Users' Manual for Handling Resampled Micro Data of Vietnamese Household Living Standard Survey (VHLSS)

VHLSS 2010

(Version 1.0)

2017
The Institute of Statistical Mathematics (ISM)
and
Statistical Information Institute for Consulting and Analysis (SINFONICA)

History of revision of the manual

☐.Version 1.0: Finalized in January 2017 based on the discussion during the Workshop in December 2016.

☐ Provisional version in November 2016 for the Workshop in December 2016.

CONTENTS

VHLSS 2010

1. About this Manual

1. This manual was prepared for users to use the next 80% resampled micro data sets of Vietnamese Household Living Standard Survey (VHLSS) 2010.

CSV format

[1] ~~"hhexpe10_80.csv"~~	"muc1a_80.csv"	"muc1b_80.csv"	"muc2_80.csv"
[5] "muc3a_80.csv"	"muc3b_80.csv"	"muc4a_80.csv"	"muc4b0_80.csv"
[9] "muc4b11_80.csv"	"muc4b12_80.csv"	"muc4b13_80.csv"	"muc4b14_80.csv"
[13] "muc4b15_80.csv"	"muc4b16_80.csv"	"muc4b17_80.csv"	"muc4b21_80.csv"
[17] "muc4b22_80.csv"	"muc4b31_80.csv"	"muc4b32_80.csv"	"muc4b41_80.csv"
[21] "muc4b42_80.csv"	"muc4b51_80.csv"	"muc4b52_80.csv"	"muc4c1_80.csv"
[25] "muc4c2_80.csv"	"muc4d_80.csv"	"muc5a1_80.csv"	"muc5a2_80.csv"
[29] "muc5b1_80.csv"	"muc5b2_80.csv"	"muc5b3_80.csv"	"muc6_80.csv"
[33] "muc6b_80.csv"	"muc7_80.csv"	"muc8_80.csv"	"muc8vayno_80.csv"
[37] "ttchung_80.csv"			

R format

[1] ~~"hhexpe10_80"~~	"muc1a.80"	"muc1b.80"	"muc2.80"	"muc3a.80"
[6] "muc3b.80"	"muc4a.80"	"muc4b0.80"	"muc4b11.80"	"muc4b12.80"
[11] "muc4b13.80"	"muc4b14.80"	"muc4b15.80"	"muc4b16.80"	"muc4b17.80"
[16] "muc4b21.80"	"muc4b22.80"	"muc4b31.80"	"muc4b32.80"	"muc4b41.80"
[21] "muc4b42.80"	"muc4b51.80"	"muc4b52.80"	"muc4c1.80"	"muc4c2.80"
[26] "muc4d.80"	"muc5a1.80"	"muc5a2.80"	"muc5b1.80"	"muc5b2.80"
[31] "muc5b3.80"	"muc6.80"	"muc6b.80"	"muc7.80"	"muc8.80"
[36] "muc8vayno.80"	"ttchung.80"			

Note: hhexpe10_80 will not be provided.

2. The overall of VHLSS was described in the manual on “VHLSS – Overall and Survey Process”, separately.

3. The original micro data sets composed of all the samples were provided by NSO, Viet Nam based on the Charter for Experimental Laboratory for Research Purpose Statistical Use of Micro Data, and resampled at the rate of 80% by Sinfonica.

4. This manual was first compiled in January 2017 by;

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Visiting Senior Research Fellow, Sinfonica

Acknowledgements
Special thanks to Ms. Van Nghiem, GSO, Vietnam, who assisted my work of compiling the manuals by properly answering to my queries via email.

2. Outline of VHLSS 2010

The below table describes mainly on the income and expenditure survey.

Objectives of the survey	To evaluate living standards for policy-making and socio-economic development planning, in order to systematically monitor and supervise the living standards of different population groups in Viet Nam; to monitor and evaluate the implementation of the Comprehensive Poverty Reduction and Growth Strategy; and to contribute to the evaluation of achievement of the Millennium Development Goals (MDGs) and Vietnam's socio-economic development goals.
Topics covered by the survey	The income and expenditure survey covered the following topics; ● Some basic demographic characteristics related to living standards ● Education ● Health and health care ● Employment and income ● Expenditure ● Housing, electricity, water, sanitation facilities and durable goods ● Poverty reduction ● Participation in poverty reduction programs
Frequency of the survey	Every two years from 2002 to 2010
Survey period	● The survey collected information during four periods, each period in one quarter from the second quarter to the fourth quarter in 2010 and one period in the first quarter of 2011. ● The reference period of household income and expenditure was the last 12 months.
Coverage of the survey	● Geographically, the survey covered the whole country. Scope of the survey included all selected enumeration areas and communes in 64 provinces and cities under central management. ● The target population comprised the civilian, non-institutional population.
Sample design	● Three-stage stratified design Master sample based on 1999 Population Census Strata: province and urban/rural PSU: 3,132 communes/wards were selected. SSU: 3,133 enumeration areas. 3 EA were selected within PSU. Only one of EA was used for each year of VHLSS survey, with the exception of one

	PSU. FSU: household ● Sample size In total 69,360 households. 22,365 households were asked about income; 37,596 households were asked about income and other issues; 9,399 households were asked about income, expenditure and other issues. ● The income and expenditure survey was designed to assess living standards at national and regional level.
Data collection method	● Face-to-face interviews.
Data entry and data check	No description
Publication	“Result of The Vietnam Household Living Standards Survey 2010”

3. Data and metadata provided

[VHLSS 2010]

Note: The data set for 9,399 households asked about income, expenditure and other issues was provided by NSO.

◆ Household data files

File names in STATA format;			
[1] "hhexpe10.dta"	"muc1a.dta"	"muc1b.dta"	"muc2.dta"
[5] "muc3a.dta"	"muc3b.dta"	"muc4a.dta"	"muc4b0.dta"
[9] "muc4b11.dta"	"muc4b12.dta"	"muc4b13.dta"	"muc4b14.dta"
[13] "muc4b15.dta"	"muc4b16.dta"	"muc4b17.dta"	"muc4b21.dta"
[17] "muc4b22.dta"	"muc4b31.dta"	"muc4b32.dta"	"muc4b41.dta"
[21] "muc4b42.dta"	"muc4b51.dta"	"muc4b52.dta"	"muc4c1.dta"
[25] "muc4c2.dta"	"muc4d.dta"	"muc5a1.dta"	"muc5a2.dta"
[29] "muc5b1.dta"	"muc5b2.dta"	"muc5b3.dta"	"muc6.dta"
[33] "muc6b.dta"	"muc7.dta"	"muc8.dta"	"muc8vayno.dta"
[37] "ttchung.dta"	"weight10.dta"		

◆ Questionnaire

Household Questionnaire for Income & Expenditure Survey in English	
[1] "Can_doi(tn-ct)-ENG.xls"	"Muc01_1Bnew_En.xls"
[3] "Muc02_1Bnew_Erev.xls"	"Muc03_1Bnew_Erev.xls"
[5] "Muc04_1Bnew_Erev.xls"	"Muc05_1Bnew_Erev.xls"
[7] "Muc06_1Bnew_En.xls"	"Muc07_1Bnew_Erev.xls"
[9] "Muc08_1Bnew_ENG.xls"	

Remarks: The file “Muc0x” corresponds to section 0x.

"Can_doi(tn-ct)-ENG.xls" includes some computing indicators from results of household interviews.

◆ Codebook was not included in the metadata provided by NSO, but later prepared by Ms. Van.

Codebook_2010.xls	Describes variable name, topics, scope, length, code and description in each sheet of dataset

◆ Code of ethnicity, province, occupation and industry

The following lists of classification are available in the questionnaire.

- List of ethnicity code
- List of province code
- List of industry code
- List of occupation code

◆ Survey results

Survey report of VHLSS 2010	Result of The Vietnam Household Living Standards Survey 2010
Content of the report	Part A: Living standards through results of VHLSS 2010 I. Overview of the VHLSS 2010 II. Survey results 1. Some basic demographic characteristics related to living standards 2. Education 3. Health and health care 4. Employment and income 5. Expenditure 6. Housing, electricity, water, sanitation facilities and durable goods 7. Poverty reduction 8. Participation in poverty reduction programs 9. Commune general characteristics 10. General remarks Part B: Data results on the VHLSS 2010 Section 1. Some basic demographic characteristics related to living standards Section 2. Education Section 3. Labour - Employment Section 4. Health and health care Section 5. Income Section 6. Consumption expenditure Section 7. Durable goods Section 8. Housing, electricity, water, sanitation facilities and use of Internet

	Section 9. Participation in poverty reduction programs Section 10. Business production activities Section 11. Commune general characteristics
Note	The survey report is available at IHSN website.

☐ IHSN

http://catalog.ihsn.org/index.php/catalog/3277/ (Accessed on 09 April 2016)

Survey report	Result of The Vietnam Household Living Standards Survey 2010 (712 pages)
	Very detailed result tables in the report.

4. Data import

4.1 Import STATA data files into R

```
> list.files()
 [1] "hhexpe10.dta"  "muc1a.dta"     "muc1b.dta"     "muc2.dta"
 [5] "muc3a.dta"     "muc3b.dta"     "muc4a.dta"     "muc4b0.dta"
 [9] "muc4b11.dta"   "muc4b12.dta"   "muc4b13.dta"   "muc4b14.dta"
[13] "muc4b15.dta"   "muc4b16.dta"   "muc4b17.dta"   "muc4b21.dta"
[17] "muc4b22.dta"   "muc4b31.dta"   "muc4b32.dta"   "muc4b41.dta"
[21] "muc4b42.dta"   "muc4b51.dta"   "muc4b52.dta"   "muc4c1.dta"
[25] "muc4c2.dta"    "muc4d.dta"     "muc5a1.dta"    "muc5a2.dta"
[29] "muc5b1.dta"    "muc5b2.dta"    "muc5b3.dta"    "muc6.dta"
[33] "muc6b.dta"     "muc7.dta"      "muc8.dta"      "muc8vayno.dta"
[37] "ttchung.dta"   "weight10.dta"
> file.names<-list.files()

> library(foreign)
# Imported STATA files into R
> lss2010<-list()
> for(j in 1:38){
+ lss2010<-c(lss2010,list(read.dta(file.names[j],convert.factors=F)))
+ }
# 38 R data frames were stored in the list  “lss2010”.

# Made list of data file name, number of records and variables
> for(j in 1:38){
+ cat(file.names[j],": ",dim(lss2010[[j]]),"¥n")
+ }
hhexpe10.dta :  9399 53
muc1a.dta :  36999 18
muc1b.dta :  1221 17
muc2.dta :  36999 34
muc3a.dta :  19647 16
muc3b.dta :  36999 15
muc4a.dta :  36999 53
muc4b0.dta :  11619 9
```

muc4b11.dta : 13588 12
muc4b12.dta : 13157 11
muc4b13.dta : 3012 12
muc4b14.dta : 7207 12
muc4b15.dta : 6638 10
muc4b16.dta : 47482 13
muc4b17.dta : 15124 11
muc4b21.dta : 12967 10
muc4b22.dta : 8111 29
muc4b31.dta : 200 9
muc4b32.dta : 199 27
muc4b41.dta : 3504 13
muc4b42.dta : 2119 30
muc4b51.dta : 2671 10
muc4b52.dta : 2013 30
muc4c1.dta : 4007 23
muc4c2.dta : 4007 32
muc4d.dta : 9399 29
muc5a1.dta : 136854 10
muc5a2.dta : 236630 14
muc5b1.dta : 111034 10
muc5b2.dta : 119120 8
muc5b3.dta : 9399 14
muc6.dta : 9399 42
muc6b.dta : 91597 11
muc7.dta : 9399 30
muc8.dta : 9399 53
muc8vayno.dta : 1367 12
ttchung.dta : 9399 118
weight10.dta : 3133 5

4.1.2 Generated list of variable names in each data frame

```
> var.names<-list()
> for(j in 1:38){
+ var.names<-c(var.names,list(attributes(lss2010[[j]])$var.labels))
+ }
> length(var.names)
[1] 38

> for(j in 1:38){
+ varname<-colnames(lss2010[[j]])
+ cat("¥n","### ",j,": ",Rnames[j]," ##########¥n")
+ varlbl<-var.names[[j]]
+ for(k in 1:length(varname)){
+ cat(k,":",varname[k]," : ",varlbl[k],"¥n")
+ }}

# List of variable names and variable labels in each data frame
(omitted because the list is the part of the next list in 4.1.3.)
```

4.1.3 Labels of categorical variable

✓ Displayed the variable names, variable labels, and labels of response categories.

```
> for(n in 1:38){
+ df<-lss2010[[n]]
+ cat("¥n","### ",n,": ",Rnames[n]," ###########¥n")
+ cb<-vector(length=ncol(df),mode="list")
+ # cb: data frame of codebook
+ for(j in 1:length(cb)){
+ cb[[j]]$varname<-names(df)[j]
+ cb[[j]]$varlabel<-attributes(df)$var.labels[j]
+ cb[[j]]$vallabel<-(attributes(df)$label.table[attributes(df)$val.labels])[[j]]
+ } # end of for j
+ # print codebook
+ for(j in 1:length(cb)){
+ cat(format(j,width=2),format(cb[[j]]$varname,width=10),": ",
+     format(cb[[j]]$varlabel,width=30),"¥n")
+ if(length(cb[[j]])==3){  # including value labels
+   t<-cb[[j]]$vallabel
+   for(k in 1:length(t)){
+   cat(rep(" ",10),format(t[k],width=3),format(names(t)[k],width=30),"¥n")
+   } # end of for k
+ } # end of if
+ } # end of for j
+ } # end of for n

 ###  1 :  hhexpe10  ###########
 1 tinh       :
 2 huyen      :
 3 xa         :
 4 diaban     :
 5 hoso       :
 6 compfoodnom :  'Comparable' nominal household food consumption
 7 compricenom :  'Comparable' nominal household rice consumption
 8 compnonricenom :  'Comparable' non-rice household food consumption
 9 bestfoodnom :  Best nominal household food consumption
10 bestricenom :  Best nominal household rice consumption
11 bestnonricenom :  Best non-rice household food consumption
12 urban10    :  Indicator that household is urban; 0 means rural
                     0 Rural
                     1 Urban
13 reg8       :  8-region coding
                     1 Red River Delta
                     2 East Northern Mtns
                     3 West Northern Mtns
                     4 North Central Coast
                     5 South Central Coast
```

```
                    6 Central Highlands
                    7 Southeast
                    8 Mekong Delta
14 reg6       :  6-region coding
                    1 Red River Delta
                    2 Midlands and Northern Mountains
                    3 Northern and Coastal Central
                    4 Central Highlands
                    5 Southeast
                    6 Mekong Delta
15 monthint   :  Month of interview - for use with defltem
16 hhsize     :  Household size
17 wt9        :  Household sampling weight
18 hhszwt     :  Population weight -- wt9*hhsize
19 defltemrice :  GSO's CPI / temporal deflator for rice, scaled so that January 2010 =
1
20 defltemnonricefood :  GSO's CPI / temporal deflator for non-rice food, scaled so that
January 2010 = 1
21 defltemnonfood :  GSO's CPI / temporal deflator for non-food items, scaled so that
January 2010 =
22 deflGSOspatialfood :  GSO's spatial defl for food--rescaled for population- rather than
economic-weigh
23 deflGSOspatialnonfood :  GSO's spatial defl for nonfood--rescaled for population-
rather than economic-we
24 deflSCOLI  :  SCOLI, scaled so that allVN=1; defined by urban10 and reg6 variables
25 compfoodrl :  'Comparable' food household real consumption (deflators: Jan; GSO
regional)
26 compfoodpcrl :  'Comparable' food per capita real consumption (deflators: Jan; GSO
regional)
27 bestfoodrl :  Best food household real consumption (deflators: Jan; SCOLI)
28 bestfoodpcrl :  Best food per capita real consumption (deflators: Jan; SCOLI)
29 compnonfoodnom :  'Comparable' nominal housenhold nonfood consumption
30 compnonfoodrl :  'Comparable' food household real consumption (deflators: Jan; GSO
regional)
31 compnonfoodpcrl :  'Comparable' all per capita real consumption except food (deflators:
Jan; GSO re
32 comphhnom  :  'Comparable' household nominal consumption
33 comphhrl   :  'Comparable' household real consumption (deflators: Jan; GSO regional)
34 comppcnom  :  'Comparable' per capita nominal consumption
35 comppcrl   :  'Comparable' per capita real consumption (deflators: Jan; GSO regional)
36 bestnonfoodnom :  Best nominal household nonfood consumption
37 bestnonfoodrl :  Best food household real consumption (deflators: Jan; SCOLI)
38 bestnonfoodpcrl :  Best all per capita real consumption except food (deflators: Jan;
SCOLI)
39 besthhnom  :  Best household nominal consumption
40 besthhrl   :  Best household real consumption (deflators: Jan; SCOLI)
41 bestpcnom  :  Best per capita nominal consumption
42 bestpcrl   :  Best per capita real consumption (deflators: Jan; SCOLI)
43 bestrlpopquint :  Population quintiles by Best real (low to high)
44 bestrlpopquinturb :  Urban population quintiles by Best real (low to high)
```

45 bestrlpopquintrur : Rural population quintiles by Best real (low to high)
46 bestfoodpcnom : Best nominal per capita food consumption
47 compfoodpcnom : 'Comparable' nominal per capita food consumption
48 compricepcnom : 'Comparable' nominal per capita rice consumption
49 bestricepcnom : Best nominal per capita rice consumption
50 compnonricepcnom : 'Comparable' nominal non-rice per capita food consumption
51 bestnonricepcnom : Best nominal non-rice per capita food consumption
52 compnonfoodpcnom : 'Comparable' nominal per capita nonfood consumption
53 bestnonfoodpcnom : Best nominal per capita nonfood consumption

2 : muc1a
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 matv : ID code
7 m1ac2 : Sex
1 Male
2 Female
8 m1ac3 : Relationship
1 Household head
2 Wife/husband
3 Child
4 Father/mother
5 Paternal/maternal grandfather/grandmother
6 Paternal/maternal grandchild
7 Other relationships
9 m1ac4a : Month of birth
10 m1ac4b : Year of birth
11 m1ac5 : Age
12 m1ac6 : Marial status
1 Single
2 Married
3 Widowed
4 Divorced
5 Separated
13 m1ac7 : Months have stayed household
14 m1ac8 : Why has not lived household
1 Student studies in the country
2 Cadre studies in the country
3 Medical treament in the country/overseas
4 Newborn, new comer
5 Household head working away
6 Others
15 m1ac9 : Place of registering for residency
1 At this dwelling within com./ward
2 Other place within this province
3 Another province
4 Others

```
                    5 Never having registered household status
16 m1ac10     :  Province registering for residency
                    4 ***Undefined Label
                    6 ***Undefined Label
                    8 ***Undefined Label
                   17 ***Undefined Label
                   22 ***Undefined Label
                   40 ***Undefined Label
                   42 ***Undefined Label
                   54 ***Undefined Label
                   56 ***Undefined Label
                   58 ***Undefined Label
                   60 ***Undefined Label
                   62 ***Undefined Label
                   64 ***Undefined Label
                   70 ***Undefined Label
                   72 ***Undefined Label
                   77 ***Undefined Label
                   89 ***Undefined Label
                   99 Missing
17 m1ac11n    :  Years staying in the province
18 m1ac11t    :  Months staying in the province

 ###  3 :  muc1b  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m1bma      :  ID code
 7 m1bc3      :  Sex
                    1 Male
                    2 Female
 8 m1bc4      :  Being servant, home worker, lodger or house sharer?
                    1 Sevant
                    2 Home worker
 9 m1bc5      :  Age
10 m1bc6      :  Marital status
                    1 Never married
                    2 Married
                    3 Widowed
                    4 Devorced
                    5 Seperated
11 m1bc7a     :  The highest diploma of universalised and higher education
                    0 No degree
                    1 Primary school
                    2 Lower secondary school
                    3 Upper secondary school
                    8 College
                    9 University
```

```
                    10 Master
                    11 PhD
                    12 Others
12 m1bc7b     :  The highest diploma of vocational education
                     0 No degree
                     4 Short-term technical worker
                     5 Long-term technical worker
                     6 Professional secondary shool
                     7 Vocational college
13 m1bc8      :  Months staying in the dwelling in the last 12 months
14 m1bc9      :  Place of registering for residency
                     1 At this dwelling within com./ward
                     2 Other place within this province
                     3 Another province
                     4 Others
15 m1bc10     :  Province registering for residency
                     4 ***Undefined Label
                     6 ***Undefined Label
                     8 ***Undefined Label
                    17 ***Undefined Label
                    22 ***Undefined Label
                    40 ***Undefined Label
                    42 ***Undefined Label
                    54 ***Undefined Label
                    56 ***Undefined Label
                    58 ***Undefined Label
                    60 ***Undefined Label
                    62 ***Undefined Label
                    64 ***Undefined Label
                    70 ***Undefined Label
                    72 ***Undefined Label
                    77 ***Undefined Label
                    89 ***Undefined Label
                    99 Missing
16 m1bc11n    :  Years staying in the province
17 m1bc11t    :  Months staying in the province

 ###  4 :  muc2  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 matv       :  Member code
 7 m2c1       :  Which grade
 8 m2c2a      :  The highest qualification - General education and college-level upwards
                     0 No qualification
                     1 Primary
                     2 Lower secondary
                     3 Higher secondary
```

