1    1129325 36361204 5769.9
## - MainOccupOther.Agric.Ventures                 1    1137083 36368962 5770.0
## - MarketTypeRetailers                           1    2105163 37337042 5783.4
##
## Step:  AIC=5754.7
## Profit.kg ~ ProdScaleMedium + ProdScaleMicro.Small + Experience11.to.15 +
##     MainOccupOther.Agric.Ventures + EducationDegree + EducationMSC.Above.Grad.studies. +
##     AgeRange41.50.Yrs + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     Pond.TypeConcrete.pond
##
##                                                Df Sum of Sq      RSS    AIC
## - ProdScaleMedium                               1      67485 35359223 5749.4
## - AgeRange41.50.Yrs                             1      99410 35391148 5749.9
## - Experience11.to.15                            1     188034 35479773 5751.2
## - EducationDegree                               1     196365 35488103 5751.3
## - MarketTypeRestaurants..Eateries.or.Hotels     1     423669 35715407 5754.5
## <none>                                                       35291739 5754.7
## - EducationMSC.Above.Grad.studies.              1     458165 35749904 5755.0
## - Pond.TypeConcrete.pond                        1     568579 35860317 5756.6
## - MarketTypeIndividuals                         1     661116 35952854 5757.9
## - ProdScaleMicro.Small                          1     860503 36152242 5760.7
## - OwnershipOwned                                1    1095981 36387720 5764.0
## - MainOccupOther.Agric.Ventures                 1    1110703 36402442 5764.2
## - MarketTypeRetailers                           1    2120383 37412121 5778.2
##
## Step:  AIC=5749.44
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + MainOccupOther.Agric.Ventures +
##     EducationDegree + EducationMSC.Above.Grad.studies. + AgeRange41.50.Yrs +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                                Df Sum of Sq      RSS    AIC
## - AgeRange41.50.Yrs                             1      95340 35454563 5744.6
## - Experience11.to.15                            1     188579 35547802 5745.9
```

```
## - EducationDegree                              1     213208 35572431 5746.3
## - MarketTypeRestaurants..Eateries.or.Hotels  1     418821 35778045 5749.2
## <none>                                                  35359223 5749.4
## - EducationMSC.Above.Grad.studies.            1     486649 35845872 5750.2
## - Pond.TypeConcrete.pond                      1     564224 35923447 5751.3
## - MarketTypeIndividuals                       1     631264 35990487 5752.2
## - MainOccupOther.Agric.Ventures               1    1106558 36465782 5758.9
## - OwnershipOwned                              1    1131927 36491151 5759.2
## - ProdScaleMicro.Small                        1    1256119 36615342 5761.0
## - MarketTypeRetailers                         1    2169610 37528834 5773.5
##
## Step:  AIC=5744.58
## Profit.kg ~ ProdScaleMicro.Small + Experience11.to.15 + MainOccupOther.Agric.Ventures +
##     EducationDegree + EducationMSC.Above.Grad.studies. + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                              Df Sum of Sq      RSS    AIC
## - Experience11.to.15                          1     171673 35626236 5740.8
## - EducationDegree                             1     218720 35673283 5741.5
## <none>                                                  35454563 5744.6
## - MarketTypeRestaurants..Eateries.or.Hotels  1     440230 35894793 5744.6
## - EducationMSC.Above.Grad.studies.            1     494668 35949231 5745.4
## - Pond.TypeConcrete.pond                      1     547142 36001705 5746.1
## - MarketTypeIndividuals                       1     663514 36118077 5747.8
## - MainOccupOther.Agric.Ventures               1    1111368 36565930 5754.1
## - OwnershipOwned                              1    1119286 36573849 5754.2
## - ProdScaleMicro.Small                        1    1215477 36670040 5755.5
## - MarketTypeRetailers                         1    2165490 37620053 5768.5
##
## Step:  AIC=5740.8
## Profit.kg ~ ProdScaleMicro.Small + MainOccupOther.Agric.Ventures +
##     EducationDegree + EducationMSC.Above.Grad.studies. + OwnershipOwned +
##     MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                              Df Sum of Sq      RSS    AIC
## - EducationDegree                             1     217337 35843573 5737.7
## - MarketTypeRestaurants..Eateries.or.Hotels  1     433120 36059356 5740.7
## <none>                                                  35626236 5740.8
## - EducationMSC.Above.Grad.studies.            1     484078 36110314 5741.4
## - Pond.TypeConcrete.pond                      1     542036 36168272 5742.3
## - MarketTypeIndividuals                       1     632290 36258526 5743.5
## - MainOccupOther.Agric.Ventures               1    1138401 36764636 5750.6
## - OwnershipOwned                              1    1163418 36789654 5750.9
## - ProdScaleMicro.Small                        1    1385271 37011506 5754.0
## - MarketTypeRetailers                         1    2156907 37783143 5764.5
##
## Step:  AIC=5737.67
## Profit.kg ~ ProdScaleMicro.Small + MainOccupOther.Agric.Ventures +
##     EducationMSC.Above.Grad.studies. + OwnershipOwned + MarketTypeIndividuals +
##     MarketTypeRestaurants..Eateries.or.Hotels + MarketTypeRetailers +
##     Pond.TypeConcrete.pond
##
```

