```
*{Construct Variables}.

*{Members per sleeping room}.
if (hv012=0) hv012=hv013.
if (qh112>0) memsleep=trunc(hv012/qh112).
if (qh112=0) memsleep=hv012.
if (memsleep>=98) memsleep=98.

VARIABLE LABELS
 MEMSLEEP "Number of members per sleeping room".
value labels memsleep 0 'Less than 1 per room'.

*{Drinking water supply}.
compute h2oires=0.
if (qh101=11) h2oires=1.
var labels h2oires "Piped into dwelling".
compute h2oyrd=0.
if (qh101=12) h2oyrd=1.
var labels h2oyrd "Piped into yard/plot".
compute h2opub=0.
if (qh101=13) h2opub=1.
var labels h2opub "Public tap / standpipe".
compute h2obwell=0.
if (qh101=21) h2obwell=1.
var labels h2obwell "Tube well or borehole".
compute h2ipwell=0.
if (qh101=31) h2ipwell=1.
var labels h2ipwell "Protected dug well".
compute h2iowell=0.
if (qh101=32) h2iowell=1.
var labels h2iowell "Unprotected dug well".
compute h2opspg=0.
if (qh101=41) h2opspg=1.
var labels h2opspg "Protected Spring".
compute h2ouspg=0.
if (qh101=42) h2ouspg=1.
var labels h2ouspg "Unprotected Spring".
compute h2orain=0.
if (qh101=51) h2orain=1.
var labels h2orain "Water from rain".
compute h2otruck=0.
if (qh101=61) h2otruck=1.
var labels h2otruck "Water from tanker truck".
compute h2ocart=0.
if (qh101=71) h2ocart=1.
var labels h2ocart "Water from cart with small tank".
compute h2osurf=0.
if (qh101=81) h2osurf=1.
var labels h2osurf "Surface water-river, lake, dam, etc.".
compute h2obot=0.
if (qh101=91) h2obot=1.
```

```
var labels h2obot "Water from bottle".
compute h2ooth=0.
if (qh101=71 or qh101=96) h2ooth=1.
var labels h2ooth "Other water source".

*{Toilet facility}.
compute flushs=0.
if (qh104=11) flushs=1.
var labels flushs "Flush toilet to sewer".
compute flusht=0.
if (qh104=12) flusht=1.
var labels flusht "Flush toilet to septic tank".
compute flushp=0.
if (qh104=13) flushp=1.
var labels flushp "Flush toilet to pit latrine".
compute flushe=0.
if (qh104=14) flushe=1.
var labels flushe "Flush toilet to elsewhere".
compute flushdk=0.
if (qh104=15) flushdk=1.
var labels flushdk "Flush toilet to unknown".
compute latpit=0.
if (qh104=23) latpit=1.
var labels latpit "Traditional pit latrine".
compute latpits=0.
if (qh104=22) latpits=1.
var labels latpits "Pit latrine with slab".
compute latvip=0.
if (qh104=21) latvip=1.
var labels latvip "VIP latrine".
compute latcomp=0.
if (qh104=31) latcomp=1.
var labels latcomp 'Composting toilet/ecosan'.
compute latpail=0.
if (qh104=41) latpail=1.
var labels latpail 'Bucket toilet'.
compute lathang=0.
if (qh104=51) lathang=1.
var labels lathang 'Hanging toilet/latrine'.
compute latbush=0.
if (qh104=61) latbush=1.
var labels latbush "No facility/bush/field".
compute latoth=0.
if (qh104=96) latoth=1.
var labels latoth 'Other type of latrine/toilet'.

compute latshare=0.
if (qh105=1) latshare=1.
var labels latshare 'Shares latrine/toilet with other
households'.
```

```
*{Flooring}.
compute dirtfloo=0.
if (qh109=11 or qh109=12) dirtfloo=1.
var labels dirtfloo "Earth, sand, dung floor".
compute woodfloo=0.
if (qh109=21 or qh109=22) woodfloo=1.
var labels woodfloo "Rudimentary wood plank, palm, bamboo floor".
compute cemtfloo=0.
if (qh109=34) cemtfloo=1.
var labels cemtfloo "Cement floor".
compute vinlfloo=0.
if (qh109=32) vinlfloo=1.
var labels vinlfloo "Vinyl, asphalt strip floor".
compute tilefloo=0.
if (qh109=33) tilefloo=1.
var labels tilefloo "Ceramic tile floor".
compute rugfloo=0.
if (qh109=35) rugfloo=1.
var labels rugfloo "Carpeted floor".
compute prqfloo=0.
if (qh109=31) prqfloo=1.
var labels prqfloo "Polished wood floor".
compute othfloo=0.
if (qh109=96) othfloo=1.
var labels othfloo "Other type of flooring".

*{Walls}.
compute nowall=0.
if (qh111=11) nowall=1.