4 Elementary vocational school
5 Middle-level vocational school
6 Professional school
7 Vocational college
8 College
9 University
10 MA/MSc
11 PhD
12 Others

9 m2c2b : The highest qualification - Vocational training
0 No qualification
1 Primary
2 Lower secondary
3 Higher secondary
4 Elementary vocational school
5 Middle-level vocational school
6 Professional school
7 Vocational college
8 College
9 University
10 MA/MSc
11 PhD
12 Others

10 m2c3 : Which type of school
1 Public
2 Semi-public
3 Community-established
4 Private
5 Others

11 m2c4 : Does [name] go to school now?
1 Yes
2 On summer vacation
3 No

12 m2c5 : Has [name] attended school over the past 12 months?
1 Yes
2 No

13 m2c6 : Level of education
0 Nursery, kindergarten
1 Primary
2 Lower secondary
3 Higher secondary
4 Elementary vocational school
5 Middle-level vocational school
6 Professional school
7 Vocational college
8 College
9 University
10 MA/MSc
11 PhD
12 Others

14 m2c7 : Which grade is [name] attending?
15 m2c8 : Which school does [name] attend?
1 Public
2 Community-established
3 Private
4 Others
16 m2c9 : Reduction of or exemption from tuition fees or contributions to education?
1 Yes
2 No
17 m2c10a : Reasons for reduction/exemption from tuition fees?
1 Poor households
2 Ethnic minorities
3 Households of fallen combatants
4 War invalids, sick soldiers, or with revolutionary merits
5 Deep, remote, especially difficult areas
6 Families in difficult circumstances
7 Primary school students
8 School doesn't collect tuition fees
9 Others
18 m2c10b : Reasons for reduction/exemption from contribution?
1 Poor households
2 Ethnic minorities
3 Households of fallen combatants
4 War invalids, sick soldiers, or with revolutionary merits
5 Deep, remote, especially difficult areas
6 Families in difficult circumstances
7 Primary school students
8 School doesn't collect tuition fees
9 Others
19 m2c11a : Tuition fees?
0 0
20 m2c11b : Charge for not following a relevant reference system?
0 0
21 m2c11c : Contributions to school, class(construction fund,...)?
0 0
22 m2c11d : Parent fund, class fund?
0 0
23 m2c11e : Uniforms and costumes as stipulated?
0 0
24 m2c11f : Textbooks, reference books?
0 0
25 m2c11g : Other study instruments?
0 0
26 m2c11h : Coaching sessions for compulsory subjects in school?
0 0
27 m2c11i : Other education expenditures?
0 0
28 m2c11k : Total
0 0

29 m2c12 : Funds received from organisations that provide aid in education over the past 12
0 0
30 m2c13 : Values of scholarships and rewards received over the last 12 months?
0 0
31 m2c14 : Expenditures for other education and training over the past 12 months?
0 0
32 m2c15a : Toys bought in shops
1 Yes
2 No
33 m2c15b : Self-made toys
1 Yes
2 No
34 m2c16 : How many books/cartoon stories does your HH have for children?

5 : muc3a
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 matv : Member code
7 m3c2 : Names of users of medical services over the last 12 months?
8 m3c3a : Sequence number
9 m3c3b : Medical establishment code
1 Village/hamlet clinics
2 Commune/ward clinics
3 Regional general clinics.
4 Urban/rural district hospitals
5 Provincial/city hospitals
6 Central hospitals
7 Other state-run hospitals
8 Private hospitals
9 Other hospitals
10 Private practice
11 Traditional herbal physicians
12 Individual medical services
13 Other medical establishments
10 m3c4 : Reasons for [name] to visit medical establishments?
1 Vaccination
2 Pregnancy checks, insertion of intrauterine devices, abortion, birth delivery
3 Health checks and consultancy
4 Medical treatment
11 m3c5a : Number of visits for health checks/non-resident treatment of [name] over the pas
0 0
12 m3c5b : Costs for health checks/non-resident treatment of [name] over the past 12 months
0 0

13 m3c6a : Number of visits for resident treatment of [name] over the past 12 months?
0 0
14 m3c6b : Costs of visits for resident treatment of [name] over the past 12 months?
0 0
15 m3c7 : Did the household afford the medical check/treatment?
1 Yes, it did
2 It had some but not enough
3 No
16 m3c8 : If it did have some but not enough or didn't afford, did you have to sell produc
0 0

6 : muc3b
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 matv : ID code
7 m3c9 : Health insurance card in the last 12 months
1 Yes
2 No
8 m3c10a : The first type
1 Booklet/card for children aged 6 or less
2 Health insurance card for the poor
3 Health insurance card for the near-poor
4 Free healthcare booklet/card/certificate
5 Health insurance card for policy beneficiaries
6 Other compulsory state-run health insurance card
7 Other compulsory non-state health insurance card
8 Voluntary health insurance card for students
9 Other voluntary health insurance card
10 Others
9 m3c10b : The second type
1 Booklet/card for children aged 6 or less
2 Health insurance card for the poor
3 Health insurance card for the near-poor
4 Free healthcare booklet/card/certificate
5 Health insurance card for policy beneficiaries
6 Other compulsory state-run health insurance card
7 Other compulsory non-state health insurance card
8 Voluntary health insurance card for students
9 Other voluntary health insurance card
10 Others
10 m3c11 : spent on health insurance
0 0
11 m3c12a : Out-service
1 Yes
2 No
12 m3c12b : In-service

```
                    1 Yes
                    2 No
13 m3c13      :  spent on purchasing medicines
                    0 0
14 m3c14      :  spent on purchasing medical facilities
                    0 0
15 m3c15      :  value of grants
                    0 0

 ###  7 :  muc4a  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 matv       :  ID code
 7 m4ac1a     :  waged/salaried employment
                    1 Yes
                    2 No
 8 m4ac1b     :  Involved in agri, fishery and farm
                    1 Yes
                    2 No
 9 m4ac1c     :  involved bussiness, services
                    1 Yes
                    2 No
10 m4ac2      :  Working or not?
                    1 Yes
                    2 No
11 m4ac3a     :  Number of days
12 m4ac3m     :  Work description of the most time-consuming job
13 m4ac3      :  Occupation code of the most time-cosuming job
14 m4ac4c     :  Names of employing agencies
15 m4ac4m     :  Description of employing agencies' main tasks/products
16 m4ac4      :  Industry code
                   35 Production and distribution of electricity, gas, hot water, steam
and air conditioners
                  110 Agriculture and related services: crop production
                  140 Agriculture and related services: husbandry
                  160 Agriculture and related services: agricultural services
17 m4ac5      :  taken the most time-consuming job over the last 30 days
                    1 Yes
                    2 No
18 m4ac6      :  For how many days has...done it for the last 30 days
19 m4ac7      :  On average how many hours does...usually work for a days
20 m4ac8a     :  8a.Economic types
                    1 Farming, forestry, aquaculture households / individuals
                    2 Independent production and business households
                    3 Collective
                    4 Private
                    5 State-run
```

6 Foreign-invested
21 m4ac8b : 8b.Official?
1 Yes
2 No
22 m4ac9 : Has [name] received salaries, wages for this job?
1 Yes
2 No
23 m4ac10 : How much in cash and kind has [name] received from this job over the past 30 day
24 m4ac11 : How much in salaries/wages, including that in kind, has[name] received from this
25 m4ac12a : Festive occasions, 1/5, 2/9, 22/12, Lunar Tet...
26 m4ac12b : Others (bonuses, uniforms, lunch, allowances for business trips, sickness, labor
27 m4ac13a : Signing a payroll book?
1 Yes
2 No
28 m4ac13b : Paid leave / festive occasions?
1 Yes
2 No
29 m4ac13c : Social insurance?
1 Yes
2 No
30 m4ac14 : Any other jobs in the last 12 months?
1 Yes
2 No
31 m4ac15a : For how many days has [name] performed the second most time-cosuming job over th
32 m4ac15m : Work description of the second most time-cosuming job
33 m4ac15 : Occupation code of the most time-cosuming job
34 m4ac16c : Names of employing agencies
35 m4ac16m : Description of main tasks/products of employing agencies/organizations
36 m4ac16 : Industry code
35 Production and distribution of electricity, gas, hot water, steam and air conditioners
110 Agriculture and related services: crop production
140 Agriculture and related services: husbandry
160 Agriculture and related services: agricultural services
37 m4ac17 : taken the second most time-consuming job over the last 30 days
1 Yes
2 No
38 m4ac18 : For how many days has...been doing this job last 30 days
39 m4ac19 : For how many hours has...been doing this job for a day on average
40 m4ac20 : Employer/owner?
1 Farming, forestry, aquaculture households / individuals
2 Independent production and business households
3 Collective
4 Private
5 State-run
6 Foreign-invested

41 m4ac21 : Working for wage/salary?
1 Yes
2 No
42 m4ac22 : Total Wage/salary received in the past 1 months- second job
43 m4ac23 : Total Wage/salary received in the past 12 months- second job
44 m4ac24a : Income from bonus/ award received during public holidays
45 m4ac24b : Other incomes: bonuses, uniforms, lunch, allowances for business trips, sickness
46 m4ac25 : Any other job for wage/salary?
1 Yes
2 No
47 m4ac26 : Income from any other job?
48 m4ac27 : Has received unemployment benefits, one-off severance pays, pensions, ... over t
1 Yes
2 No
49 m4ac28a : Has received from unemployment allowance in the past 12 months
50 m4ac28b : Has received from one-off severance pay in the past 12 months
51 m4ac28c : Has received from standard pension at a stipulated age in the past 12 months
52 m4ac28d : Has received from premature pension in the past 12 months
53 m4ac28e : Has received from allowance for loss of working capacity in the past 12 months

8 : muc4b0
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4b0ma : Code of land plot
1 Annual crop land
2 Perennial crop land
3 Forestry land
4 Water surface
5 Grassland
6 Gardens, ponds adjacent to residential land
7 Shifting-cultivation farmland
8 Others specify
7 m4b0c3 : How much area of land does your family use or manage?
8 m4b0c4 : Payment in cash and in-kind for land rent or contracting in the last 12 months?
9 m4b0c5 : Amount in cash and in-kind obtained from land rental in the last 12 months

9 : muc4b11
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code

```
 6 m4b11ma    :  Rice code
                      1 Winter-spring ordinary rice
                      2 Summer-autumn ordinary rice
                      3 Ten-month or autumn-winter rice
                      4 Ordinary rice planted in terraced field
                      5 Year-round ordinary rice
                      6 Year-round glutinous rice
                      7 Year-round specialty rice
 7 m4b11c3    :  Area in sqm for planting rice
 8 m4b11c4    :  Output in KGs?
 9 m4b11c5    :  Amount in KGs lost due to pests/rotting...?
10 m4b11c6    :  Sold/bartered in KGs?
11 m4b11c7    :  Amount sold/bartered?
12 m4b11c8    :  Value received from sold/batrtered

 ###  10 :  muc4b12  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b12ma    :  Staple food crops, non-staple food crops, and other annual crops
                      8 Maize (corn)
                      9 Sweet potato
                     10 Cassava/manioc
                     11 Other staple food crops
                     12 Potato
                     13 Morning glory vegetable
                     14 Kohlrabi
                     15 Cabbage, cauliflower
                     16 Cruciferous vegetables
                     17 Edible beans
                     18 Tomato
                     19 Seasoning herb
                     20 Other edible vegetables, fruits and roots
                     21 Other annual crops (flowers, etc.)
 7 m4b12c3    :  Area in sqm for planting rice
 8 m4b12c4    :  Output in KGs?
 9 m4b12c5    :  Sold/bartered in KGs?
10 m4b12c6    :  Amount sold/bartered?
11 m4b12c7    :  Value received from sold/batrtered

 ###  11 :  muc4b13  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b13ma    :  Annual and perennial industrial crops
                     22 Soya bean/soybean
```

```
                    23 Peanut/groundnut
                    24 Sesame
                    25 Sugarcane
                    26 Tobacco, rustic tobacco
                    27 Cotton
                    28 Jute, ramie (China grass)
                    29 Sedge
                    30 Other industrial annuals
                    31 Tea
                    32 Coffee
                    33 Rubber
                    34 Pepper
                    35 Coconut
                    36 Mulberry
                    37 Cashew
                    38 Other industrial perennials
 7 m4b13c3a   :  Area in sqm for planting rice
 8 m4b13c3b   :  Code
                     1 M2
                     2 Tree
 9 m4b13c4    :  Output in KGs?
10 m4b13c5    :  Sold/bartered in KGs?
11 m4b13c6    :  Amount sold/bartered?
12 m4b13c7    :  Value received from sold/batrtered

 ###  12 :  muc4b14  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b14ma    :  Fruit trees
                    39 Citrus
                    40 Pineapple
                    41 Banana
                    42 Mango, horse mango
                    43 Indian jujube
                    44 Grape
                    45 Plum
                    46 Papaya
                    47 Longan, lychee, rambutan
                    48 Sapodilla
                    49 Sugar-apple, soursop
                    50 Jackfruit, durian
                    51 Mangosteen
                    52 Other fruit trees
                    53 Other perennials
                    54 Seedlings
                    55 Decorative trees
 7 m4b14c3a   :  Area in sqm for planting rice
```

```
 8 m4b14c3b   :  Code
                      1 M2
                      2 Tree
 9 m4b14c4    :  Output in KGs?
10 m4b14c5    :  Sold/bartered in KGs?
11 m4b14c6    :  Amount sold/bartered?
12 m4b14c7    :  Value received from sold/batrtered

 ###  13 :  muc4b15  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b15ma    :  Code of crop by-products
                      1 Straw, thatch
                      2 Sweet potato leaves and stems
                      3 Cassava and maize stems
                      4 Stems of beans of all kinds
                      5 Sugarcane leaves and tops
                      6 Jute, ramie stems
                      7 Mulberry plant stems
                      8 Firewood
                      9 Other crop by products
 7 m4b15c2    :  Value from sales/barter
 8 m4b15c3    :  Value kept for household's animal food
 9 m4b15c4    :  Value kept for other purposes?
10 m4b15c5    :  Total value

 ###  14 :  muc4b16  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b16ma    :  Crop planting expense code
                      1 Seeds
                      2 Saplings
                      3 Chemical fertilizers
                      4 Organic fertilizers(seft-provided)
                      5 Organic fertilizers (bought)
                      6 pesticides
                      7 Herbicides
                      8 Small, non-durable tools
                     10 Small repairs, maintenance
                     11 Fixed asset depreciation
                     12 Land rental and procurement
                     13 Hire of assets, machines, vehicles and mechanical work; hire of
transport
                     14 Hire of ploughing cattle
```

```
                    15 Paying outsourced labour
                    16 Inner-field irrigation
                    17 Payment of interest on loans taken out for production
                    18 Other costs
                    91 Electricity
                    92 Coal
                    93 Coal briquette
                    94 Petrol
                    95 Kerosene
                    96 Mazut oil
                    97 Diesel oil
                    98 LPG
                    99 Natural gas
                   910 Firewood
                   911 Other energy and fuels
 7 m4b16c2a   :  Expenditure on rice crop
 8 m4b16c2b   :  Expenditure on starchy and other food crops
 9 m4b16c2c   :  Expenditure on industrial crops
10 m4b16c2d   :  Expenditure on fruit crops and others, excluding forestry trees
11 m4b16c2e   :  Total Crop Planting Expenditure
12 m4b16c2e1  :  State subsidy
13 m4b16c2e2  :  Other assistance

 ###  15 :  muc4b17  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b17ma    :  Code of chemical fertilizers
                    1 Nitrogenous
                    2 Phosphat
                    3 Potassium
                    4 NPK
                    5 Other chemical fertilizers
 7 m4b17c2    :  Rice
 8 m4b17c3    :  Other staple and food trees
 9 m4b17c4    :  Industrial trees
10 m4b17c5    :  Fruit trees and others
11 m4b17c6    :  Total

 ###  16 :  muc4b21  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b21ma    :  Livestock breeding code
                    1 Live pig pork
                    2 Live buffalo and cow meat
```

3 Horses
4 Sheep, goats
5 Chickens
6 Ducks, thai ducks, geese
7 Other poultry
8 Pigs for breed
9 Buffaloes, oxen, cows for breed
10 Other cattle for breed
11 Other livestocks
12 Poultry eggs
13 Fresh milk
14 Silkworm cocoond
15 Bee's honey
16 Other livestock(non-slaughtered)
17 Other income from breeding
18 Livestock breeding by products
19 Hunting, trapping and domesticating forest animals and birds

7 m4b21c3 : Quantity obtained over the last 12 months?
8 m4b21c4a : Quantity sold/bartered
9 m4b21c4b : Value sold/bartered
10 m4b21c5 : Value of the output obtained over the last 12 months

17 : muc4b22
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4b22ma : Code of livestock breeding
1 Pigs
2 Water buffalos, cows
3 Horses
4 Sheep, goats
5 Chickens
6 Ducks, Thai ducks, geese
7 Other poultry
8 Bees
9 Silkworms
10 Others
11 Hungtin trapping and domesticating forest animals and birds
7 m4b22c7 : Expenditure on Livestock breeds
8 m4b22c8 : Expenditure on feed
9 m4b22c9 : Expenditure on Medicine for cattle, poultry
10 m4b22c10a : Expenditure on Electricity
11 m4b22c10b : Expenditure on Coal
12 m4b22c10c : Expenditure on Coal/Briquette
13 m4b22c10d : Expenditure on Petrol
14 m4b22c10e : Expenditure on Kerosene
15 m4b22c10f : Expenditure on Mazut oil
16 m4b22c10g : Expenditure on Diesel oil

17 m4b22c10h : Expenditure on LPG
18 m4b22c10i : Expenditure on Natural gas
19 m4b22c10j : Expenditure on Firewood
20 m4b22c10k : Expenditure on Others
21 m4b22c11 : Water
22 m4b22c12 : Expenditure on fixed assets Depreciation
23 m4b22c13 : Expenditure on Land rental and auction
24 m4b22c14 : Expenditure on Rental of assets, machinery, equipment, means of production
25 m4b22c15 : Payment for hired laborers
26 m4b22c16 : Payment for loan interest for breeding
27 m4b22c17 : Business taxes
28 m4b22c18 : Other expenses
29 m4b22c19 : Total livestock breeding expenditure

18 : muc4b31
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4b31ma : Agricultural Service code
1 Soil preparation
2 Irrigation
3 Pest and disease control
4 Rice plucking, semi-processing
5 Other services
7 m4b31c3 : Number of operating months
8 m4b31c4 : Average monthly income
9 m4b31c5 : Total Agricultural Service Income