```
##                                               Df Sum of Sq       RSS    AIC
## - EducationMSC.Above.Grad.studies.             1    337940 36181513 5736.2
## <none>                                                      35843573 5737.7
## - Pond.TypeConcrete.pond                       1    504494 36348067 5738.5
## - MarketTypeRestaurants..Eateries.or.Hotels    1    505139 36348712 5738.6
## - MarketTypeIndividuals                        1    589794 36433367 5739.7
## - MainOccupOther.Agric.Ventures               1   1062019 36905592 5746.3
## - OwnershipOwned                               1   1264342 37107916 5749.1
## - ProdScaleMicro.Small                         1   1410339 37253912 5751.1
## - MarketTypeRetailers                          1   2224327 38067900 5762.1
##
## Step:  AIC=5736.21
## Profit.kg ~ ProdScaleMicro.Small + MainOccupOther.Agric.Ventures +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond
##
##                                               Df Sum of Sq       RSS    AIC
## <none>                                                      36181513 5736.2
## - Pond.TypeConcrete.pond                       1    457987 36639501 5736.4
## - MarketTypeRestaurants..Eateries.or.Hotels    1    472368 36653881 5736.6
## - MarketTypeIndividuals                        1    593927 36775440 5738.3
## - MainOccupOther.Agric.Ventures               1   1004376 37185889 5743.9
## - OwnershipOwned                               1   1295113 37476626 5747.9
## - ProdScaleMicro.Small                         1   1503673 37685186 5750.7
## - MarketTypeRetailers                          1   2131282 38312795 5759.1
```

```
summary(stepwise_modelCb)
```

```
##
## Call:
## lm(formula = Profit.kg ~ ProdScaleMicro.Small + MainOccupOther.Agric.Ventures +
##     OwnershipOwned + MarketTypeIndividuals + MarketTypeRestaurants..Eateries.or.Hotels +
##     MarketTypeRetailers + Pond.TypeConcrete.pond, data = RegDatC)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1086.6  -130.8     2.1   158.5   921.3
##
## Coefficients:
##                                             Estimate Std. Error t value Pr(>|t|)
## (Intercept)                                   140.18      30.29   4.629 4.69e-06
## ProdScaleMicro.Small                         -110.81      24.28  -4.563 6.35e-06
## MainOccupOther.Agric.Ventures                 154.28      41.37   3.729 0.000214
## OwnershipOwned                                129.10      30.49   4.235 2.72e-05
## MarketTypeIndividuals                         127.21      44.36   2.868 0.004308
## MarketTypeRestaurants..Eateries.or.Hotels     131.27      51.33   2.557 0.010836
## MarketTypeRetailers                          -164.58      30.30  -5.432 8.69e-08
## Pond.TypeConcrete.pond                        -63.18      25.09  -2.518 0.012104
##
## (Intercept)                               ***
## ProdScaleMicro.Small                      ***
## MainOccupOther.Agric.Ventures             ***
## OwnershipOwned                            ***
## MarketTypeIndividuals                     **
```

```
## MarketTypeRestaurants..Eateries.or.Hotels *
## MarketTypeRetailers                         ***
## Pond.TypeConcrete.pond                       *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 268.7 on 501 degrees of freedom
## Multiple R-squared:  0.1861, Adjusted R-squared:  0.1747
## F-statistic: 16.36 on 7 and 501 DF,  p-value: < 2.2e-16
```