var labels nowall "No walls".
compute natwall=0.
if (qh111=12 or qh111=13) natwall=1.
var labels natwall "Cane/palm/trunks/dirt walls".
compute mudwall=0.
if (qh111=21) mudwall=1.
var labels mudwall "Bamboo with mud walls".
compute stonwall=0.
if (qh111=22) stonwall=1.
var labels stonwall "Stone with mud walls".
compute adobwall=0.
if (qh111=23) adobwall=1.
var labels adobwall "Uncovered adobe walls".
compute plywall=0.
if (qh111=24) plywall=1.
var labels plywall "Plywood walls".
compute cardwall=0.
if (qh111=25) cardwall=1.
var labels cardwall "Cardboard walls".
compute rwoodwall=0.
if (qh111=26) rwoodwall=1.
var labels rwoodwall "Reused wood walls".
compute trnkwall=0.
```

```
if (qh111=27) trnkwall=1.
var labels trnkwall "Trunks with mud walls".
compute cmtwall=0.
if (qh111=31) cmtwall=1.
var labels cmtwall "Cement walls".
compute stoncwall=0.
if (qh111=32) stoncwall=1.
var labels stoncwall "Stone walls with lime cement".
compute brkwall=0.
if (qh111=33) brkwall=1.
var labels brkwall "Brick walls".
compute cmtbwall=0.
if (qh111=34) cmtbwall=1.
var labels cmtbwall "Cement block walls".
compute cadobwall=0.
if (qh111=35) cadobwall=1.
var labels cadobwall "Covered adobe walls".
compute woodwall=0.
if (qh111=36) woodwall=1.
var labels woodwall "Wood planks, shingles walls".
compute othwall=0.
if (qh111=96) othwall=1.
var labels othwall "Other type of walls".

*{Roofing}.
compute noroof=0.
if (qh110=11) noroof=1.
var labels noroof "No roof".
compute natroof=0.
if (qh110=12 or qh110=13) natroof=1.
var labels natroof "Thatch/palm/sod roof".
compute matroof=0.
if (qh110=21) matroof=1.
var labels matroof "Rustic mat / plastic roof".
compute bambroof=0.
if (qh110=22) bambroof=1.
var labels bambroof "Palm / bamboo roof".
compute wproof=0.
if (qh110=23) wproof=1.
var labels wproof "Wood planks roof".
compute cardroof=0.
if (qh110=24) cardroof=1.
var labels cardroof "Cardboard roof".
compute metroof=0.
if (qh110=31) metroof=1.
var labels metroof "Iron sheet roof".
compute woodroof=0.
if (qh110=32) woodroof=1.
var labels woodroof "Wood roof".
compute asbroof=0.
if (qh110=33) asbroof=1.
var labels asbroof "Calamine / cement fiber roof".
```

```
compute tileroof=0.
if (qh110=34) tileroof=1.
var labels tileroof "Ceramic tile roof".
compute cmtroof=0.
if (qh110=35) cmtroof=1.
var labels cmtroof "Concrete roof".
compute shngroof=0.
if (qh110=36) shngroof=1.
var labels shngroof "Roofing shingles roof".
compute othroof=0.
if (qh110=96) othroof=1.
var labels othroof "Other type of roof".

*{Cooking Fuel}.
compute cookelec=0.
if (qh108=1) cookelec=1.
var labels cookelec "Electricity for cooking".
compute cooklpg=0.
if (qh108=2) cooklpg=1.
var labels cooklpg "LPG for cooking".
compute cookng=0.
if (qh108=3) cookng=1.
var labels cookng "Natural gas for cooking".
compute cookbio=0.
if (qh108=4) cookbio=1.
var labels cookbio "Biogas for cooking".
compute cookkero=0.
if (qh108=5) cookkero=1.
var labels cookkero "Kerosene for cooking".
compute cookcoal=0.
if (qh108=6) cookcoal=1.
var labels cookcoal "Coal/lignite for cooking".
compute cookchar=0.
if (qh108=7) cookchar=1.
var labels cookchar "Charcoal for cooking".
compute cookwood=0.
if (qh108=8 ) cookwood=1.
var labels cookwood "Wood for cooking".
compute cookstraw=0.
if (qh108=9) cookstraw=1.
var labels cookstraw "Straw, shrubs, grass for cooking".
compute cookcrop=0.
if (qh108=10) cookcrop=1.
var labels cookcrop "Agricultural crop for cooking".
compute cookdung=0.
if (qh108=11) cookdung=1.
var labels cookdung "Dung for cooking".
compute cooknone=0.
if (qh108=95) cooknone=1.
var labels cooknone 'Does not cook'.
compute cookoth=0.
if (qh108=96) cookoth=1.
```

```