19 : muc4b32
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4b32ma : Agricultural Services expense code
1 Soil preparation
2 Irrigation
3 Pest and disease control
4 Rice plucking, semi-processing
5 Other services
7 m4b32c7 : Expenditure on materials
8 m4b32c8 : Expenditure on small, non-durable iterms
9 m4b32c9a : Expenditure on Electricity
10 m4b32c9b : Expenditure on Coal
11 m4b32c9c : Expenditure on Coal briquette
12 m4b32c9d : Expenditure on Petrol
13 m4b32c9e : Expenditure on Kerosene

14 m4b32c9f : Expenditure on Mazut oil
15 m4b32c9g : Expenditure on Diesel oil
16 m4b32c9h : Expenditure on LPG
17 m4b32c9i : Expenditure on Natural gas
18 m4b32c9j : Expenditure on Fuelwood
19 m4b32c9k : Expenditure on Others
20 m4b32c10 : Expenditure on minor repairs, maintenance
21 m4b32c11 : Fixed assets depreciation
22 m4b32c12 : Expenditure on rental of house, workshops,...
23 m4b32c13 : Payment for hires outside laborers
24 m4b32c14 : Payment for loan interest for business
25 m4b32c15 : Business taxes
26 m4b32c16 : Other expenditure
27 m4b32c17 : Total Agricultural Services Expenditure

20 : muc4b41
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4b41ma : Forestry product code
1 Mu oil trees
2 Cinnamon
3 Anise
4 Pine
5 Vamish trees
6 Trees for wood
7 Bamboo
8 Fan palm trees
9 Water coconut
10 Other forestry trees
11 Wood
12 Forest plantation, protection, maintenance, improvement
13 Trees for breeding and other products collected from forests
14 Other forestry services
7 m4b41c3a : Value of turnover and harvested output/Forestry land for production allocated to
8 m4b41c3b : Value of turnover and harvested output/Forestry land for production not allocate
9 m4b41c3c : Value of turnover and harvested output/Protective forestry land allocated to hou
10 m4b41c3d : Value of turnover and harvested output/Protective forestry land not allocated to
11 m4b41c3e : Value of turnover and harvested output/Other forestry land
12 m4b41c3f : Value of turnover and harvested output/Total
13 m4b41c4 : Value of sales/bartered

21 : muc4b42
1 tinh : Province

```
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b42ma    :  Forestry activity code
                      1 Forestry activities
                      2 Forestry services
 7 m4b42c1    :  Expenditure on seeds, breeds
 8 m4b42c2    :  Expenditure on various type of fertilizers
 9 m4b42c3    :  Expenditure on small, non-durable tools
10 m4b42c4a   :  Expenditure on Electricity
11 m4b42c4b   :  Expenditure on Coal
12 m4b42c4c   :  Expenditure on Coal briquette
13 m4b42c4d   :  Expenditure on Petrol
14 m4b42c4e   :  Expenditure on Kerosene
15 m4b42c4f   :  Expenditure on Mazut (oil)
16 m4b42c4g   :  Expenditure on Diesel (oil)
17 m4b42c4h   :  Expenditure on LPG
18 m4b42c4i   :  Expenditure on Natural gas
19 m4b42c4j   :  Expenditure on Fire-wood
20 m4b42c4k   :  Expenditure on others
21 m4b42c5    :  Expenditure on small repairs, maintenance
22 m4b42c6    :  Fixed assets depreciation
23 m4b42c7    :  Expenditure on land rental and auction
24 m4b42c8    :  Expenditure on rent of assets, machinery,..
25 m4b42c9    :  Expenditure on hiring animals for droughing and pulling
26 m4b42c10   :  Hiring laborers from outside
27 m4b42c11   :  Loan interest
28 m4b42c12   :  Business taxes
29 m4b42c13   :  Other expenditure
30 m4b42c14   :  Total expenditure for forestry ...

 ###  22 :  muc4b51  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b51ma    :  Aquaculture code
                      1 Aquacultural raising
                      2 Auquacultural catching
                      3 Aquacultural sevices
                     11 Fish
                     12 Shrimp
                     13 Shrimp and fish for breed
                     14 Other aquacultural products
                     21 Fish
                     22 Shrimp
                     23 Other aquacultural products
 7 m4b51c3    :  Total catch over the past 12 months?
```

```
 8 m4b51c4a   :  Quantity sold/bartered
 9 m4b51c4b   :  Value sold/bartered
10 m4b51c5    :  Total values of products gained over the past 12 months?

 ###  23 :  muc4b52  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4b52ma    :  Aquacultural breed code
                      1 Raising
                      2 Catching
                      3 Services
 7 m4b52c6    :  Expenditure on aquacultural breeds
 8 m4b52c7    :  Expenditure on feeds
 9 m4b52c8    :  Expenditure on small, non-durable tools
10 m4b52c9a   :  Expenditure on Electricity
11 m4b52c9b   :  Expenditure on Coal
12 m4b52c9c   :  Expenditure on Coal briquette
13 m4b52c9d   :  Expenditure on Petrol
14 m4b52c9e   :  Expenditure on Kerosene
15 m4b52c9f   :  Expenditure on Mazut (oil)
16 m4b52c9g   :  Expenditure on Diesel (oil)
17 m4b52c9h   :  Expenditure on LPG
18 m4b52c9i   :  Expenditure on Natural gas
19 m4b52c9j   :  Expenditure on Fuel-wood
20 m4b52c9k   :  Expenditure on Others
21 m4b52c10   :  Expenditure on Salt, ice water
22 m4b52c11   :  Expenditure on small repairs, maintenance
23 m4b52c12   :  Expenditure on Fixed assets depreciation
24 m4b52c13   :  Expenditure on land rental and auction
25 m4b52c14   :  Expenditure on rental of assets, machinery, equipment
26 m4b52c15   :  Payment for hired laborers
27 m4b52c16   :  Payment for loan interest
28 m4b52c17   :  Business taxes
29 m4b52c18   :  Other expenses
30 m4b52c19   :  Total aquacultural expenditure

 ###  24 :  muc4c1  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m4c1ma     :  Order of activities
 7 m4c1c2     :  Industry code
                     35 ***Undefined Label
                     68 ***Undefined Label
                     84 ***Undefined Label
```

85 ***Undefined Label
99 ***Undefined Label
8 m4c1c3 : Number of months this activity under operation for the past 12 months
9 m4c1c4 : HH's member owned all of the business or not
1 Yes
2 No
10 m4c1c5 : Number of households that own the business
11 m4c1c6 : The percentage of income from this business received by your household
12 m4c1c7 : Having business license or not
1 Yes, enterprise
2 Yes, private trading
3 No
13 m4c1c8 : The product of this activity is for selling/bartering/supplying services or not
1 Yes
2 No
14 m4c1c9 : For months business under operation for past 12 months, what was the average mon
15 m4c1c10 : The revenue for the past 12 months
16 m4c1c11 : HH exchanged goods and services produce by this business for other goods and ser
1 Yes
2 No
17 m4c1c12 : The value of exchanged goods and services for past 12 months?
18 m4c1c13 : HH consumed any goods and services produced by this business for past 12 months?
1 Yes
2 No
19 m4c1c14 : The value of goods and services consumed by your HH past 12 months?
20 m4c1c15 : HH consumed or sold and by-products produced by this business for the past 12 mo
1 Yes
2 No
21 m4c1c16 : The value of by-products consumed or sold by your HH for past 12 months?
22 m4c1c17 : Total income
23 m4c1c18 : Total income allocated for HH

25 : muc4c2
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4c2ma : Order of activities
7 m4c2c19 : Main and minor materials
8 m4c2c20 : Small, cheap, undurable tools
9 m4c2c21a : Electricity
10 m4c2c21b : Coal
11 m4c2c21c : Coal briquette
12 m4c2c21d : Petrol

13 m4c2c21e : Kerosene
14 m4c2c21f : Mazut (oil)
15 m4c2c21g : Diesel (oil)
16 m4c2c21h : LPG
17 m4c2c21i : Natural gas
18 m4c2c21j : Firewood
19 m4c2c21k : Others
20 m4c2c22 : Water
21 m4c2stt : STT
22 m4c2c23 : Minor repair, maintenance
23 m4c2c24 : Depreciation of fixed assets
24 m4c2c25 : Rent of land, workshops, shops, machines and other means of production
25 m4c2c26 : Transport (rents and charges)
26 m4c2c27 : Costs of labour
27 m4c2c28 : Loan interests
28 m4c2c29 : Taxes, fees and charges regarded as taxes
29 m4c2c30 : Costs of treatment of sewage and solid waste
30 m4c2c31 : Other costs
31 m4c2c32 : Total costs
32 m4c2c33 : Total costs divided by household(s)

26 : muc4d
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m4dc2_01 : Oversea remittance received in both cash and kinds
7 m4dc2_02 : Cash and kind (value) for domestic use sent as a gift... residing and working ov
8 m4dc2_03 : Gift of housing
9 m4dc2_04 : Gift of automobile(s) for domestic use
10 m4dc2_05 : Other gifts of assets for domestic use
11 m4dc2_06 : Domestic remittance recieved in both cash and kind
12 m4dc2_07 : Cash and kind (value) for domestic use sent as a gift or... who work as seasonal
13 m4dc2_08 : Gift of housing
14 m4dc2_09 : Gift of automobile(s) for domestic use
15 m4dc2_10 : Other gifts of assets for domestic use
16 m4dc2_11 : Wedding cash
17 m4dc2_12 : Funeral cash tributes
18 m4dc2_13 : Social benefits for war invalids, families of fallen combatants...
19 m4dc2_14 : Social benefits for beneficiary households of social policies
20 m4dc2_15 : Assistance to overcome natural disasters and fire
21 m4dc2_16 : Income from various types of insurance
22 m4dc2_17 : Withdrawal from saving, stocks, obtaining debts
23 m4dc2_18 : Income from leasing workshops, machines, assets, equiment
24 m4dc2_19 : Revenues as donations from organizations, humanitarian aid, associations and uni
25 m4dc2_20 : Others

```
26 m4dc2_21    :  2. Trﾞ giｸ nhﾋn ｮｭ祥 trong 12 thｸng qua
27 m4dc2_22    :  2. Trﾞ giｸ nhﾋn ｮｭ祥 trong 12 thｸng qua
28 m4dc2_23    :  2. Trﾞ giｸ nhﾋn ｮｭ祥 trong 12 thｸng qua
29 m4dc2_24    :  2. Trﾞ giｸ nhﾋn ｮｭ祥 trong 12 thｸng qua

 ###  27 :  muc5a1  ###########
 1 tinh        :  Province
 2 huyen       :  District
 3 xa          :  Commune
 4 diaban      :  Enumerator area
 5 hoso        :  Household code
 6 m5a1ma      :  Consumed items
                     101 Fragrant, specialty rice
                     102 Sticky rice
                     110 Pork
                     111 Beef
                     112 Buffalo's meat
                     113 Chicken
                     114 Duck and other poultry meat
                     115 Other meat
                     116 Processed meat
                     118 Fresh fish, shrimp
                     120 Other seafoods
                     121 Eggs of Chicken or duck
                     124 Beans of all kinds
                     134 Fruit
                     139 Sugar, molassess
                     140 Cakees, candy, jam
                     144 Alcohol
                     145 Beer
                     148 Coffee
                     150 Dried tea
                     151 Cigarettes, tobacco
                     153 Outdoors eating
                     154 Other things
 7 m5a1c2a     :  Quantity bought/bartered
 8 m5a1c2b     :  Value bought/bartered
 9 m5a1c3a     :  Quantity self-supplied/received
10 m5a1c3b     :  Value self-supplied/received

 ###  28 :  muc5a2  ###########
 1 tinh        :  Province
 2 huyen       :  District
 3 xa          :  Commune
 4 diaban      :  Enumerator area
 5 hoso        :  Household code
 6 m5a2ma      :  Things has HH consumed for last 12 months
                     101 Plain rice
                     102 Sticky rice
                     103 Maize
```

104 Cassaca
105 Various types of potatoes
106 Wheat grains,bread,wheat
107 Noodle, pho noodle, instant rice soup
108 Rice noodle
109 Vermicelli
110 Pork
111 Beef
112 Buffalo's meat
113 Chicken
114 Duck and other poultry meat
115 Other meat
116 Processed meat
117 Lard,cooking oil
118 Fresh fish, shrimp
119 Dried and processed fish shrimp
120 Other aquatic producs and seafoods
121 Chicken or duck eggs
122 Tofu
123 Peanuts, seasame seeds
124 beans
125 Various kinds of fresh pea
126 Water morning glory
127 Kohirabi
128 cabbage
129 tomatoes
130 Other vegetables
131 Oranges
132 Bananas
133 Mangoes
134 Other fruits
135 Fish sauce and dipping sauce
136 Salt
137 Spices, powdered soup
138 Glutamale
139 Sugar, molasses
140 Cakes, candied fruits, sweets
141 Condensed milk, powdered milk
142 Ice creams, yoghurt
143 fresh milk
144 Alcohol
145 Beer
146 bottle,canned,boxed beverages
147 Instant coffee
148 Powdered coffee
149 Instant tea powder
150 Other dried coffee
151 Cigarettes, tobacco
152 Betel leaf, areca nut, lime
153 Outdoors meals

154 Others
7 m5a2c2a : Quantily months bought/bartered
8 m5a2c2b : Value months bought/bartered
9 m5a2c3a : Quantily purchase or exchange
10 m5a2c3b : Value purchase or exchange
11 m5a2c4a : Quantily self-subsidy
12 m5a2c4b : Value self-subsidy
13 m5a2c5a : Quantily gift,donation,present
14 m5a2c5b : Value gift,donation,present

29 : muc5b1
1 tinh : Province
2 huyen : District
3 xa : Commune
4 diaban : Enumerator area
5 hoso : Household code
6 m5b1ma : which of the Items has your HH consumed over the last 30 days?
201 Pocket money for children
202 Coal
203 Coal briquette
204 Petroleum
205 Kerosene
206 Mazut oil
207 Diesel oil
208 LPG
209 Natural gas
210 Firewood,husk,sawdust
211 Farm by-products
212 Other type of fuel
213 Deposit fees for vehicles
214 Matches,candles,fire stones,lighters
215 Soap/detergent,softening solution
216 Dish washing,floor-cleaning liquid
217 Shampoo, conditioning
218 Bath soap,shower gel
219 Skin-nourishing cream,powder and lipsticks
220 Toothpaste, tooth brushes
221 Toilet paper, razorblades
222 Book, newspaper, magazines
223 Books,newspapers for children
224 Fresh flowers
225 Lottery tickets
226 Items for workship
227 Haircut, hairdressing
228 Other daily expenditures
7 m5b1c2 : Value bought per month
8 m5b1c3 : Purchase or exchange value
9 m5b1c4 : value self-subsidy
10 m5b1c5 : value gift,donation,present

```
 ###  30 :  muc5b2  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m5b2ma     :  which is the Items HH has consumed for last 12 months?
 7 m5b2c2     :  Value bought per year
 8 m5b2c3     :  Value Self generated/given value per year

 ###  31 :  muc5b3  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m5b3c2_1   :  Fees and charges on administrative and legal services for daily-life
requirement
 7 m5b3c2_2   :  Contributions to various funds over the past 12 months
 8 m5b3c2_3   :  Cash contributions in lieu of public labor and other obligations over
the past 1
 9 m5b3c2_4   :  All kinds of taxes over the past 12 months
10 m5b3c2_5   :  Wedding of a household member over the past 12 months
11 m5b3c2_6   :  Funeral and death anniversaries over the past 12 months
12 m5b3c2_7   :  Organization of parties and entertaining activities over the past 12
months
13 m5b3c2_8   :  Gifts, donation, support,..over the past 12 months
14 m5b3c2_9   :  Other expenses over the past 12 months

 ###  32 :  muc6  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m6ma_01    :  Automobile
 7 m6ma_02    :  Motorbike
 8 m6ma_03    :  Bicycle
 9 m6ma_04    :  Ship,boat,junk,outer part with a motor
10 m6ma_05    :  Ship,boat,junk,outer part without a motor
11 m6ma_06    :  Other means of travel
12 m6ma_07    :  Pumping machine
13 m6ma_08    :  Electricity generator
14 m6ma_09    :  Printer
15 m6ma_10    :  Fax machine
16 m6ma_11    :  Landline telephone
17 m6ma_12    :  Mobile telephone
18 m6ma_13    :  Sewing machine
19 m6ma_14    :  Video player,DVD player,digital player,satellite antenna
20 m6ma_15    :  Color TV
```

```
21 m6ma_16    :  Black and white TV
22 m6ma_17    :  Music rack
23 m6ma_18    :  Radio/radio-cassette player
24 m6ma_19    :  Disk player
25 m6ma_20    :  Computer
26 m6ma_21    :  Camera,video recorder
27 m6ma_22    :  Refrigerator
28 m6ma_23    :  Air conditioner
29 m6ma_24    :  Washing machine, drying machine
30 m6ma_25    :  Electric fan
31 m6ma_26    :  water heater
32 m6ma_27    :  GAs cooker,magnetic cooker
33 m6ma_28    :  Electric cooker,electric rice cooker,pressure cooker
34 m6ma_29    :  Trolleys
35 m6ma_30    :  Cupboard,cabinet,wardrobe
36 m6ma_31    :  Bed
37 m6ma_32    :  Desk,chair,long bench,dressing table
38 m6ma_33    :  Vacuum cleaner,dehumidifier,water filter
39 m6ma_34    :  Microwave oven,banking oven
40 m6ma_35    :  Juice extractor,citrus juicer
41 m6ma_36    :  Piano,keyboard
42 m6ma_37    :  Others

 ###  33 :  muc6b  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m6c2       :  Durables household has puchased or received or self-produced over the
past 10 ye
 7 m6c3       :  Quantity
 8 m6c4t      :  Purchased month
 9 m6c4n      :  Purchased year
10 m6c5       :  The value at purchase reception,self-production
11 m6c6       :  Current price

 ###  34 :  muc7  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m7c1       :  No of houses/flats HH living in
 7 m7c2       :  Total living area?
 8 m7c3       :  The main material as poles(or pillars,or carrying walls of the house
                      1 Reinforcement concrete
                      2 Bricks/stones
                      3 Iron/steel/good wood
                      4 Poor-quality wood/bamboo
```

5 Others

9 m7c4 : The main material as roofing of the house
1 Reinforcement concrete
2 Tiles (cement, terracotta)
3 Roof slabs (cement, metal)
4 Leave/straw/rolled roofing
5 Others

10 m7c5 : The main meterial as walls or surounding of the house
1 Reinforcement concrete
2 Bricks/stones
3 Wood/metal
4 Calcareous soil/straw
5 Bamboo partitions/hardboards
6 Others

11 m7c6 : Does your household pay rents?
1 Yes
2 No

12 m7c7 : How much HH spent on rents over past 12 months?

13 m7c8 : What is the duration of existing contract?

14 m7c9 : Cost of the house HH living in at current price?