var labels cookoth "Other fuel for cooking".

*{Reset missing values to "does not have", change 2 code to 0}.

*if (qh108<>1) qh108=0.

if (qh107a<>1) qh107a=0.
if (qh107b<>1) qh107b=0.
if (qh107c<>1) qh107c=0.
if (qh107d<>1) qh107d=0.
if (qh107e<>1) qh107e=0.
if (qh107f<>1)  qh107f=0.
if (qh107g<>1) qh107g=0.

if (qh113a<>1) qh113a=0.
if (qh113b<>1) qh113b=0.
if (qh113c<>1) qh113c=0.
if (qh113d<>1) qh113d=0.
if (qh113e<>1) qh113e=0.
if (qh113f<>1)  qh113f=0.
if (qh113g<>1) qh113g=0.

if (qh114<>1) qh114=0.
if (qh114<>1) qh115=0.

compute landarea=0.

if (not(missing(qh115))) landarea=qh115.
if (qh114<>1) landarea=0.
FREQUENCIES landarea.

if (qh116<>1) qh116=0.
if (qh116<>1) qh117a=0.
if (qh116<>1) qh117b=0.
if (qh116<>1) qh117c=0.
if (qh116<>1) qh117d=0.
if (qh116<>1) qh117e=0.
if (qh116<>1) qh117f=0.
if (qh116<>1) qh117g=0.
if (qh116<>1) qh117h=0.
if (qh116<>1) qh117i=0.
missing values qh117a to qh117i (98,99).

if (qh118<>1) qh118=0.

*{Lighting fuel}.
*compute eleclgt=0.
*if (qh106=1) eleclgt=1.
*var labels eleclgt "Electricity for lighting".
*compute sunlgt=0.
*if (qh106=2) sunlgt=1.
*var labels sunlgt "Solar electricity for lighting".
```

```
*compute gaslgt=0.
*if (qh106=3) gaslgt=1.
*var labels gaslgt "Gas for lighting".
*compute hurrlgt=0.
*if (qh106=4) hurrlgt=1.
*var labels hurrlgt "Pariffin-hurricane lamp".
*compute preslgt=0.
*if (qh106=5) preslgt=1.
*var labels preslgt "Pariffin-pressure lamp".
*compute wicklgt=0.
*if (qh106=6) wicklgt=1.
*var labels wicklgt "Wick lamp for lighting".
*compute candlgt=0.
*if (qh106=8) candlgt=1.
*var labels candlgt "Candles for lighting".
*compute woodlgt=0.
*if (qh106=7) woodlgt=1.
*var labels woodlgt "Firewood for lighting".
*compute othlgt=0.
*if (qh106=96) othlgt=1.
*var labels othlgt "Other type of lighting".


*{Solid waste/garbage collection}.

execute.

DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES=QHTYPE HV009 HV012 HV013 qh101 qh104 QH108
qh107A qh107B qh107C qh107D qh107E
    qh107F qh107G qh109 qh110 qh111 qh112 qh113A qh113B qh113C
qh113D qh113E qh113F qh113G
    qh116 qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H
qh117I QH118
  /ORDER=ANALYSIS.
FREQUENCIES VARIABLES=memsleep h2oires h2oyrd h2opub h2obwell
h2ipwell h2iowell h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone
    /ORDER=ANALYSIS.

save outfile="c:\hnp2a\Rwanda 2013\rw13misassets.sav".
```

```
**********************************.
*** Factor Analysis to Test Distribution of created variables.

FACTOR
  /VARIABLES qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H qh117I
QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone landarea
  /MISSING MEANSUB
  /ANALYSIS qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H qh117I
QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone landarea
        /PRINT UNIVARIATE INITIAL CORRELATION EXTRACTION
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /METHOD=CORRELATION.

**********************************.
*** Common Factor Analysis.

FILTER OFF.
USE ALL.
EXECUTE.
```

```
**** Redo removing area-specific variables ****.

FACTOR
 /VARIABLES qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone
  /MISSING MEANSUB
  /ANALYSIS qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL COM)
  /METHOD=CORRELATION.


** For Scale-up survey only.
*FACTOR
 /VARIABLES QH110A QH110B QH110C QH110D QH110E QH110F QH110G
QH118A QH118B QH118C QH118D
    QH118E QH118F QH118G
   QH123 DOMESTIC HOUSE memsleep h2oires h2oyrd h2opub h2obwell
h2ipwell h2iowell h2opspg
    h2ouspg h2orain h2osurf h2obot h2ooth flushs flusht flushp
```

```
flushe latpit latpits
    latvip latcomp latbush latoth latshare dirtfloo woodfloo
cemtfloo tilefloo
    othfloo nowall natwall mudwall stonwall adobwall plywall
rwoodwall
    trnkwall cmtwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof bambroof
    metroof woodroof tileroof cmtroof shngroof othroof cookelec
cookkero cookchar cookwood cookcrop cooknone cookoth landarea
  /MISSING MEANSUB
  /ANALYSIS QH110A QH110B QH110C QH110D QH110E QH110F QH110G
QH118A QH118B QH118C QH118D
    QH118E QH118F QH118G
   QH123 DOMESTIC HOUSE memsleep h2oires h2oyrd h2opub h2obwell
h2ipwell h2iowell h2opspg
    h2ouspg h2orain h2osurf h2obot h2ooth flushs flusht flushp
flushe latpit latpits
    latvip latcomp latbush latoth latshare dirtfloo woodfloo
cemtfloo tilefloo
    othfloo nowall natwall mudwall stonwall adobwall plywall
rwoodwall
    trnkwall cmtwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof bambroof
    metroof woodroof tileroof cmtroof shngroof othroof
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL SU)
  /METHOD=CORRELATION.

*FREQUENCIES
  VARIABLES=su1  /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SKEWNESS
SESKEW
  KURTOSIS SEKURT
  /ORDER=  ANALYSIS .

weight off.

** Standard wealth index for DHS by urban and rural areas.


**  Urban Areas.

USE ALL.
COMPUTE filter_$=(qhtype = 1).
VARIABLE LABEL filter_$ 'qhtype = 1 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
```

```
EXECUTE .

WEIGHT
  OFF.


FACTOR
   /VARIABLES  qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E
   qh117A qh117B qh117C qh117E qh117F qh117G qh117H qh117I QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latbush latshare dirtfloo cemtfloo tilefloo
    rugfloo othfloo natwall mudwall stonwall adobwall rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall
    cardroof metroof woodroof asbroof tileroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cooknone landarea
  /MISSING MEANSUB
  /ANALYSIS  qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E
   qh117A qh117B qh117C qh117E qh117F qh117G qh117H qh117I QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latbush latshare dirtfloo cemtfloo tilefloo
    rugfloo othfloo natwall mudwall stonwall adobwall rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall
    cardroof metroof woodroof asbroof tileroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cooknone landarea
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL URB)
  /METHOD=CORRELATION.


** Rural Area.

USE ALL.
COMPUTE filter_$=(qhtype = 2).
VARIABLE LABEL filter_$ 'qhtype = 2 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
```

```
FACTOR
  /VARIABLES  qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H qh117I
QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2ooth flusht flushp latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    othfloo nowall natwall mudwall stonwall adobwall rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cookbio cookkero cookcoal cookchar cookwood cookstraw
cookcrop cookdung cooknone landarea
  /MISSING MEANSUB
  /ANALYSIS  qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H qh117I
QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2ooth flusht flushp latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    othfloo nowall natwall mudwall stonwall adobwall rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cookbio cookkero cookcoal cookchar cookwood cookstraw
cookcrop cookdung cooknone landarea
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL RUR)
  /METHOD=CORRELATION.



* Calculate regressions with total score.
** Urban Area.

USE ALL.
COMPUTE filter_$=(qhtype = 1).
VARIABLE LABEL filter_$ 'qhtype = 1 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .
```