15 m7c10 : Does HH have any other land plots or houses/flats?
1 Yes
2 No

16 m7c11 : Does HH receive rents from those residential land lost or house
1 Yes
2 No

17 m7c12 : How much has HH received from leasing residential land and house

18 m7c13 : Expenditure on house repair and maintenance over past 12 months

19 m7c14 : The main drinking water supply of HH
1 tap wate reaching the house
2 Public tap water
3 drilled wells
4 protected dug well
5 unprotected dug well
6 Protected stream water
7 Unprotected stream water
8 Bought water
9 Rain water
10 Others

20 m7c15a : Do HH treat driking water by boiling
1 Yes
2 No

21 m7c15b : Do HH treat driking water by a filter or chemicals
1 Yes
2 No

22 m7c16 : Money HH spent on water for driking and other over past 12 months

23 m7c17 : Type of toilet
1 spetic/semi-spetic tank
2 suilabh
3 double spetic tank

```
                    4 fishing bridge
                    5 Others
                    6 None
24 m7c18      :  Main source of lighting?
                    1 National-grid electricity
                    2 battery lamp, resin torch
                    3 gas, oil, kerosene lamps
                    4 others
25 m7c19      :  For last month,How much money has HH spent on eclectricity?
26 m7c19k     :  For last month,how many KWs has HH consumed?
27 m7c20      :  Money paid for electricity in the past 12 months
28 m7c21      :  How has HH disposed garbage?
                    1 Somebody else collects it
                    2 Dumping into ponds, lakes, rivers, streams
                    3 Dumping in a nearby site
                    4 Landfill burial
                    5 Burning
                    6 Others
29 m7c22      :  Money paid for daily-life waste in the past 12 months
                    1 collected
                    2 dumped in river/lake
                    3 dumped in a site nearby
                    4 Landfill burial
                    5 buried
                    6 Others
30 m7c23      :

 ###  35 :  muc8  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m8c1a      :  HH classified as a poor of the commune/ward in the following y2006?
                    1 Yes
                    2 No
 7 m8c1b      :  HH classified as a poor of the commune/ward in the following y2007?
                    1 Yes
                    2 No
 8 m8c1c      :  HH classified as a poor of the commune/ward in the following y2008?
                    1 Yes
                    2 No
 9 m8c1d      :  HH classified as a poor of the commune/ward in the following y2009?
                    1 Yes
                    2 No
10 m8c1e      :  HH classified as a poor of the commune/ward in the following y2010?
                    1 Yes
                    2 No
11 m8c21_01   :  Support in purchasing health insurance cards 2009
                    1 Yes
```

2 No
3 Doesnt know
12 m8c21_02 : Reduction of and exemption from costs of medical checks/treament for the poor 20
1 Yes
2 No
3 Doesnt know
13 m8c21_03 : reduction of and exemption from tuition fees for the poor 2009
1 Yes
2 No
3 Doesnt know
14 m8c21_04 : Policy-based scholarships 2009
1 Yes
2 No
3 Doesnt know
15 m8c21_05 : Vocational training for the poor and low-income earners 2009
16 m8c21_06 : Support in housing and residential land for poor households 2009
1 Yes
2 No
3 Doesnt know
17 m8c21_07 : Support in cleaning/improving daily-life water supplies for poor households 2009
1 Yes
2 No
3 Doesnt know
18 m8c21_08 : Providing productive land for poor ethnic minorities households 2009
1 Yes
2 No
3 Doesnt know
19 m8c21_09 : Extension services in agriculture, forestry and fisheries 2009
1 Yes
2 No
3 Doesnt know
20 m8c21_10 : Support in migrating abroad for employment 2009
1 Yes
2 No
3 Doesnt know
21 m8c21_11 : Food aid 2009
1 Yes
2 No
3 Doesnt know
22 m8c21_12 : Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) 2009
1 Yes
2 No
3 Doesnt know
23 m8c21_13 : Preferential credit for the poor 2009
1 Yes
2 No
3 Doesnt know
24 m8c21_14 : Support in machinery, production inputs 2009

1 Yes
2 No
3 Doesnt know

25 m8c21_15 : others 2009
1 Yes
2 No
3 Doesnt know

26 m8c22_01 : Support in purchasing health insurance cards 2010
1 Yes
2 No
3 Doesnt know

27 m8c22_02 : Reduction of and exemption from costs of medical checks/treament for the poor 20
1 Yes
2 No
3 Doesnt know

28 m8c22_03 : reduction of and exemption from tuition fees for the poor 2010
1 Yes
2 No
3 Doesnt know

29 m8c22_04 : Policy-based scholarships 2010
1 Yes
2 No
3 Doesnt know

30 m8c22_05 : Vocational training for the poor and low-income earners 2010

31 m8c22_06 : Support in housing and residential land for poor households 2010
1 Yes
2 No
3 Doesnt know

32 m8c22_07 : Support in cleaning/improving daily-life water supplies for poor households 2010
1 Yes
2 No
3 Doesnt know

33 m8c22_08 : Providing productive land for poor ethnic minorities households 2010
1 Yes
2 No
3 Doesnt know

34 m8c22_09 : Extension services in agriculture, forestry and fisheries 2010
1 Yes
2 No
3 Doesnt know

35 m8c22_10 : Support in migrating abroad for employment 2010
1 Yes
2 No
3 Doesnt know

36 m8c22_11 : Food aid 2010
1 Yes
2 No
3 Doesnt know

37 m8c22_12 : Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) 2010
1 Yes
2 No
3 Doesnt know
38 m8c22_13 : Preferential credit for the poor 2010
1 Yes
2 No
3 Doesnt know
39 m8c22_14 : Support in machinery, production inputs 2010
1 Yes
2 No
3 Doesnt know
40 m8c22_15 : others 2010
1 Yes
2 No
3 Doesnt know
41 m8c2a : Number of months of vocational training provided
42 m8c2b : The total area that HH has ben provided
43 m8c3 : Borrowed from or remained to preferential credit schemes for the poor in 2010
1 yes
2 no
44 m8c9 : Compared with 2006, has HH member's life been improved?
1 Yes, very much
2 Yes
3 unchanged
4 Worse
5 does/t know
45 m8c10a : The first reason why life is worse
1 Increased production costs in agriculture, forestry and fisheries
2 Low selling prices of agricultural, forestry and fisheries products
3 Cattle and poultry suffer from epidemics or death
4 Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production
5 Household member(s) is sick or dies
6 High prices of food, foodstuff, and other consumer goods
7 Low incomes
8 Job loss or underemployment
9 Conflicts or other problems among family members/friends/neighbors
10 Decreased arable land/water surface for aquaculture production
11 Unfortunate events
12 others
46 m8c10b : The second reason why life is worse
1 Increased production costs in agriculture, forestry and fisheries
2 Low selling prices of agricultural, forestry and fisheries products
3 Cattle and poultry suffer from epidemics or death
4 Droughts, floods, pests, and harvest loss affect agricultural,

forestry and fisheries production
5 Household member(s) is sick or dies
6 High prices of food, foodstuff, and other consumer goods
7 Low incomes
8 Job loss or underemployment
9 Conflicts or other problems among family members/friends/neighbors
10 Decreased arable land/water surface for aquaculture production
11 Unfortunate events
12 others

47 m8c10c : The third reason why life is worse
1 Increased production costs in agriculture, forestry and fisheries
2 Low selling prices of agricultural, forestry and fisheries products
3 Cattle and poultry suffer from epidemics or death
4 Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production
5 Household member(s) is sick or dies
6 High prices of food, foodstuff, and other consumer goods
7 Low incomes
8 Job loss or underemployment
9 Conflicts or other problems among family members/friends/neighbors
10 Decreased arable land/water surface for aquaculture production
11 Unfortunate events
12 others

48 m8c11a : consumtion of food over the last 30 days
1 insufficient
2 sufficient
3 more than sufficient
4 No comment

49 m8c11b : consumtion of foodstuff over the last 30 days
1 insufficient
2 sufficient
3 more than sufficient
4 No comment

50 m8c12a : comsumtion of electricity over the last 30 days
1 insufficient
2 sufficient
3 more than sufficient
4 No comment

51 m8c12b : comsumtion of water over the last 30 days
1 insufficient
2 sufficient
3 more than sufficient
4 No comment

52 m8c12c : comsumtion of housing over the last 30 days
1 insufficient
2 sufficient
3 more than sufficient

```
                    4 No comment
53 m8c13      :  comsumtion of clothing and footwear over the last 30 days
                    1 insufficient
                    2 sufficient
                    3 more than sufficient
                    4 No comment

 ###  36 :  muc8vayno  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 m8ma       :  Order
 7 m8c4          :   Which preferential credit scheme has your household borrowed
from/remained indeb
                    1 Social Policy Bank
                    2 Employment Support Fund
                    3 Poverty Reduction Fund
                    4 Socio-political organisations
                    5 Others
 8 m8c5       :  Value of this loan?
 9 m8c6a      :  The interest rate of this loan?
10 m8c6b      :  Time unit
                    1 month
                    2 quarter
                    3 6 months
                    4 year
11 m8c7       :  Does your household have to pay any costs to get this loan?
12 m8c8         :   The (outstanding) balance of this loan? (including principal and
interest)?

 ###  37 :  ttchung  ###########
 1 tinh       :  Province
 2 huyen      :  District
 3 xa         :  Commune
 4 diaban     :  Enumerator area
 5 hoso       :  Household code
 6 quyen      :  Income/Income & Expenditure
                    1 Income & Expenditure
                    2 Income
 7 tsphieu    :
 8 ttnt       :  Urban/Rural
                    1 Urban
                    2 Rural
 9 dantoc     :  Household head's ethnicity
10 phdich     :  Interpretation
                    1 Yes
                    2 No
11 dtv        :  Surveyor's ID code
```

12 dt : Team leader' ID code
13 ngaydt : Date of survey
14 thangdt : Month of survey
15 tsnguoi : Hosehold size
16 m1b1 : Is there any a servant, home worker, lodger or house sharer?
1 Yes
2 No
17 tsmuc1b : Total number of home worker
18 m2act : Total Quest11k And Quest 14
19 m2atn : 2TN. C駭ｇｃゥｕ 12 ｖオ 13 (q.xanh)
20 m2btn : Total Quest 12 and Quest 13
21 m4atn1 : Total of Q11-section 4A
22 m4atn2 : Total of Q12a and 12b-section 4A
23 m4atn3 : Total of Q23-section 4A
24 m4atn4 : Total of Q24a and 24b section 4A
25 m4atn5 : Total of Q26 section 4A
26 m4atn6 : Total of Q28 section 4A
27 m4atn : Total income from wages
28 m4b21a : Raised livestock in past 12 month?
1 Yes
2 No
29 m4b21b : Was the damage caused by natural disaster, pest diseases,...?
1 Yes
2 No
30 m4b21t : Total of question 5 from line 1 to 18
31 kydt : Ky dieu tra
32 m4b0c1 : Used or managed land for agri&forestry or water surface aquaculture
1 Yes
2 No
33 m4b0tn : Total of Q5-section 4B0
34 m4b1a : Harvested any products from planting activities in past 12 month?
1 Yes
2 No
35 m4b1b : Was the damage caused by natural disaster, pest diseases,...?
1 Yes
2 No
36 m4b11t : Total of Q8 section 4B1.1
37 m4b12t : Total of Q7 section 4B1.2
38 m4b13t : Total of Q7 section 4B1.3
39 m4b14t : Total of Q7 section 4B1.4
40 tongthu_01 : Total of household revenue
41 tongthu_02 : Income from subsidies,scholarship
42 tongthu_03 : Income from health subsidies
43 tongthu_04 : Income from wage
44 tongthu_05 : Revenue from renting out agricultural and forestry land and water surface
45 tongthu_06 : Revenue from crop
46 tongthu_07 : Revenue from husbandry
47 tongthu_08 : Revenue from hunting, trapping and domestication
48 tongthu_09 : Revenue from agricultural services
49 tongthu_10 : Revenue from forestry

50 tongthu_11 : Revenue from aquaculture
51 tongthu_12 : Other income
52 tongthu_13 : Other revenues included in incomes
53 tongthu_14 : Revenues from renting out house(s) and residential land
54 m4b22t : Question 5 line 19
55 m4b21c : Total of quest 19 from line 1 to 10
56 m4b22c : Quest 19 line 11
57 m4b31a : Agricul. services in past 12 months?
1 Yes
2 No
58 m4b31b : Was the damage caused by natural disaster, pest diseases,...?
1 Yes
2 No
59 m4b3t : Total revenue from Agri Services
60 m4b3c : Total expense on Agri Services
61 m4b41a : Revenue from forestry activities?
1 Yes
2 No
62 m4b41b : Was the damage caused by natural disaster, pest diseases,...?
1 Yes
2 No
63 m4b4t : Total revenue from Forestry
64 m4b4c : Total expense on Forestry
65 chisxkd_1 : Expenditure on business
66 chisxkd_2 : Expenditure on crops
67 chisxkd_3 : Expenditure on livestock
68 chisxkd_4 : Expenditure on hunting, trapping..
69 chisxkd_5 : Expenditure on agricultural services
70 chisxkd_6 : Expenditure on forestry
71 chisxkd_7 : Expenditure on aquaculture
72 chisxkd_8 : Expenditure on non-farm business
73 thunhap : **Total Income**
74 thubq : **income per capita per month**
75 chikhac_1 : Expenditure on education
76 chikhac_2 : Expenditure on health
77 chikhac_3 : Expenditure on foods and drinks during holidays
78 chikhac_4 : Daily expenditure on foods and drinks
79 chikhac_5 : Daily expenditure on non-food
80 chikhac_6 : Yearly Non-food expenditure
81 chikhac_7 : Other expenditure considered as consumption
82 chikhac_8 : Expenditures on durables over the past 12 month
83 chikhac_9 : Recurrent expenditures on housing, electricity, water,and daily life waste
84 m4b5c1a : Aquatic activities in past 12 months?
85 m4b5c1b : Was the damage caused by natural disaster, pest diseases,...?
1 Yes
2 No
86 m4b5t : Total revenue from Aquaculture
87 m4b5c : Total expense on Aquaculture
88 m4c1 : Non-farm activities?

```
                    1
                    2 Khᄀng
89 m4ctt      :  Total revenue from non-farm
90 m4ct       :  Total revenue belongs to household
91 m4cct      :  Total expense on non-farm
92 m4cc       :  Total expense on non-farm allocated for HH
93 m4dtn      :  Income from other sources
94 m5a1ct     :  Total of Q4 and Q5 section 5A1
95 m5a1c4     :  Total of Q2B section 5A1
96 m5a1c5     :  Total of Q3B section 5A1
97 m5a2ct     :  Total of Q2B from code 101 to 154 section 5A2
98 m5a2c6     :  Total of 3B from code 101 to code 154 section 5A2
99 m5a2c7     :  Total of 4B from code 101 to code 154 section 5A2
100 m5a2c8     :  Total of 5B from code 101 to code 154 section 5A2
101 m5b1ct     :  Total of Q2 section 5B1
102 m5b1c6     :  Total of Q3 section 5B1
103 m5b1c7     :  Total of Q4 section 5B1
104 m5b1c8     :  Total of Q5 section 5B1
105 m5b2ct     :  Total of Q4 and Q5 section 5B2
106 m5b2c4     :  Total of Q2 section 5B2
107 m5b2c5     :  Total of Q3 section 5B2
108 m5b3ct     :  Total of Q2 section 5B3
109 m6c7       :  Total of Q5 section 6
110 m3c1       :  Has anyone in your HH visited medical establishment...
                    1 Yes
                    2 No
111 m3ct1      :  Total of Q5 section 3
112 m3ct2      :  Total of Q6 section 3
113 m3ct3      :  Total of Q11 section 3
114 m3ct       :  healthcare expenditures
115 m3tn       :  Total of Q15 section 3
116 m4b15t     :  Total of Q5 section 4B1.5
117 m4b1t      :  Total revenues from crops
118 m4b1c      :  Total cost of crops

 ###  38 :  weight10  ###########
 1 tinh       :  Tinh/Province
 2 huyen      :  Huyen/District
 3 xa         :  Xa/Commune
 4 diaban     :  Dia ban/Cluster
 5 wt9        :  Quyen so 9.000 ho/Weight of 9,000 HHs
```

4.2 Summary of data files

The data files of VHLSS 2010 are summarized as the next.

No.	STATA filenames	Section	Main contents	No. of variables	No. of records	Unit of records
1	hhexpe10.dta	Summary of living standards used only for office internal use	(Note: The definitions of many variables are unclear.)	53	9,399	Household
2	muc1a.dta	Section 1A: List of household members	Demographics	18	36,999	Individual
3	muc1b.dta	Section 1b: List of domestic helps and migrant labourers	Servants and migrant labourers from the household (Note: The next sections do not apply to the people in this list.)	17	1,221	Individual
4	muc2.dta	Section 2: Education	School attendance, educational degree, expenditure	34	36,999	Individual
5	muc3a.dta	Section 3: Healthcare	Medical services	16	19,647	Individual
6	muc3b.dta	Section 3: Healthcare	Health insurance card	15	36,999	Individual
7	muc4a.dta	Section 4: Income	Part 4A: Employment, salaries and wages	53	36,999	Individual
8	muc4b0.dta	Section 4: Income	Part 4B0: Farm land, forestry land and aquaculture water surface	9	11,619	Household, Land piece
9	muc4b11.dta	Section 4: Income	Part 4B1.1: Rice	12	13,588	Household, Type of rice
10	muc4b12.dta	Section 4: Income	Part 4B1.2: Staple food crops, non-staple food crops, and other annual crops	11	13,157	Household, Kind of crops

11	muc4b13.dta	Section 4: Income	Part 4B1.3: Annual and perennial industrial crops	12	3,012	Household, Kind of crops
12	muc4b14.dta	Section 4: Income	Part 4B1.4: Fruit trees	12	7,207	Household, Kind of fruit
13	muc4b15.dta	Section 4: Income	Part 4B1.5: Revenues from harvested by-products	10	6,638	Household, Kind of by-product
14	muc4b16.dta	Section 4: Income	Part 4B1.6: Costs of cultivation	13	47,482	Household, Kind of expense
15	muc4b17.dta	Section 4: Income	Part 4B1.7: Quantity of fertilizers used by the household for plants	11	15,124	Household, Type of fertilizer
16	muc4b21.dta	Section 4: Income	Part 4B2.1: Revenues from husbandry, hunting, trapping and domestication of birds and animals	10	12,967	Household, Kind of product
17	muc4b22.dta	Section 4: Income	Part 4B2.2: Costs of husbandry, hunting, trapping and domestication of birds and animals	29	8,111	Household, Kind of livestock breeding
18	muc4b31.dta	Section 4: Income	Part 4B3.1: Revenues from agricultural service activities	9	200	Household, Kind of activities
19	muc4b32.dta	Section 4: Income	Part 4B3.2: Costs of agricultural service activities	27	199	Household, Kind of activities
20	muc4b41.dta	Section 4: Income	Part 4B4.1: Forestry revenues	13	3,504	Household, Kind of products/activities
21	muc4b42.dta	Section 4: Income	Part 4B4.2: Costs of forestry activities and services	30	2,119	Household, Kind of activities/services
22	muc4b51.dta	Section 4: Income	Part 4B5.1: Revenues from aquaculture	10	2,671	Household, Kind of product

23	muc4b52.dta	Section 4: Income	Part 4B5.2: Costs of aquaculture-related activities	30	2,013	Household, Kind of activities
24	muc4c1.dta	Section 4: Income	Part 4C1: Revenues from production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products	23	4,007	Household, Kind of sectoral activities
25	muc4c2.dta	Section 4: Income	Part 4C2: Costs of production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products	32	4,007	Household, Kind of sectoral activities
26	muc4d.dta	Section 4: Income	Part 4D: Other revenues included in incomes	29	9,399	Household Kind of sources
27	muc5a1.dta	Section 5: Expenditure	Part 5A1: Expenditure on foods and drinks on festive occasions	10	136,854	Household, Expenditure item
28	muc5a2.dta	Section 5: Expenditure	Part 5A2: Recurrent expenditures on food and drinks (over the past 30 days)	14	236,630	Household, Expenditure item
29	muc5b1.dta	Section 5: Expenditure	Part 5B1: Expenditures on daily non-food items and other expenditures	10	111,034	Household, Expenditure item
30	muc5b2.dta	Section 5: Expenditure	Part 5B2: Annual consumption on daily non-food items and other expenditures	8	119,120	Household, Expenditure item
31	muc5b3.dta	Section 5: Expenditure	Part 5B3: Other costs as expenditures	14	9,399	Household, Expenditure item
32	muc6.dta	Section 6: Durables	Possession of durables	42	9,399	Household Durable codes
33	muc6b.dta	Section 6: Durables	Purchase of durables	11	91,597	Household, Durable codes

34	muc7.dta	Section 7: Housing		30	9,399	Household
35	muc8.dta	Section 8: Participation in aid schemes		53	9,399	Household
36	muc8vayno.dta	Section 8: Participation in aid schemes		12	1,367	Household
37	ttchung.dta	Summary	Summary of income and expenditure	118	9,399	Household
38	weight10.dta	Weight	Weight for income-expenditure sample	5	3,133	Enumeration area

4.3 Weight data

The file “weight10.dta” is weight data by diaban (enumeration area). The number of record is 3,133, the same as the number of unique diaban codes in data files. The variables are tinh (province), huyen (district), xa (commune), diaban (enumeration area) and wt9.

Remarks: In VHLSS 2006, weight data were given by xa (commune).

```
> d<-lss2010[[38]]  # weight10
> dim(d)
[1] 3133    5
> head(d)
  tinh huyen xa diaban  wt9
1    1     1  4     12 3977
2    1     1  7     22 4805
3    1     1 16     15 4140
4    1     1 22     19 4471
5    1     1 28     20 3820
6    1     1 34     25 3997

> t<-sapply(d,range)
> rownames(t)<-c("Min","Max")
> t
    tinh huyen    xa diaban  wt9
Min    1     1     4      1  369
Max   96   973 32248     91 7936
```

✓ Defined the variable of commune identifier “xaid” in weight10;

```
> wt<-d  # weight10
> wt["xaid"]<-as.character(as.integer(wt$xa)+(10^5)*as.integer(wt$huyen)+
+ (10^8)*as.integer(wt$tinh))
> head(wt)
  tinh huyen xa diaban  wt9      xaid
1    1     1  4     12 3977 100100004
```

```
2    1      1  7      22 4805 100100007
3    1      1 16      15 4140 100100016
4    1      1 22      19 4471 100100022
5    1      1 28      20 3820 100100028
6    1      1 34      25 3997 100100034
> length(unique(wt$xaid))
[1] 3132

# There are one duplicated xaid.
> wt$xaid[duplicated(wt$xaid)==T]
[1] "5455722053"
> wt[wt$xaid== "5455722053",]
     tinh huyen    xa diaban  wt9       xaid
1749   54   557 22053      5 1605 5455722053
1750   54   557 22053     26 1790 5455722053
```

Summary: xaid=5455722053 has two enumeration areas with different weights.
So, the EA identifier "eaid" should be defined.

```
> wt$eaid<-paste(wt$xaid,formatC(wt$diaban,width=2,flag="0"),sep="")
> head(wt)
  tinh huyen xa diaban  wt9      xaid        eaid
1    1      1  4      12 3977 100100004 10010000412
2    1      1  7      22 4805 100100007 10010000722
3    1      1 16      15 4140 100100016 10010001615
4    1      1 22      19 4471 100100022 10010002219
5    1      1 28      20 3820 100100028 10010002820
6    1      1 34      25 3997 100100034 10010003425
> length(unique(wt$eaid))
[1] 3133
```

✓ Number of eaid within xaid

```
> eas<-tapply(wt$eaid,wt$xaid,length)
> table(eas)
eas
   1    2
```

3131 1

4.4 Defining identifiers in data files and appending weight to data files

Three kind of identifier was generated as in the next table;

- eaid for weight data file.
- eaid and ID for household-level data files.
- eaid, ID and PID for individual-level data files including the variable “matv” of member code.

Variable	Description	Length	Type	Identifier		
				EA	Household	Person
tinh	province	2	Numeric	eaid	ID	PID
huyen	district	3	Numeric			
xa	commune	5	Numeric			
diaban	enumeration area	2	Numeric			
hoso	household code	2	Numeric			
matv	member code	2	Numeric			

eaid = diaban + (10^2)*xa + (10^7)*huyen + (10^10)*tinh

ID = hoso + (10^2)*diaban + (10^4)*xa + (10^9)*huyen + (10^12)*tinh
= hoso + (10^2)*eaid

PID = matv +(10^2) hoso + (10^4)*diaban + (10^6)*xa + (10^11)*huyen + (10^14)*tinh
= matv +(10^2) *ID

Note: The above identifier were generated as character, because eaid is 12 digits.

```
> head(wt)
  tinh huyen xa diaban  wt9      xaid        eaid
1    1     1  4     12 3977 100100004 10010000412
2    1     1  7     22 4805 100100007 10010000722
3    1     1 16     15 4140 100100016 10010001615
4    1     1 22     19 4471 100100022 10010002219
5    1     1 28     20 3820 100100028 10010002820
```

```
6    1     1 34     25 3997 100100034 10010003425
> wt.old<-wt
> wt<-wt[,c(7,5)]
> colnames(wt)<-c("eaid","wt")
> head(wt)
         eaid   wt
1 10010000412 3977
2 10010000722 4805
3 10010001615 4140
4 10010002219 4471
5 10010002820 3820
6 10010003425 3997
> dim(wt)
[1] 3133    2
```

Remarks:

Although the length of commune code (xa) in VHLSS is 5 digits, it was 2 digits in VHLSS 2004 and 2006.

According to the delegates from Vietnam, GSO has changed the administrative code since 2007. The Household survey sample size is picked up from the Population Census in 2009. Because the Population Census 2009 followed new administrative code, therefore, the code in Household survey 2010 was changed. However, there was no change in sample design. In master sample, each commune has three EAs and only one will be allocated for each year VHLSS.

✓ Generated the variables of identifier eaid and ID in all data files, and appended weight to all data files.

```
> lss2010.old<-lss2010
> for(j in 1:37){
+ d<-lss2010[[j]]
+ d$eaid<-paste(format(d$tinh,width=2, flag="0"),
+ formatC(d$huyen,width=3,flag="0"),
+ formatC(d$xa,width=5,flag="0",format="d"),
+ formatC(d$diaban,width=2,flag="0"),sep="")
+ d$ID<-paste("ID",d$eaid,format(d$hoso,width=2,flag="0"),sep="")
+ d<-merge(d,wt,by="eaid",all.x=T)
+ n<-ncol(d)
+ d<-d[,c(2:n,1)]
+ lss2010[[j]]<-d
+ }

> dim(lss2010[[1]])
[1] 9399   56
> length(unique(lss2010[[1]]$eaid))
[1] 3133
```

✓ Generated the individual identifier PID in individual-level data files including the variable of "matv".

```
# Numbers of individual-level data files including the variable of "matv"
> ind.files<-c(2,4:7)

> for(j in ind.files){
+ d<-lss2010[[j]]
+ d$PID<-paste("P",d$ID,formatC(d$matv,width=2,flag="0"),sep="")
+ lss2010[[j]]<-d
+ }
```

Example of results

```
> head(lss2010[[2]][,c(1:7,19:22)])
  tinh huyen xa diaban hoso matv m1ac2              ID   wt         eaid
1    1     1  4     12   13    5     1 ID01001000041213 3977 010010000412
2    1     1  4     12   13    4     1 ID01001000041213 3977 010010000412
3    1     1  4     12   13    2     1 ID01001000041213 3977 010010000412
4    1     1  4     12   13    6     2 ID01001000041213 3977 010010000412
5    1     1  4     12   13    1     2 ID01001000041213 3977 010010000412
6    1     1  4     12   13    3     1 ID01001000041213 3977 010010000412
                  PID
1 PID0100100004121305
2 PID0100100004121304
3 PID0100100004121302
4 PID0100100004121306
5 PID0100100004121301
6 PID0100100004121303
```

Number of records and variables in data files

```
> Rnames<-sub(".dta","",file.names)
> for(j in 1:38){
+ cat(format(Rnames[j],width=11),": ",format(nrow(lss2010[[j]]),width=6),",",
+ format(ncol(lss2010[[j]]),width=3),"¥n")
+ }

hhexpe10    :   9399 ,  56
muc1a       :  36999 ,  22
muc1b       :   1221 ,  20
muc2        :  36999 ,  38
muc3a       :  19647 ,  20
muc3b       :  36999 ,  19
muc4a       :  36999 ,  57
muc4b0      :  11619 ,  12
muc4b11     :  13588 ,  15
muc4b12     :  13157 ,  14
muc4b13     :   3012 ,  15
muc4b14     :   7207 ,  15
```

```
muc4b15     :   6638 ,  13
muc4b16     :  47482 ,  16
muc4b17     :  15124 ,  14
muc4b21     :  12967 ,  13
muc4b22     :   8111 ,  32
muc4b31     :    200 ,  12
muc4b32     :    199 ,  30
muc4b41     :   3504 ,  16
muc4b42     :   2119 ,  33
muc4b51     :   2671 ,  13
muc4b52     :   2013 ,  33
muc4c1      :   4007 ,  26
muc4c2      :   4007 ,  35
muc4d       :   9399 ,  32
muc5a1      : 136854 ,  13
muc5a2      : 236630 ,  17
muc5b1      : 111034 ,  13
muc5b2      : 119120 ,  11
muc5b3      :   9399 ,  17
muc6        :   9399 ,  45
muc6b       :  91597 ,  14
muc7        :   9399 ,  33
muc8        :   9399 ,  56
muc8vayno   :   1367 ,  15
ttchung     :   9399 , 121
weight10    :   3133 ,   5
```

4.5 Basic statistics

Item	Value	R scripts	Survey report
Un-weighted number of household	9,399	> d<-lss2010[[37]] # ttchung > nrow(d) [1] 9399	
Weighted number of household	22,278,084	> sum(d$wt) [1] 22278084	
Un-weighted number of household members	36,999	> sum(d$hhsize) [1] 36999	
Weighted number of household members	86,232,933	> sum(d$hhsize*d$wt) [1] 86232933	
Household size	3.87	> sum(d$hhsize*d$wt)/sum(d$wt) [1] 3.870752	3.89 *(Table 1.1)
Monthly total consumption per capita (1000 VND)	1,267.3	> d$exp<-rowSums(d[,c(75:77,80:83)])+ + rowSums(d[,78:79])*12 # Yearly consumption > sum(d$exp*d$wt)/sum(d$tsnguoi*d$wt)/12 [1] 1267.316	1,211 (Table 6.1)
Monthly income per capita (1000 VND)	1,557.0	> sum(d$thunhap*d$wt)/sum(d$tsnguoi*d$wt)/12 [1] 1556.983	1,387.1 *(Table 5.1)

Remarks:

For Table 6.1 in Section 6, there is a note of “For income - consumption expenditure sample” in the survey report. It may imply that other figures such as household size and income in the survey report are estimated from all samples of 45,945 households.

(Ref.)

75 chikhac_1 : Expenditure on education
76 chikhac_2 : Expenditure on health
77 chikhac_3 : Expenditure on foods and drinks during holidays
78 chikhac_4 : Daily expenditure on foods and drinks
79 chikhac_5 : Daily expenditure on non-food
80 chikhac_6 : Yearly Non-food expenditure
81 chikhac_7 : Other expenditure considered as consumption
82 chikhac_8 : Expenditures on durables over the past 12 month
83 chikhac_9 : Recurrent expenditures on housing, electricity, water, and daily life waste

4.6 Sample allocation

✓ The number of province in data set is 63.

```
> d<-lss2010[[1]]    # hhexpe10
> length(unique(d$tinh))
[1] 63
```

Number of sample household by province

```
> table(d$tinh)
  1   2   4   6   8  10  11  12  14  15  17  19  20  22  24  25  26  27  30
420 105 102 102 114 102 102 102 126 114 114 147 108 147 168 156 135 138 183
 31  33  34  35  36  37  38  40  42  44  45  46  48  49  51  52  54  56  58
186 147 189 123 195 129 246 225 150 120 102 135 123 159 147 162 123 138 102
 60  62  64  66  67  68  70  72  74  75  77  79  80  82  83  84  86  87  89
135 102 141 165 102 141 120 135 177 207 132 351 156 171 153 129 135 168 186
 91  92  93  94  95  96
162 138 111 144 114 138
```

✓ The variable of reg6 in hhexp10 represents six region codes. The next table shows the number of sample household by province and region, which is consistent with the province code list at page 4 of the questionnaire;

Relationship between provinces and six regions

```
> table(d$tinh,d$reg6)
      1   2   3   4   5   6
  1 420   0   0   0   0   0
  2   0 105   0   0   0   0
  4   0 102   0   0   0   0
  6   0 102   0   0   0   0
  8   0 114   0   0   0   0
  10  0 102   0   0   0   0
  11  0 102   0   0   0   0
  12  0 102   0   0   0   0
  14  0 126   0   0   0   0
  15  0 114   0   0   0   0
  17  0 114   0   0   0   0
  19  0 147   0   0   0   0
  20  0 108   0   0   0   0
  22 147   0   0   0   0   0
  24  0 168   0   0   0   0
  25  0 156   0   0   0   0
  26 135   0   0   0   0   0
  27 138   0   0   0   0   0
```

```
  30 183   0   0   0   0   0
  31 186   0   0   0   0   0
  33 147   0   0   0   0   0
  34 189   0   0   0   0   0
  35 123   0   0   0   0   0
  36 195   0   0   0   0   0
  37 129   0   0   0   0   0
  38   0   0 246   0   0   0
  40   0   0 225   0   0   0
  42   0   0 150   0   0   0
  44   0   0 120   0   0   0
  45   0   0 102   0   0   0
  46   0   0 135   0   0   0
  48   0   0 123   0   0   0
  49   0   0 159   0   0   0
  51   0   0 147   0   0   0
  52   0   0 162   0   0   0
  54   0   0 123   0   0   0
  56   0   0 138   0   0   0
  58   0   0 102   0   0   0
  60   0   0 135   0   0   0
  62   0   0   0 102   0   0
  64   0   0   0 141   0   0
  66   0   0   0 165   0   0
  67   0   0   0 102   0   0
  68   0   0   0 141   0   0
  70   0   0   0   0 120   0
  72   0   0   0   0 135   0
  74   0   0   0   0 177   0
  75   0   0   0   0 207   0
  77   0   0   0   0 132   0
  79   0   0   0   0 351   0
  80   0   0   0   0   0 156
  82   0   0   0   0   0 171
  83   0   0   0   0   0 153
  84   0   0   0   0   0 129
  86   0   0   0   0   0 135
  87   0   0   0   0   0 168
  89   0   0   0   0   0 186
  91   0   0   0   0   0 162
  92   0   0   0   0   0 138
  93   0   0   0   0   0 111
  94   0   0   0   0   0 144
  95   0   0   0   0   0 114
  96   0   0   0   0   0 138
```

```
> t<-table(d$reg6)
> region.name<-c("Red River Delta","Midlands and Northern Mountains",
+ "Northern and Coastal Central","Central Highlands",
+ "Southeastern","Mekong Delta")
> names(t)<-region.name
```

```
> t
# Number of sample households by six regions
               Red River Delta Midlands and Northern Mountains
                          1992                            1662
   Northern and Coastal Central              Central Highlands
                          2067                             651
                   Southeastern                   Mekong Delta
                          1122                            1905
```

Number of sample by region and urban/rural

```
> t<-addmargins(table(d$reg6,d$urban10))

> rownames(t)<-c(region.name,"Viet Nam")
> colnames(t)<-c("Rural","Urban","Total")
> t
```

	Rural	Urban	Total
Red River Delta	1425	567	1992
Midlands and Northern Mountains	1329	333	1662
Northern and Coastal Central	1488	579	2067
Central Highlands	453	198	651
Southeastern	600	522	1122
Mekong Delta	1455	450	1905
Viet Nam	6750	2649	9399

- ✓ According to the survey report, the survey collected information during four periods, each period in one quarter from the second quarter to the fourth quarter in 2010 and one period in the first quarter of 2011.
- ✓ However, the survey month in data file is spread from May to November.

```
> table(d$monthint)
   6    7    8    9   10   11   12
 343 2777   30 2996  160   31 3062
```

Number of sample by region, urban/rural and survey month

```
> t<-table(d$reg6,d$monthint,d$urban10)
> dimnames(t)<-list(region.name,c(6:12), c("Rural","Urban"))
> t
, , Rural

                                 6   7   8   9  10  11  12
Red River Delta                 51 432   0 439  38   0 465
Midlands and Northern Mountains 20 425   5 423  24   7 425
Northern and Coastal Central    53 439   3 501  10  18 464
Central Highlands               19 134   0 151   2   4 143
Southeastern                    29 169   3 163  36   0 200
Mekong Delta                   100 379   7 477   9   0 483

, , Urban

                                 6   7   8   9  10  11  12
Red River Delta                 12 168   3 186   4   2 192
Midlands and Northern Mountains  6 101   1 105   3   0 117
Northern and Coastal Central    18 166   8 181  20   0 186
Central Highlands                6  66   0  63   0   0  63
Southeastern                    12 162   0 166  11   0 171
Mekong Delta                    17 136   0 141   3   0 153
```

4.7 Sample design

```
> d<-lss2010[[1]]  # hhexpe10
> nrow(d)
[1] 9399
> head(d[,c(1:5,12,14,15,54:56)])
  tinh huyen xa diaban hoso urban10 reg6 monthint              ID   wt        eaid
1    1     1  4     12   13       1    1        9 ID1001000041213 3977 10010000412
2    1     1  4     12   14       1    1        9 ID1001000041214 3977 10010000412
3    1     1  4     12   15       1    1        9 ID1001000041215 3977 10010000412
4    1     1  7     22   13       1    1        7 ID1001000072213 4805 10010000722
5    1     1  7     22   15       1    1        7 ID1001000072215 4805 10010000722
6    1     1  7     22   20       1    1        7 ID1001000072220 4805 10010000722
```

✓ The household code “hoso” is from 13 to 24.

```
> table(d$hoso)
  13   14   15   19   20   21   24
2856 2847 2795  572  326    2    1
```

✓ The household codes from 19 to 24 seems to be set for alternate households.

```
> head(d[d$hoso==24,c(1:5,12,14,15,54:56)])
    tinh huyen    xa diaban hoso urban10 reg6 monthint                ID  wt          eaid
351   11    96 3163      12   24       0    2        7 ID11096031631224 978 110960316312
> head(d[d$eaid==110960316312,c(1:5,12,14,15,54:56)])
    tinh huyen    xa diaban hoso urban10 reg6 monthint                ID  wt          eaid
349   11    96 3163      12   13       0    2        7 ID11096031631213 978 110960316312
350   11    96 3163      12   14       0    2        7 ID11096031631214 978 110960316312
351   11    96 3163      12   24       0    2        7 ID11096031631224 978 110960316312

> head(d[d$hoso==21,c(1:5,12,14,15,54:56)])
     tinh huyen    xa diaban hoso urban10 reg6 monthint               ID   wt         eaid
3177   36   365 14200      13   21       0    1        9 ID36365142001321 2879 363651420013
4515   48   495 20260      18   21       1    3        9 ID48495202601821 1896 484952026018
```

```
> head(d[d$eaid==363651420013,c(1:5,12,14,15,54:56)])
     tinh huyen    xa diaban hoso urban10 reg6 monthint              ID   wt         eaid
3175   36   365 14200     13   14       0    1        9 ID36365142001314 2879 363651420013
3176   36   365 14200     13   20       0    1        9 ID36365142001320 2879 363651420013
3177   36   365 14200     13   21       0    1        9 ID36365142001321 2879 363651420013

> head(d[d$hoso==19,c(1:5,12,14,15,54:56)])
   tinh huyen  xa diaban hoso urban10 reg6 monthint              ID   wt        eaid
8     1     1  16     15   19       1    1        9 ID1001000161519 4140 10010001615
12    1     1  22     19   19       1    1       12 ID1001000221919 4471 10010002219
15    1     1  28     20   19       1    1        7 ID1001000282019 3820 10010002820
26    1     2  67     23   19       1    1        9 ID1002000672319 3992 10020006723
30    1     2  79     11   19       1    1       12 ID1002000791119 4137 10020007911
51    1     4 139     50   19       1    1        7 ID1004001395019 3965 10040013950
> head(d[d$eaid==10010001615,c(1:5,12,14,15,54:56)])
  tinh huyen xa diaban hoso urban10 reg6 monthint              ID   wt        eaid
7    1     1 16     15   14       1    1        9 ID1001000161514 4140 10010001615
8    1     1 16     15   19       1    1        9 ID1001000161519 4140 10010001615
9    1     1 16     15   20       1    1        9 ID1001000161520 4140 10010001615
```

✓ In each enumeration area, three sample households for income-expenditure survey were responded. Non-response was not found. It was the responsibility of Provincial Statistics Office to find alternate households to be assured of 3 households for income-expenditure survey in each enumeration area.