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT COM1
  /METHOD=ENTER URB1  .

** Rural Area.

USE ALL.
COMPUTE filter_$=(qhtype = 2).
VARIABLE LABEL filter_$ 'qhtype = 2 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .


REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT COM1
  /METHOD=ENTER RUR1  .

FILTER OFF.
USE ALL.
EXECUTE .


*** Calculate combined wealth score from Urban and Rural Scores.
compute combscor=0.
print formats combscor (F11.5).
** Urban.
if (qhtype = 1) combscor=0.981534 +1.348241* URB1.
** Rural.
if (qhtype = 2) combscor=(-0.328828)+0.512805* RUR1.
execute.


*Tabulation for histograms
weight by hhwt.
filter off.
use all.
FREQUENCIES
  VARIABLES=combscor  /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MEAN
```

```
  /HISTOGRAM  NORMAL
  /ORDER=  ANALYSIS
.

*Calculate quintiles and scores for data file.
compute hhmemwt=qhweight*hv012/1000000.
weight by hhmemwt.
VARIABLE LABELS hhmemwt 'HH members weighting for Index' .

** Urban Area.
USE ALL.
COMPUTE filter_$=(qhtype = 1).
VARIABLE LABEL filter_$ 'qhtype = 1 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .

RANK
  VARIABLES=urb1  (A) /RANK /NTILES (5) /PRINT=YES
  /TIES=MEAN .

** Rural Area.

USE ALL.
COMPUTE filter_$=(qhtype = 2).
VARIABLE LABEL filter_$ 'qhtype = 2 (FILTER)'.
VALUE LABELS filter_$  0 'Not Selected' 1 'Selected'.
FORMAT filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE .

RANK
  VARIABLES=rur1  (A) /RANK /NTILES (5) /PRINT=YES
  /TIES=MEAN .

** National combined score.

FILTER OFF.
USE ALL.
EXECUTE .

RANK
  VARIABLES=combscor  (A) /RANK /NTILES (5) /PRINT=YES
  /TIES=MEAN .

FREQUENCIES
  VARIABLES=combscor  /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SKEWNESS
SESKEW
  KURTOSIS SEKURT
```

```
  /ORDER=  ANALYSIS .

frequencies variables=ncombsco.

compute hhwt=qhweight/1000000.
weight by hhwt.
VARIABLE LABELS hhwt 'HH weights' .

MEANS TABLES=qh107A qh107B qh107C qh107D qh107E qh107F qh107G
   qh113A qh113B qh113C qh113E qh113G
   qh117A qh117B qh117C qh117D qh117E qh117F qh117G qh117H qh117I
QH118
   memsleep h2oires h2oyrd h2opub h2obwell h2ipwell h2iowell
h2opspg h2ouspg
    h2orain h2ocart h2osurf h2obot h2ooth flusht flushp flushe
latpit latpits
    latvip latcomp latpail latbush latshare dirtfloo woodfloo
cemtfloo tilefloo
    rugfloo othfloo nowall natwall mudwall stonwall adobwall
rwoodwall
    cmtwall stoncwall brkwall cmtbwall cadobwall woodwall othwall
noroof natroof matroof
    cardroof metroof woodroof asbroof tileroof othroof cookelec
    cooklpg cookng cookbio cookkero cookcoal cookchar cookwood
cookstraw cookcrop cookdung cooknone landarea
    by Ncombsco
  /CELLS MEAN COUNT STDDEV.


compute hv271=combscor.
compute hv270=ncombsco.

save outfile="c:\hnp2a\Rwanda 2013\rw13misassets.sav".

WEIGHT
  OFF.

compute hhwt=qhweight/1000000.
weight by hhwt.

GRAPH
  /HISTOGRAM(NORMAL)=combscor
  /TITLE= 'Distribution of Households by Wealth Scores Rwanda
2010'.
FREQUENCIES
  VARIABLES=combscor  /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MINIMUM MAXIMUM SEMEAN MEAN MEDIAN MODE
SKEWNESS SESKEW
  KURTOSIS SEKURT
  /ORDER=  ANALYSIS .
```

```
write formats combscor urb1 rur1 (f11.5).

WRITE OUTFILE='c:\hnp2a\Rwanda 2013\rw13misscores.dat'
  TABLE
  /qhclust qhnumber combscor ncombsco urb1 nurb1 rur1 nrur1.
EXECUTE.
```