hhs: Number of sample households within eaid is always equal to three.

```
> hhs<-tapply(d$ID,d$eaid,length)
> dim(hhs)
[1] 3133
# Frequency of hhs
> table(hhs)
hhs
   3
```

```
3133
```

✓ The number of unique value of weight is 1,523.

```
> length(unique(d$wt))
[1] 1523
```

✓ The weight is unique within the enumeration area.

```
> wts<-tapply(d$wt,d$eaid,function(x) length(unique(x)))
> table(wts)
wts
   1
3133
```

5. Data Check

5.1 Structure of each data file

```
# Displayed the names and types of variables


Note: ID, PID, aeid, wt are excluded in the followings.


> Rnames<-sub(".dta","",file.names)
> for(j in 1:38){
+ cat("##",j,"#### ",Rnames[j]," ##########¥n")
+ print(str(lss2010[[j]]))
+ cat("¥n¥n")
+ }

## 1 ####  hhexpe10  ##########
'data.frame':   9399 obs. of  53 variables:
 $ tinh                 : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen                : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa                   : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban               : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso                 : int  13 14 15 13 15 20 14 19 20 13 ...
 $ compfoodnom          : num  58468 24629 40370 47132 76362 ...
 $ compricenom          : num  4675 2390 4004 4239 3749 ...
 $ compnonricenom       : num  53793 22240 36365 42893 72613 ...
 $ bestfoodnom          : num  61475 26821 39977 46945 76065 ...
 $ bestricenom          : num  4691 2398 4018 4253 3760 ...
 $ bestnonricenom       : num  56784 24424 35959 42692 72305 ...
 $ urban10              : int  1 1 1 1 1 1 1 1 1 1 ...
 $ reg8                 : num  1 1 1 1 1 1 1 1 1 1 ...
 $ reg6                 : num  1 1 1 1 1 1 1 1 1 1 ...
 $ monthint             : int  9 9 9 7 7 7 9 9 9 12 ...
 $ hhsize               : num  6 2 4 4 4 5 2 3 4 5 ...
 $ wt9                  : int  3977 3977 3977 4805 4805 4805 4140 4140 4140 4471 ...
 $ hhszwt               : num  23862 7954 15908 19220 19220 ...
 $ defltemrice          : num  0.987 0.987 0.987 0.955 0.955 ...
 $ defltemnonricefood   : num  1.06 1.06 1.06 1.06 1.06 ...
 $ defltemnonfood       : num  1.04 1.04 1.04 1.03 1.03 ...
 $ deflGSOspatialfood   : num  1.11 1.11 1.11 1.11 1.11 ...
 $ deflGSOspatialnonfood: num  1.09 1.09 1.09 1.09 1.09 ...
 $ deflSCOLI            : num  1.26 1.26 1.26 1.26 1.26 ...
 $ compfoodrl           : num  49716 20970 34377 40437 65230 ...
 $ compfoodpcrl         : num  8286 10485 8594 10109 16307 ...
 $ bestfoodrl           : num  45989 20085 29962 35447 57184 ...
 $ bestfoodpcrl         : num  7665 10042 7490 8862 14296 ...
 $ compnonfoodnom       : num  165583 72410 79184 82309 136474 ...
 $ compnonfoodrl        : num  146445 64041 70032 73501 121871 ...
 $ compnonfoodpcrl      : num  24407 32020 17508 18375 30468 ...
 $ comphhnom            : num  224051 97039 119554 129441 212836 ...
 $ comphhrl             : num  196161 85010 104409 113938 187101 ...
```

```
 $ comppcnom            : num  37342 48520 29889 32360 53209 ...
 $ comppcrl             : num  32693 42505 26102 28485 46775 ...
 $ bestnonfoodnom       : num  238224 637699 223852 196941 361445 ...
 $ bestnonfoodrl        : num  180850 484116 169940 150960 277056 ...
 $ bestnonfoodpcrl      : num  30142 242058 42485 37740 69264 ...
 $ besthhnom            : num  299699 664520 263829 243886 437511 ...
 $ besthhrl             : num  226839 504201 199902 186407 334240 ...
 $ bestpcnom            : num  49950 332260 65957 60972 109378 ...
 $ bestpcrl             : num  37807 252100 49975 46602 83560 ...
 $ bestrlpopquint       : num  5 5 5 5 5 5 5 5 5 5 ...
 $ bestrlpopquinturb    : int  5 5 5 5 5 5 5 5 5 5 ...
 $ bestrlpopquintrur    : int  NA NA NA NA NA NA NA NA NA NA ...
 $ bestfoodpcnom        : num  10246 13411 9994 11736 19016 ...
 $ compfoodpcnom        : num  9745 12315 10092 11783 19090 ...
 $ compricepcnom        : num  779 1195 1001 1060 937 ...
 $ bestricepcnom        : num  782 1199 1004 1063 940 ...
 $ compnonricepcnom     : num  8965 11120 9091 10723 18153 ...
 $ bestnonricepcnom     : num  9464 12212 8990 10673 18076 ...
 $ compnonfoodpcnom     : num  27597 36205 19796 20577 34119 ...
 $ bestnonfoodpcnom     : num  39704 318849 55963 49235 90361 ...
 - attr(*, "datalabel")= chr "Household expenditures: 2010 VHLSS"
 - attr(*, "time.stamp")= chr "30 Aug 2012 11:34"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 255 255 255 255 255 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "" "" "" "" ...
 - attr(*, "expansion.fields")=List of 2
  ..$ : chr  "_dta" "__xi__Vars__To__Drop__" "_Idwater_2 _Idwater_3 _Idwater_4 _Idwater_5
_Idwater_6 _Idwater_7 _Idwater_8 _Idwater_9 _Idwater_10 _Itoilet_2 _Itoilet_3 _Itoi"|
__truncated__
  ..$ : chr  "_dta" "__xi__Vars__Prefix__" "_I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I
_I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I _I"
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 3
  ..$ region8Paul: Named int  1 2 3 4 5 6 7 8
  .. ..- attr(*, "names")= chr  "Red River Delta" "East Northern Mtns" "West Northern Mtns" "North
Central Coast" ...
  ..$ region6    : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Red River Delta" "Midlands and Northern Mountains" "Northern and
Coastal Central" "Central Highlands" ...
  ..$ urban      : Named int  0 1
  .. ..- attr(*, "names")= chr  "Rural" "Urban"
NULL


## 2 ####  muc1a  ##########
'data.frame':   36999 obs. of  18 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa     : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban : int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso   : int  13 13 13 13 13 13 14 14 15 15 ...
 $ matv   : int  5 4 2 6 1 3 1 2 3 1 ...
 $ m1ac2  : int  1 1 1 2 2 1 1 2 2 1 ...
 $ m1ac3  : int  6 3 3 6 1 3 1 2 3 1 ...
 $ m1ac4a : int  10 10 2 9 5 9 6 6 1 12 ...
```

```
 $ m1ac4b : int  2005 1970 1983 2007 1950 1970 1949 1953 1982 1940 ...
 $ m1ac5  : int  4 39 27 3 60 40 61 57 28 69 ...
 $ m1ac6  : int  NA 2 1 NA 3 2 2 2 1 2 ...
 $ m1ac7  : int  12 12 12 12 12 12 12 12 12 12 ...
 $ m1ac8  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m1ac9  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m1ac10 : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m1ac11n: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m1ac11t: int  NA NA NA NA NA NA NA NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:32"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 251 252 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 6
  ..$ M1AC10: Named int  4 6 8 17 22 40 42 54 56 58 ...
  .. ..- attr(*, "names")= chr  "***Undefined Label" "***Undefined Label" "***Undefined Label"
"***Undefined Label" ...
  ..$ m1ac2 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Male" "Female"
  ..$ m1ac3 : Named int  1 2 3 4 5 6 7
  .. ..- attr(*, "names")= chr  "Household head" "Wife/husband" "Child" "Father/mother" ...
  ..$ m1ac6 : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Single" "Married" "Widowed" "Divorced" ...
  ..$ m1ac8 : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Student studies in the country" "Cadre studies in the country"
"Medical treament in the country/overseas" "Newborn, new comer" ...
  ..$ m1ac9 : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "At this dwelling within com./ward" "Other place within this
province" "Another province" "Others" ...
NULL


## 3 ####  muc1b  ##########
'data.frame':   1221 obs. of  17 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  4 5 8 8 8 8 9 16 19 19 ...
 $ xa     : num  124 157 313 313 328 337 349 448 592 592 ...
 $ diaban : int  39 22 37 37 14 29 7 4 6 6 ...
 $ hoso   : int  15 14 20 20 14 15 15 15 19 19 ...
 $ m1bma  : int  31 31 31 32 31 31 31 31 31 32 ...
 $ m1bc3  : int  2 2 2 2 2 2 2 1 1 2 ...
 $ m1bc4  : int  1 1 1 1 1 1 1 2 2 2 ...
 $ m1bc5  : int  58 40 17 21 48 38 39 25 33 31 ...
 $ m1bc6  : int  2 2 1 1 2 2 2 2 2 2 ...
 $ m1bc7a : int  1 3 2 2 1 2 3 3 9 3 ...
 $ m1bc7b : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m1bc8  : int  12 9 12 1 11 12 12 5 5 5 ...
 $ m1bc9  : int  2 3 3 3 2 3 3 1 1 1 ...
 $ m1bc10 : int  NA 19 36 36 NA 38 38 NA NA NA ...
 $ m1bc11n: int  NA 39 3 0 NA 2 0 NA NA NA ...
 $ m1bc11t: int  NA 3 0 1 NA 0 10 NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:33"
```

```
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 252 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 7
  ..$ M1BC10: Named int  4 6 8 17 22 40 42 54 56 58 ...
  .. ..- attr(*, "names")= chr  "***Undefined Label" "***Undefined Label" "***Undefined Label"
"***Undefined Label" ...
  ..$ m1bc3 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Male" "Female"
  ..$ m1bc4 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Sevant" "Home worker"
  ..$ m1bc6 : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Never married" "Married" "Widowed" "Devorced" ...
  ..$ m1bc7a: Named int  0 1 2 3 8 9 10 11 12
  .. ..- attr(*, "names")= chr  "No degree" "Primary school" "Lower secondary school" "Upper
secondary school" ...
  ..$ m1bc7b: Named int  0 4 5 6 7
  .. ..- attr(*, "names")= chr  "No degree" "Short-term technical worker" "Long-term technical
worker" "Professional secondary shool" ...
  ..$ m1bc9 : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "At this dwelling within com./ward" "Other place within this
province" "Another province" "Others"
NULL


## 4 ####  muc2  ##########
'data.frame':   36999 obs. of  34 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : int  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban: int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso  : int  13 13 13 13 13 13 14 14 15 15 ...
 $ matv  : int  1 2 3 4 5 6 1 2 1 2 ...
 $ m2c1  : chr  "8" "12" "10" "9" ...
 $ m2c2a : int  1 3 2 2 0 0 9 9 9 9 ...
 $ m2c2b : int  4 4 4 4 0 0 0 0 0 0 ...
 $ m2c3  : int  1 1 1 1 3 3 1 1 1 1 ...
 $ m2c4  : int  3 3 3 3 1 1 3 3 3 3 ...
 $ m2c5  : int  2 2 2 2 NA NA 2 2 2 2 ...
 $ m2c6  : int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c7  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m2c8  : int  NA NA NA NA 3 3 NA NA NA NA ...
 $ m2c9  : int  NA NA NA NA 2 2 NA NA NA NA ...
 $ m2c10a: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m2c10b: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m2c11a: int  NA NA NA NA 13000 10600 NA NA NA NA ...
 $ m2c11b: int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c11c: int  NA NA NA NA 0 1000 NA NA NA NA ...
 $ m2c11d: int  NA NA NA NA 0 200 NA NA NA NA ...
 $ m2c11e: int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c11f: int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c11g: int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c11h: int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c11i: int  NA NA NA NA 0 0 NA NA NA NA ...
```

```
 $ m2c11k: int  NA NA NA NA 13000 11800 NA NA NA NA ...
 $ m2c12 : int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c13 : int  NA NA NA NA 0 0 NA NA NA NA ...
 $ m2c14 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m2c15a: int  NA NA NA NA 1 1 NA NA NA NA ...
 $ m2c15b: int  NA NA NA NA 2 2 NA NA NA NA ...
 $ m2c16 : int  10 NA NA NA NA NA NA NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:27"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  251 252 252 251 251 251 2 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 25
  ..$ M2AC11A: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11B: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11C: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11D: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11E: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11F: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11G: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11H: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11I: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC11K: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ m2ac9  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m2ac10a: Named int  1 2 3 4 5 6 7 8 9
  .. ..- attr(*, "names")= chr  "Poor households" "Ethnic minorities" "Households of fallen
combatants" "War invalids, sick soldiers,  or with revolutionary merits" ...
  ..$ m2ac10b: Named int  1 2 3 4 5 6 7 8 9
  .. ..- attr(*, "names")= chr  "Poor households" "Ethnic minorities" "Households of fallen
combatants" "War invalids, sick soldiers,  or with revolutionary merits" ...
  ..$ M2AC14 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC13 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M2AC12 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ m2ac15a: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m2ac15b: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m2ac8  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "Public" "Community-established" "Private" "Others"
  ..$ m2ac6  : Named int  0 1 2 3 4 5 6 7 8 9 ...
```

```
  .. ..- attr(*, "names")= chr  "Nursery, kindergarten" "Primary" "Lower secondary" "Higher
secondary" ...
  ..$ m2ac5  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m2ac4  : Named int  1 2 3
  .. ..- attr(*, "names")= chr  "Yes" "On summer vacation" "No"
  ..$ m2ac3  : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Public" "Semi-public" "Community-established" "Private" ...
  ..$ m2ac2b : Named int  0 1 2 3 4 5 6 7 8 9 ...
  .. ..- attr(*, "names")= chr  "No qualification" "Primary" "Lower secondary" "Higher
secondary" ...
  ..$ m2ac2a : Named int  0 1 2 3 4 5 6 7 8 9 ...
  .. ..- attr(*, "names")= chr  "No qualification" "Primary" "Lower secondary" "Higher
secondary" ...
NULL


## 5 ####  muc3a  ##########
'data.frame':   19647 obs. of  16 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 4 4 4 4 7 7 7 ...
 $ diaban: int  12 12 12 12 12 12 12 22 22 22 ...
 $ hoso  : int  13 13 13 14 14 15 15 15 20 20 ...
 $ matv  : int  5 1 6 1 2 2 1 3 2 5 ...
 $ m3c2  : chr  "hiュu" "an" "kiィn" "thオnh" ...
 $ m3c3a : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m3c3b : int  3 5 3 6 6 6 6 5 5 5 ...
 $ m3c4  : int  3 3 3 3 3 3 3 3 3 4 ...
 $ m3c5a : int  2 1 3 1 1 1 1 1 1 3 ...
 $ m3c5b : int  500 100 700 0 0 100 50 150 150 500 ...
 $ m3c6a : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m3c6b : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m3c7  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m3c8  : int  NA NA NA NA NA NA NA NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 8 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 8
  ..$ m3c7 : Named int  1 2 3
  .. ..- attr(*, "names")= chr  "Yes, it did" "It had some but not enough" "No"
  ..$ m3c4 : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "Vaccination" "Pregnancy checks, insertion of intrauterine devices,
abortion, birth delivery" "Health checks and consultancy" "Medical treatment"
  ..$ m3c3b: Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Village/hamlet clinics" "Commune/ward clinics" "Regional general
clinics." "Urban/rural district hospitals" ...
  ..$ M3C8 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C6B: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C6A: Named int 0
```

```
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C5B: Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C5A: Named int 0
  .. ..- attr(*, "names")= chr "0"
NULL


## 6 ####  muc3b  ##########
'data.frame':   36999 obs. of  15 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban: int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso  : int  13 13 13 13 13 13 14 14 15 15 ...
 $ matv  : int  1 2 3 4 5 6 1 2 1 2 ...
 $ m3c9  : int  1 2 1 2 1 1 1 1 1 1 ...
 $ m3c10a: int  7 NA 6 NA 1 1 6 7 7 7 ...
 $ m3c10b: int  0 NA 0 NA 0 0 0 0 0 0 ...
 $ m3c11 : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m3c12a: int  1 NA 2 NA 2 2 1 1 1 1 ...
 $ m3c12b: int  2 NA 2 NA 2 2 2 2 2 2 ...
 $ m3c13 : int  100 NA NA NA NA NA 100 NA 200 NA ...
 $ m3c14 : int  10 NA NA NA NA NA 0 NA 100 NA ...
 $ m3c15 : int  0 NA NA NA NA NA 0 NA 0 NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 251 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 8
  ..$ m3c12b: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m3c12a: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m3c10 : Named int  1 2 3 4 5 6 7 8 9 10
  .. ..- attr(*, "names")= chr  "Booklet/card for children aged 6 or less" "Health insurance card
for the poor" "Health insurance card for the near-poor" "Free healthcare
booklet/card/certificate" ...
  ..$ m3c9  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ M3C11 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C13 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C14 : Named int 0
  .. ..- attr(*, "names")= chr "0"
  ..$ M3C15 : Named int 0
  .. ..- attr(*, "names")= chr "0"
NULL


## 7 ####  muc4a  ##########
'data.frame':   36999 obs. of  53 variables:
```

```
$ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
$ huyen  : int  1 1 1 1 1 1 1 1 1 1 ...
$ xa     : num  4 4 4 4 4 4 4 4 4 4 ...
$ diaban : int  12 12 12 12 12 12 12 12 12 12 ...
$ hoso   : int  13 13 13 13 13 13 14 14 15 15 ...
$ matv   : int  1 2 3 4 5 6 1 2 1 2 ...
$ m4ac1a : int  2 1 1 2 NA NA 1 1 1 1 ...
$ m4ac1b : int  2 2 2 2 NA NA 2 2 2 2 ...
$ m4ac1c : int  2 2 2 1 NA NA 2 2 2 2 ...
$ m4ac2  : int  2 1 1 1 NA NA 1 1 1 1 ...
$ m4ac3a : int  NA 340 312 340 NA NA 144 144 312 264 ...
$ m4ac3m : chr  "" "lクi xe" "lクi xe" "bクn tケp hoク" ...
$ m4ac3  : int  NA 83 83 52 NA NA 26 23 22 23 ...
$ m4ac4c : chr  "" "cty cp thaqnh nga" "cty vina thオnh cォng" "c□ hオng sャn thu¥xfb" ...
$ m4ac4m : chr  "" "vヒn chuyモn" "kd nhオ" "bクn bクnh kムo" ...
$ m4ac4  : int  NA 49 68 47 NA NA 79 85 86 85 ...
$ m4ac5  : int  NA 1 1 1 NA NA 1 1 1 1 ...
$ m4ac6  : int  NA 28 26 28 NA NA 12 12 26 22 ...
$ m4ac7  : int  NA 8 8 10 NA NA 8 8 8 4 ...
$ m4ac8a : int  NA 4 5 2 NA NA 5 4 4 1 ...
$ m4ac8b : int  NA NA 1 NA NA NA 2 NA NA NA ...
$ m4ac9  : int  NA 1 1 2 NA NA 1 1 1 1 ...
$ m4ac10 : int  NA 2835 3308 NA NA NA 6661 6661 4283 1903 ...
$ m4ac11 : int  NA 34023 39693 NA NA NA 79935 79935 51393 22841 ...
$ m4ac12a: int  NA 945 1890 NA NA NA 952 1903 1903 952 ...
$ m4ac12b: int  NA 945 945 NA NA NA 0 0 952 0 ...
$ m4ac13a: int  NA 1 1 NA NA NA 1 1 1 2 ...
$ m4ac13b: int  NA 1 1 NA NA NA 2 2 1 2 ...
$ m4ac13c: int  NA 1 1 NA NA NA 2 2 2 2 ...
$ m4ac14 : int  NA 2 2 2 NA NA 2 2 2 2 ...
$ m4ac15a: int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac15m: chr  "" "" "" "" ...
$ m4ac15 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac16c: chr  "" "" "" "" ...
$ m4ac16m: chr  "" "" "" "" ...
$ m4ac16 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac17 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac18 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac19 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac20 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac21 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac22 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac23 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac24a: int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac24b: int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac25 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac26 : int  NA NA NA NA NA NA NA NA NA NA ...
$ m4ac27 : int  2 2 2 2 NA NA 1 1 1 1 ...
$ m4ac28a: int  NA NA NA NA NA NA 0 0 0 0 ...
$ m4ac28b: int  NA NA NA NA NA NA 0 0 0 0 ...
$ m4ac28c: int  NA NA NA NA NA NA 34258 29690 75377 29694 ...
$ m4ac28d: int  NA NA NA NA NA NA 0 0 0 0 ...
$ m4ac28e: int  NA NA NA NA NA NA 0 0 0 0 ...
- attr(*, "datalabel")= chr ""
- attr(*, "time.stamp")= chr " 9 May 2012 09:37"
- attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
```

```
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 19
  ..$ m4ac27 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac20 : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Farming, forestry, aquaculture households / individuals"
"Independent production and business households" "Collective" "Private" ...
  ..$ m4ac21 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac25 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac14 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac16 : Named int  35 110 140 160
  .. ..- attr(*, "names")= chr  "Production and distribution of electricity, gas, hot water, steam
and air conditioners" "Agriculture and related services: crop production" "Agriculture and related
services: husbandry" "Agriculture and related services: agricultural services"
  ..$ m4ac17 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac8a : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Farming, forestry, aquaculture households / individuals"
"Independent production and business households" "Collective" "Private" ...
  ..$ m4ac8b : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac9  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac13a: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac13b: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac13c: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac1a : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac1b : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac1c : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac2  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4ac4  : Named int  35 110 140 160
  .. ..- attr(*, "names")= chr  "Production and distribution of electricity, gas, hot water, steam
and air conditioners" "Agriculture and related services: crop production" "Agriculture and related
services: husbandry" "Agriculture and related services: agricultural services"
  ..$ m4ac5  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
NULL


## 8 ####  muc4b0  ##########
'data.frame':   11619 obs. of  9 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  3 4 4 16 16 16 16 16 16 16 ...
```

```
 $ xa    : num  91 148 148 382 382 382 382 382 397 397 ...
 $ diaban: int  6 6 6 10 10 10 10 10 2 2 ...
 $ hoso  : int  13 14 15 13 13 14 15 15 13 14 ...
 $ m4b0ma: int  1 1 1 1 5 1 1 5 5 5 ...
 $ m4b0c3: int  800 2160 1800 2520 200 480 1800 30 720 4500 ...
 $ m4b0c4: num  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b0c5: num  0 0 0 0 0 0 0 0 0 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 254 254
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b0ma: Named int  1 2 3 4 5 6 7 8
  .. ..- attr(*, "names")= chr  "Annual crop land" "Perennial crop land" "Forestry land" "Water
surface" ...
NULL


## 9 ####  muc4b11  ##########
'data.frame':   13588 obs. of  12 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  4 4 4 4 4 4 16 16 16 16 ...
 $ xa     : num  148 148 148 148 148 148 382 382 382 382 ...
 $ diaban : int  6 6 6 6 6 6 10 10 10 10 ...
 $ hoso   : int  14 14 14 15 15 15 13 13 13 13 ...
 $ m4b11ma: int  1 5 3 1 5 3 3 5 1 6 ...
 $ m4b11c3: int  2160 4320 2160 720 1440 720 2520 3960 1440 192 ...
 $ m4b11c4: int  1100 2100 1000 300 550 250 1120 1752 632 73 ...
 $ m4b11c5: int  0 0 0 0 0 0 9 15 6 1 ...
 $ m4b11c6: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b11c7: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4b11c8: int  6238 11909 5671 1528 2801 1273 5292 8338 3046 483 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b11ma: Named int  1 2 3 4 5 6 7
  .. ..- attr(*, "names")= chr  "Winter-spring ordinary rice" "Summer-autumn ordinary rice"
"Ten-month or autumn-winter rice" "Ordinary rice planted in terraced field" ...
NULL


## 10 ####  muc4b12  ##########
'data.frame':   13157 obs. of  11 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  3 4 4 4 4 16 16 16 16 16 ...
 $ xa     : num  91 148 148 148 148 382 382 382 382 382 ...
 $ diaban : int  6 6 6 6 6 10 10 10 10 10 ...
 $ hoso   : int  13 15 15 15 15 13 13 13 13 13 ...
```

```
 $ m4b12ma: int  21 14 8 16 13 13 21 15 20 14 ...
 $ m4b12c3: int  780 30 360 220 200 12 580 20 360 20 ...
 $ m4b12c4: int  NA 1200 160 2500 2700 31 NA 44 NA 42 ...
 $ m4b12c5: int  NA 1200 160 2500 2600 0 NA 0 NA 0 ...
 $ m4b12c6: int  45369 5093 662 6367 8913 NA 5670 NA 3591 NA ...
 $ m4b12c7: int  45369 5093 662 6367 8913 59 6078 166 3884 238 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b12ma: Named int  8 9 10 11 12 13 14 15 16 17 ...
  .. ..- attr(*, "names")= chr  "Maize (corn)" "Sweet potato" "Cassava/manioc" "Other staple food
crops" ...
NULL


## 11 ####  muc4b13  ##########
'data.frame':   3012 obs. of  12 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  4 16 16 16 16 16 16 16 16 19 ...
 $ xa      : num  148 382 406 406 406 418 433 448 448 598 ...
 $ diaban  : int  6 10 19 19 19 21 3 4 4 7 ...
 $ hoso    : int  15 13 13 14 15 15 19 14 15 13 ...
 $ m4b13ma : int  22 23 23 23 23 23 22 30 30 22 ...
 $ m4b13c3a: int  360 360 360 360 360 144 360 648 540 360 ...
 $ m4b13c3b: int  1 1 1 1 1 1 1 1 1 1 ...
 $ m4b13c4 : int  60 48 80 31 50 40 20 NA NA 35 ...
 $ m4b13c5 : int  60 0 60 0 0 0 0 NA NA 30 ...
 $ m4b13c6 : int  662 NA 379 NA NA NA NA 26403 12759 567 ...
 $ m4b13c7 : int  662 680 506 420 361 686 271 26403 12759 662 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 251 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 2
  ..$ m4b13c3b: Named int  1 2
  .. ..- attr(*, "names")= chr  "M2" "Tree"
  ..$ m4b13ma : Named int  22 23 24 25 26 27 28 29 30 31 ...
  .. ..- attr(*, "names")= chr  "Soya bean/soybean" "Peanut/groundnut" "Sesame" "Sugarcane" ...
NULL


## 12 ####  muc4b14  ##########
'data.frame':   7207 obs. of  12 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  16 16 16 16 16 16 16 16 16 16 ...
 $ xa      : num  382 382 382 397 397 397 397 397 406 406 ...
 $ diaban  : int  10 10 10 2 2 2 2 2 19 19 ...
 $ hoso    : int  13 15 15 13 13 14 19 19 15 15 ...
```

```
 $ m4b14ma : int  47 49 42 47 49 47 47 42 42 41 ...
 $ m4b14c3a: int  2 5 2 28 20 14 25 3 1 5 ...
 $ m4b14c3b: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m4b14c4 : int  26 20 10 420 100 300 340 130 5 75 ...
 $ m4b14c5 : int  0 10 0 300 0 300 300 100 0 0 ...
 $ m4b14c6 : int  NA 45 NA 1701 NA 2269 1418 473 NA NA ...
 $ m4b14c7 : int  369 90 45 2381 1418 2269 1607 614 36 203 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 251 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 2
  ..$ m4b14c3b: Named int  1 2
  .. ..- attr(*, "names")= chr  "M2" "Tree"
  ..$ m4b14ma : Named int  39 40 41 42 43 44 45 46 47 48 ...
  .. ..- attr(*, "names")= chr  "Citrus" "Pineapple" "Banana" "Mango, horse mango" ...
NULL


## 13 ####  muc4b15  ##########
'data.frame':   6638 obs. of  10 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  16 16 16 16 16 16 16 16 16 16 ...
 $ xa     : num  382 382 382 406 406 406 406 418 433 433 ...
 $ diaban : int  10 10 10 19 19 19 19 21 3 3 ...
 $ hoso   : int  13 13 15 14 14 15 15 15 14 19 ...
 $ m4b15ma: int  1 3 1 1 3 3 1 1 1 1 ...
 $ m4b15c2: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b15c3: int  312 38 41 0 0 0 60 163 433 325 ...
 $ m4b15c4: int  0 0 95 190 54 18 238 0 0 0 ...
 $ m4b15c5: int  312 38 136 190 54 18 298 163 433 325 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b15ma: Named int  1 2 3 4 5 6 7 8 9
  .. ..- attr(*, "names")= chr  "Straw, thatch" "Sweet potato leaves and stems" "Cassava and maize
stems" "Stems of beans of all kinds" ...
NULL


## 14 ####  muc4b16  ##########
'data.frame':   47482 obs. of  13 variables:
 $ tinh     : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen    : int  3 3 3 3 3 3 3 3 3 3 ...
 $ xa       : num  91 91 91 91 91 91 91 91 91 91 ...
 $ diaban   : int  6 6 6 6 6 6 6 6 6 6 ...
 $ hoso     : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m4b16ma  : int  12 2 7 13 94 3 10 8 18 6 ...
```

```
 $ m4b16c2a : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b16c2b : int  189 1418 123 5482 737 1040 95 189 331 614 ...
 $ m4b16c2c : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b16c2d : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b16c2e : int  189 1418 123 5482 737 1040 95 189 331 614 ...
 $ m4b16c2e1: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b16c2e2: int  0 0 0 0 0 0 0 0 0 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 252 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b16ma: Named int  1 2 3 4 5 6 7 8 10 11 ...
  .. ..- attr(*, "names")= chr  "Seeds" "Saplings" "Chemical fertilizers" "Organic
fertilizers(seft-provided)" ...
NULL


## 15 ####  muc4b17  ##########
'data.frame':   15124 obs. of  11 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  3 3 3 3 4 4 4 4 4 16 ...
 $ xa     : num  91 91 91 91 148 148 148 148 148 382 ...
 $ diaban : int  6 6 6 6 6 6 6 6 6 10 ...
 $ hoso   : int  13 13 13 13 14 14 14 15 15 13 ...
 $ m4b17ma: int  3 1 2 5 3 2 1 1 4 4 ...
 $ m4b17c2: int  0 0 0 0 60 200 85 20 25 165 ...
 $ m4b17c3: int  20 10 50 40 0 0 0 45 50 73 ...
 $ m4b17c4: int  0 0 0 0 0 0 0 10 10 10 ...
 $ m4b17c5: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b17c6: int  20 10 50 40 60 200 85 75 85 248 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b17ma: Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Nitrogenous" "Phosphat" "Potassium" "NPK" ...
NULL


## 16 ####  muc4b21  ##########
'data.frame':   12967 obs. of  10 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  16 16 16 16 16 16 16 16 16 16 ...
 $ xa      : num  382 382 382 397 397 397 397 397 406 406 ...
 $ diaban  : int  10 10 10 2 2 2 2 2 19 19 ...
 $ hoso    : int  13 13 15 14 14 19 19 19 13 13 ...
 $ m4b21ma : int  5 1 5 5 12 15 5 12 8 12 ...
 $ m4b21c3 : int  210 3200 10 40 50 50 50 2550 9 150 ...
```

```
 $ m4b21c4a: int  125 3200 0 0 0 50 0 0 9 0 ...
 $ m4b21c4b: int  7088 76208 NA NA NA 4725 NA NA 2980 NA ...
 $ m4b21c5 : int  11908 76208 587 2269 95 4725 2835 6025 2980 406 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b21ma: Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Live pig pork" "Live buffalo and cow meat" "Horses" "Sheep,
goats" ...
NULL


## 17 ####  muc4b22  ##########
'data.frame':   8111 obs. of  29 variables:
 $ tinh     : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen    : int  16 16 16 16 16 16 16 16 16 16 ...
 $ xa       : num  382 382 382 397 397 406 406 406 406 406 ...
 $ diaban   : int  10 10 10 2 2 19 19 19 19 19 ...
 $ hoso     : int  13 13 15 14 19 13 13 15 15 15 ...
 $ m4b22ma  : int  1 5 5 5 5 1 5 1 2 5 ...
 $ m4b22c7  : int  21547 1559 316 0 0 0 0 1910 0 226 ...
 $ m4b22c8  : int  22208 5421 90 1418 1418 1549 659 2805 723 542 ...
 $ m4b22c9  : int  775 898 27 38 95 181 0 90 0 0 ...
 $ m4b22c10a: int  227 60 0 0 0 90 0 45 0 18 ...
 $ m4b22c10b: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10c: int  0 0 0 0 0 0 0 217 0 0 ...
 $ m4b22c10d: int  0 0 0 0 0 90 0 90 0 18 ...
 $ m4b22c10e: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10f: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10g: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10h: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10i: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10j: int  359 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c10k: int  3260 0 0 0 0 135 0 0 0 0 ...
 $ m4b22c11 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c12 : int  5481 756 0 0 0 452 0 271 632 0 ...
 $ m4b22c13 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c14 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c15 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c16 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c17 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b22c18 : int  435 123 0 0 0 0 0 0 0 90 ...
 $ m4b22c19 : int  54293 8816 434 1456 1512 2497 659 5428 1355 894 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:27"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
```

```
  ..$ m4b22ma: Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Pigs" "Water buffalos, cows" "Horses" "Sheep, goats" ...
NULL


## 18 ####  muc4b31  ##########
'data.frame':   200 obs. of  9 variables:
 $ tinh   : int  1 1 1 1 1 4 4 4 6 8 ...
 $ huyen  : int  16 275 275 275 282 47 51 51 58 72 ...
 $ xa     : num  382 9895 9895 9946 10492 ...
 $ diaban : int  10 16 16 3 10 1 14 5 4 4 ...
 $ hoso   : int  13 14 14 13 13 14 13 14 14 14 ...
 $ m4b31ma: int  4 1 4 1 1 1 1 1 1 1 ...
 $ m4b31c3: num  2 2 2 2 6 1 2 3 1 1 ...
 $ m4b31c4: num  5670 18069 13552 3795 632 ...
 $ m4b31c5: num  11340 36139 27104 7591 3793 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 254 254 254
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b31ma: Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Soil preparation" "Irrigation" "Pest and disease control" "Rice
plucking, semi-processing" ...
NULL


## 19 ####  muc4b32  ##########
'data.frame':   199 obs. of  27 variables:
 $ tinh    : int  1 1 1 1 1 4 4 4 6 8 ...
 $ huyen   : int  16 275 275 275 282 47 51 51 58 72 ...
 $ xa      : num  382 9895 9895 9946 10492 ...
 $ diaban  : int  10 16 16 3 10 1 14 5 4 4 ...
 $ hoso    : int  13 14 14 13 13 14 13 14 14 14 ...
 $ m4b32ma : int  4 1 4 1 1 1 1 1 1 1 ...
 $ m4b32c7 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c8 : int  397 99 63 0 36 0 97 34 0 111 ...
 $ m4b32c9a: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9b: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9c: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9d: int  2315 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9e: int  0 0 0 0 0 0 0 0 1395 0 ...
 $ m4b32c9f: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9g: int  0 8312 5692 1265 0 826 4414 404 0 0 ...
 $ m4b32c9h: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9i: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9j: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c9k: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c10: int  227 253 172 0 45 0 235 172 0 0 ...
 $ m4b32c11: int  1100 1000 800 100 400 290 236 300 145 0 ...
 $ m4b32c12: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c13: int  4100 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c14: int  0 0 0 0 0 0 0 0 0 0 ...
```

```
 $ m4b32c15: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b32c16: int  0 100 100 0 650 0 110 0 0 0 ...
 $ m4b32c17: int  7853 9658 6740 1356 1029 1158 5143 954 1530 111 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:27"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b32ma: Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Soil preparation" "Irrigation" "Pest and disease control" "Rice
plucking, semi-processing" ...
NULL


## 20 ####  muc4b41  ##########
'data.frame':   3504 obs. of  13 variables:
 $ tinh    : int  1 2 2 2 2 2 2 2 2 2 ...
 $ huyen   : int  275 26 26 26 26 26 26 26 26 26 ...
 $ xa      : num  4939 730 730 730 739 ...
 $ diaban  : int  6 2 2 2 5 5 5 3 3 3 ...
 $ hoso    : int  19 13 14 15 13 14 15 13 14 15 ...
 $ m4b41ma : int  11 11 11 11 11 11 11 11 11 11 ...
 $ m4b41c3a: int  1175 2076 3552 2407 0 0 0 0 0 6954 ...
 $ m4b41c3b: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b41c3c: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b41c3d: int  0 0 0 0 0 0 0 0 2371 0 ...
 $ m4b41c3e: int  0 0 0 0 3811 3854 3869 2600 0 0 ...
 $ m4b41c3f: int  1175 2076 3552 2407 3811 3854 3869 2600 2371 6954 ...
 $ m4b41c4 : int  904 0 0 0 0 0 0 0 0 1337 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b41ma: Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Mu oil trees" "Cinnamon" "Anise" "Pine" ...
NULL


## 21 ####  muc4b42  ##########
'data.frame':   2119 obs. of  30 variables:
 $ tinh    : int  1 2 2 2 2 2 2 2 2 2 ...
 $ huyen   : int  275 26 26 26 26 26 26 26 26 26 ...
 $ xa      : num  4939 730 730 730 739 ...
 $ diaban  : int  6 2 2 2 5 5 5 3 3 3 ...
 $ hoso    : int  19 13 14 15 13 14 15 13 14 15 ...
 $ m4b42ma : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m4b42c1 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c2 : int  0 0 0 0 0 0 0 0 135 0 ...
 $ m4b42c3 : int  181 180 363 234 134 133 133 140 0 428 ...
```

```
 $ m4b42c4a: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4b: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4c: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4d: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4e: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4f: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4g: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4h: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4i: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4j: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c4k: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c5 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c6 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c7 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c8 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c9 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c10: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c11: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c12: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b42c13: int  0 0 0 0 0 0 0 0 93 115 254 ...
 $ m4b42c14: int  181 180 363 234 134 133 133 233 251 682 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:27"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b42ma: Named int  1 2
  .. ..- attr(*, "names")= chr  "Forestry activities" "Forestry services"
NULL


## 22 ####  muc4b51  ##########
'data.frame':   2671 obs. of  10 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  16 16 17 269 269 269 271 271 278 281 ...
 $ xa      : num  397 418 484 9604 9604 ...
 $ diaban  : int  2 21 11 8 8 8 7 7 9 2 ...
 $ hoso    : int  14 15 15 14 14 15 13 14 13 14 ...
 $ m4b51ma : int  11 11 11 11 12 11 11 11 22 11 ...
 $ m4b51c3 : int  36 80 1200 50 15 900 120 50 160 4880 ...
 $ m4b51c4a: int  0 54 1150 20 5 900 50 0 150 4800 ...
 $ m4b51c4b: int  NA 1806 17655 452 316 13814 904 NA 4065 90713 ...
 $ m4b51c5 : int  851 2675 18422 994 813 13814 2170 904 4336 92225 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b51ma: Named int  1 2 3 11 12 13 14 21 22 23
  .. ..- attr(*, "names")= chr  "Aquacultural raising" "Auquacultural catching" "Aquacultural
```

```
sevices" "Fish" ...
NULL


## 23 ####  muc4b52  ##########
'data.frame':   2013 obs. of  30 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  16 16 17 269 269 271 271 278 281 281 ...
 $ xa      : num  397 418 484 9604 9604 ...
 $ diaban  : int  2 21 11 8 8 7 7 9 2 2 ...
 $ hoso    : int  14 15 15 14 15 13 14 13 14 15 ...
 $ m4b52ma : int  1 1 1 1 1 1 1 2 1 1 ...
 $ m4b52c6 : int  19 361 3161 542 1354 362 45 0 14174 4512 ...
 $ m4b52c7 : int  47 0 0 361 4966 181 452 0 26458 7670 ...
 $ m4b52c8 : int  9 90 45 45 45 90 0 181 1890 135 ...
 $ m4b52c9a: int  0 0 181 0 0 0 0 0 1134 90 ...
 $ m4b52c9b: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9c: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9d: int  0 27 0 0 0 0 0 0 0 0 ...
 $ m4b52c9e: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9f: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9g: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9h: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9i: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9j: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c9k: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c10: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c11: int  0 0 0 0 271 0 0 0 0 0 ...
 $ m4b52c12: int  0 0 452 0 0 0 0 0 1890 361 ...
 $ m4b52c13: int  0 0 1199 0 0 0 0 0 10394 0 ...
 $ m4b52c14: int  0 0 0 90 0 0 0 0 0 523 ...
 $ m4b52c15: int  0 0 0 0 0 0 0 0 1417 902 ...
 $ m4b52c16: int  0 0 0 0 0 0 0 0 2835 379 ...
 $ m4b52c17: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4b52c18: int  0 0 361 0 0 90 0 0 4725 0 ...
 $ m4b52c19: int  76 479 5398 1039 6636 723 497 181 64917 14574 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m4b52ma: Named int  1 2 3
  .. ..- attr(*, "names")= chr  "Raising" "Catching" "Services"
NULL


## 24 ####  muc4c1  ##########
'data.frame':   4007 obs. of  23 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  1 2 2 2 2 3 3 3 3 3 ...
 $ xa     : num  4 40 40 55 67 91 106 106 106 112 ...
 $ diaban : int  12 6 6 11 23 6 13 13 13 20 ...
 $ hoso   : int  13 13 15 13 19 15 14 15 15 13 ...
```

```
 $ m4c1ma : int  1 1 1 1 1 1 1 1 2 1 ...
 $ m4c1c2 : int  47 47 56 96 47 96 49 43 96 46 ...
 $ m4c1c3 : num  12 12 12 12 12 7 12 12 12 12 ...
 $ m4c1c4 : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m4c1c5 : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4c1c6 : int  100 100 100 100 100 100 100 100 100 100 ...
 $ m4c1c7 : int  2 3 3 2 2 3 3 3 3 3 ...
 $ m4c1c8 : int  NA NA 1 1 NA 1 1 1 1 NA ...
 $ m4c1c9 : int  14176 9453 11285 16370 4252 4253 2930 3611 6771 1512 ...
 $ m4c1c10: num  170113 113440 135425 196434 51027 ...
 $ m4c1c11: int  NA NA 2 2 NA 2 2 2 2 NA ...
 $ m4c1c12: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4c1c13: int  NA NA 2 2 NA 2 2 2 2 NA ...
 $ m4c1c14: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4c1c15: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m4c1c16: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4c1c17: num  170113 113440 135425 196434 51027 ...
 $ m4c1c18: num  170113 113440 135425 196434 51027 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 254 251 252 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 7
  ..$ m4c1c15: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4c1c13: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4c1c11: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4c1c8 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4c1c7 : Named int  1 2 3
  .. ..- attr(*, "names")= chr  "Yes, enterprise" "Yes, private trading" "No"
  ..$ m4c1c4 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ M4C1C2 : Named int  35 68 84 85 99
  .. ..- attr(*, "names")= chr  "***Undefined Label" "***Undefined Label" "***Undefined Label"
"***Undefined Label" ...
NULL


## 25 ####  muc4c2  ##########
'data.frame':   4007 obs. of  32 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  1 2 2 2 2 3 3 3 3 3 ...
 $ xa      : num  4 40 40 55 67 91 106 106 106 112 ...
 $ diaban  : int  12 6 6 11 23 6 13 13 13 20 ...
 $ hoso    : int  13 13 15 13 19 15 14 15 15 13 ...
 $ m4c2ma  : int  1 1 1 1 1 1 1 2 1 1 ...
 $ m4c2c19 : int  0 0 60490 0 0 2315 0 5417 2708 0 ...
 $ m4c2c20 : int  1890 1040 460 571 1701 302 0 867 1083 142 ...
 $ m4c2c21a: int  5670 945 1083 0 1134 397 0 1083 0 0 ...
 $ m4c2c21b: int  0 0 0 0 0 0 0 0 0 0 ...
```

```
 $ m4c2c21c: int  0 0 3250 0 0 0 0 0 0 0 ...
 $ m4c2c21d: int  0 0 0 0 0 0 5670 0 2167 567 ...
 $ m4c2c21e: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c21f: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c21g: int  0 0 0 0 0 0 284 0 181 0 ...
 $ m4c2c21h: int  0 0 0 0 0 737 0 1625 0 0 ...
 $ m4c2c21i: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c21j: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c21k: int  1134 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c22 : int  0 0 325 0 340 0 0 0 0 0 ...
 $ m4c2stt : int  1 1 1 1 1 1 1 2 1 1 ...
 $ m4c2c23 : int  0 1229 0 0 0 189 473 181 0 0 ...
 $ m4c2c24 : int  0 0 0 0 0 945 567 903 542 0 ...
 $ m4c2c25 : int  79386 0 0 0 0 9923 0 27084 0 0 ...
 $ m4c2c26 : int  5670 3120 0 30455 0 0 0 0 0 0 ...
 $ m4c2c27 : int  0 0 0 68524 11339 0 0 17334 0 0 ...
 $ m4c2c28 : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4c2c29 : int  22682 2363 0 22841 3402 0 0 0 0 0 ...
 $ m4c2c30 : int  0 0 181 0 0 0 0 217 0 0 ...
 $ m4c2c31 : int  945 567 0 4759 454 0 0 0 0 0 ...
 $ m4c2c32 : int  117378 9264 65790 127149 18370 14808 6993 54709 6681 709 ...
 $ m4c2c33 : int  117378 9264 65790 127149 18370 14808 6993 54709 6681 709 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
NULL


## 26 ####  muc4d  ##########
'data.frame':   9399 obs. of  29 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa      : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban  : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso    : int  13 14 15 13 15 20 14 19 20 13 ...
 $ m4dc2_01: int  0 9516 0 0 0 0 28548 0 0 0 ...
 $ m4dc2_02: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_03: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_04: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_05: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_06: int  5670 9516 1903 2380 2836 1890 2379 5710 4758 14273 ...
 $ m4dc2_07: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_08: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_09: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_10: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_11: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_12: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_13: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_14: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_15: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_16: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_17: int  1890 9611 952 0 14178 0 9516 9516 0 9516 ...
```

```
 $ m4dc2_18: int  0 0 0 0 0 0 0 0 9516 0 ...
 $ m4dc2_19: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_20: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m4dc2_21: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4dc2_22: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4dc2_23: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m4dc2_24: int  NA NA NA NA NA NA NA NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 253 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
NULL


## 27 ####  muc5a1  ##########
'data.frame':   136854 obs. of  10 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa     : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban : int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso   : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m5a1ma : int  110 144 140 151 139 146 113 114 121 115 ...
 $ m5a1c2a: num  3 4 4 NA 1 10 4 5 20 NA ...
 $ m5a1c2b: num  180 200 300 100 20 100 400 250 50 200 ...
 $ m5a1c3a: num  0 0 0 NA 0 0 0 0 0 NA ...
 $ m5a1c3b: num  NA NA NA 100 NA NA NA NA NA 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 252 254 254 254 254
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m5a1ma: Named int  101 102 110 111 112 113 114 115 116 118 ...
  .. ..- attr(*, "names")= chr  "Fragrant, specialty rice" "Sticky rice" "Pork" "Beef" ...
NULL


## 28 ####  muc5a2  ##########
'data.frame':   236630 obs. of  14 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa     : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban : int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso   : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m5a2ma : int  137 117 108 132 107 150 131 151 135 111 ...
 $ m5a2c2a: num  NA 2 10 4 2.5 ...
 $ m5a2c2b: num  50 64 80 50 60 13 150 300 45 75 ...
 $ m5a2c3a: num  NA 2 10 4 2.5 ...
 $ m5a2c3b: num  50 64 80 50 60 13 150 300 45 75 ...
 $ m5a2c4a: num  NA 0 0 0 0 0 0 NA 0 0 ...
 $ m5a2c4b: num  0 NA NA NA NA NA NA 0 NA NA ...
```

```
 $ m5a2c5a: num  NA 0 0 0 0 0 0 NA 0 0 ...
 $ m5a2c5b: num  0 NA NA NA NA NA NA 0 NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 252 254 254 254 254 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m5a2ma: Named int  101 102 103 104 105 106 107 108 109 110 ...
  .. ..- attr(*, "names")= chr  "Plain rice" "Sticky rice" "Maize" "Cassaca" ...
NULL


## 29 ####  muc5b1  ##########
'data.frame':   111034 obs. of  10 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban: int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso  : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m5b1ma: int  228 217 216 204 218 219 226 215 221 220 ...
 $ m5b1c2: int  500 60 30 1000 30 100 300 80 60 50 ...
 $ m5b1c3: int  500 60 30 1000 30 100 300 80 60 50 ...
 $ m5b1c4: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m5b1c5: int  0 0 0 0 0 0 0 0 0 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 252 253 253 253 253
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 1
  ..$ m5b1ma: Named int  201 202 203 204 205 206 207 208 209 210 ...
  .. ..- attr(*, "names")= chr  "Pocket money for children" "Coal" "Coal briquette" "Petroleum" ...
NULL


## 30 ####  muc5b2  ##########
'data.frame':   119120 obs. of  8 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban: int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso  : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m5b2ma: int  327 312 317 320 313 326 310 311 314 305 ...
 $ m5b2c2: int  10560 150 300 600 50 30 150 200 200 600 ...
 $ m5b2c3: int  0 0 0 0 0 0 0 0 0 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 252 253 253
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
```

```
 - attr(*, "version")= int 12
NULL


## 31 ####  muc5b3  ##########
'data.frame':   9399 obs. of  14 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa      : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban  : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso    : int  13 14 15 13 15 20 14 19 20 13 ...
 $ m5b3c2_1: int  50 50 0 0 0 0 50 100 100 0 ...
 $ m5b3c2_2: int  600 500 600 200 0 0 500 300 200 500 ...
 $ m5b3c2_3: int  400 0 200 0 0 0 0 0 0 240 ...
 $ m5b3c2_4: int  0 0 0 0 300 0 0 0 0 0 ...
 $ m5b3c2_5: int  0 0 0 0 0 0 0 0 0 0 ...
 $ m5b3c2_6: int  2000 0 1000 0 8000 10000 0 0 0 3000 ...
 $ m5b3c2_7: int  2000 5000 0 0 0 0 3000 2000 2500 1500 ...
 $ m5b3c2_8: int  5000 3000 2000 2000 4000 3000 2000 3000 3300 4000 ...
 $ m5b3c2_9: int  0 0 0 0 0 0 0 0 0 0 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 253 253 253 253 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
NULL


## 32 ####  muc6  ##########
'data.frame':   9399 obs. of  42 variables:
 $ tinh   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa     : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso   : int  13 14 15 13 15 20 14 19 20 13 ...
 $ m6ma_01: int  1 2 2 2 2 2 2 2 2 2 ...
 $ m6ma_02: int  2 3 3 3 7 7 7 11 7 7 ...
 $ m6ma_03: int  7 7 7 7 11 11 11 12 12 11 ...
 $ m6ma_04: int  11 11 11 11 12 12 12 15 15 12 ...
 $ m6ma_05: int  12 12 12 12 14 15 14 17 21 14 ...
 $ m6ma_06: int  14 14 14 14 15 17 15 20 22 15 ...
 $ m6ma_07: int  15 15 15 15 17 20 17 21 23 20 ...
 $ m6ma_08: int  17 17 20 17 20 21 20 22 24 22 ...
 $ m6ma_09: int  20 20 21 20 21 22 21 23 25 23 ...
 $ m6ma_10: int  22 21 22 21 22 23 22 24 27 24 ...
 $ m6ma_11: int  23 22 23 22 23 24 23 25 28 25 ...
 $ m6ma_12: int  24 23 24 23 24 25 24 26 30 26 ...
 $ m6ma_13: int  25 24 25 24 25 26 25 27 31 27 ...
 $ m6ma_14: int  26 25 26 25 26 27 26 28 32 28 ...
 $ m6ma_15: int  27 26 27 26 27 28 27 30 34 30 ...
 $ m6ma_16: int  28 27 28 27 28 31 28 31 35 31 ...
 $ m6ma_17: int  30 28 30 28 30 33 30 32 0 32 ...
 $ m6ma_18: int  32 30 31 30 31 34 31 34 NA 34 ...
 $ m6ma_19: int  34 31 32 31 32 35 32 35 NA 35 ...
```

```
 $ m6ma_20: int  35 32 35 32 33 0 33 0 NA 0 ...
 $ m6ma_21: int  0 33 0 33 34 NA 34 NA NA NA ...
 $ m6ma_22: int  NA 34 NA 34 35 NA 35 NA NA NA ...
 $ m6ma_23: int  NA 35 NA 35 0 NA 0 NA NA NA ...
 $ m6ma_24: int  NA 0 NA 0 NA NA NA NA NA NA ...
 $ m6ma_25: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_26: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_27: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_28: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_29: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_30: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_31: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_32: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_33: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_34: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_35: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_36: int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6ma_37: int  NA NA NA NA NA NA NA NA NA NA ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
NULL


## 33 ####  muc6b  ##########
'data.frame':   91597 obs. of  11 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 4 4 4 4 4 4 4 ...
 $ diaban: int  12 12 12 12 12 12 12 12 12 12 ...
 $ hoso  : int  13 13 13 13 13 13 13 13 13 13 ...
 $ m6c2  : int  24 2 15 14 23 12 34 25 1 35 ...
 $ m6c3  : int  1 1 2 1 2 3 1 4 1 1 ...
 $ m6c4t : int  0 0 0 0 0 0 0 0 0 0 ...
 $ m6c4n : int  2004 2005 2008 2007 2006 2006 2008 2007 2006 2004 ...
 $ m6c5  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m6c6  : int  1000 5000 8000 500 5000 2000 900 800 120000 50 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 252 251 252 253 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
NULL


## 34 ####  muc7  ##########
'data.frame':   9399 obs. of  30 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa    : num  4 4 4 7 7 7 16 16 16 22 ...
```

```
 $ diaban: int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso  : int  13 14 15 13 15 20 14 19 20 13 ...
 $ m7c1  : int  1 2 1 1 1 1 1 1 1 1 ...
 $ m7c2  : int  24 273 50 150 160 40 150 30 100 200 ...
 $ m7c3  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c4  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c5  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m7c6  : int  2 2 2 2 2 2 2 1 2 2 ...
 $ m7c7  : num  NA NA NA NA NA NA NA 42000 NA NA ...
 $ m7c8  : int  NA NA NA NA NA NA NA 24 NA NA ...
 $ m7c9  : num  3.0e+06 2.0e+07 5.0e+06 4.0e+06 8.0e+06 4.0e+06 3.0e+06 1.5e+06 3.0e+06 5.0e+06 ...
 $ m7c10 : int  2 1 2 2 2 2 2 2 2 2 ...
 $ m7c11 : int  NA 2 NA NA NA NA NA NA NA NA ...
 $ m7c12 : num  NA NA NA NA NA NA NA NA NA NA ...
 $ m7c13 : num  0 0 0 0 0 0 0 0 0 0 ...
 $ m7c14 : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c15a: int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c15b: int  2 2 2 2 1 1 2 2 2 2 ...
 $ m7c16 : int  1060 800 760 900 840 960 600 520 800 1440 ...
 $ m7c17 : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c18 : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m7c19 : int  1500 800 502 600 700 620 350 300 320 300 ...
 $ m7c19k: int  888 610 359 460 500 442 270 250 337 246 ...
 $ m7c20 : int  14400 8500 5700 5400 6000 5400 4000 3000 4500 7500 ...
 $ m7c21 : int  1 1 1 1 1 3 1 1 1 1 ...
 $ m7c22 : int  216 72 144 288 144 180 72 72 144 180 ...
 $ m7c23 : num  15676 9372 6604 6588 6984 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 253 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 13
  ..$ m7c22 : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "collected" "dumped in river/lake" "dumped in a site nearby"
"Landfill burial" ...
  ..$ m7c21 : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Somebody else collects it" "Dumping into ponds, lakes, rivers,
streams" "Dumping in a nearby site" "Landfill burial" ...
  ..$ m7c18 : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "National-grid electricity" "battery lamp, resin torch" "gas, oil,
kerosene lamps" "others"
  ..$ m7c17 : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "spetic/semi-spetic tank" "suilabh" "double spetic tank" "fishing
bridge" ...
  ..$ m7c15b: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m7c15a: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m7c14 : Named int  1 2 3 4 5 6 7 8 9 10
  .. ..- attr(*, "names")= chr  "tap wate reaching the house" "Public tap water" "drilled wells"
"protected dug well" ...
  ..$ m7c11 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
```

```
  ..$ m7c10 : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m7c6  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m7c5  : Named int  1 2 3 4 5 6
  .. ..- attr(*, "names")= chr  "Reinforcement concrete" "Bricks/stones" "Wood/metal" "Calcareous
soil/straw" ...
  ..$ m7c4  : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Reinforcement concrete" "Tiles (cement, terracotta)" "Roof slabs
(cement, metal)" "Leave/straw/rolled roofing" ...
  ..$ m7c3  : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Reinforcement concrete" "Bricks/stones" "Iron/steel/good wood"
"Poor-quality wood/bamboo" ...
NULL


## 35 ####  muc8  ##########
'data.frame':   9399 obs. of  53 variables:
 $ tinh    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa      : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban  : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso    : int  13 14 15 13 15 20 14 19 20 13 ...
 $ m8c1a   : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c1b   : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c1c   : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c1d   : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c1e   : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_01: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_02: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_03: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_04: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_05: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_06: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_07: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_08: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_09: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_10: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_11: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_12: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_13: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_14: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c21_15: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_01: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_02: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_03: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_04: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_05: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_06: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_07: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_08: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_09: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_10: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_11: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_12: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_13: int  2 2 2 2 2 2 2 2 2 2 ...
```

```
 $ m8c22_14: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c22_15: int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c2a   : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m8c2b   : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m8c3    : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c9    : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c10a  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m8c10b  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m8c10c  : int  NA NA NA NA NA NA NA NA NA NA ...
 $ m8c11a  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c11b  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c12a  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c12b  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c12c  : int  2 2 2 2 2 2 2 2 2 2 ...
 $ m8c13   : int  2 2 2 2 2 2 2 2 2 2 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 251 251 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 44
  ..$ m8c13   : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c12c  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c12b  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c12a  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c11b  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c11a  : Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "insufficient" "sufficient" "more than sufficient" "No comment"
  ..$ m8c10c  : Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Increased production costs in agriculture, forestry and fisheries"
"Low selling prices of agricultural, forestry and fisheries products" "Cattle and poultry suffer
from epidemics or death" "Droughts, floods, pests, and harvest loss affect agricultural, forestry
and fisheries production" ...
  ..$ m8c10b  : Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Increased production costs in agriculture, forestry and fisheries"
"Low selling prices of agricultural, forestry and fisheries products" "Cattle and poultry suffer
from epidemics or death" "Droughts, floods, pests, and harvest loss affect agricultural, forestry
and fisheries production" ...
  ..$ m8c10a  : Named int  1 2 3 4 5 6 7 8 9 10 ...
  .. ..- attr(*, "names")= chr  "Increased production costs in agriculture, forestry and fisheries"
"Low selling prices of agricultural, forestry and fisheries products" "Cattle and poultry suffer
from epidemics or death" "Droughts, floods, pests, and harvest loss affect agricultural, forestry
and fisheries production" ...
  ..$ m8c9    : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Yes, very much" "Yes" "unchanged" "Worse" ...
  ..$ m8c3    : Named int  1 2
  .. ..- attr(*, "names")= chr  "yes" "no"
  ..$ m8c22_15: Named int  1 2 3
  .. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
```

```
..$ m8c22_14: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_13: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_12: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_11: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_10: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_09: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_08: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_07: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_06: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_04: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_03: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_02: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c22_01: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_15: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_14: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_13: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_12: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_11: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_10: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_09: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_08: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_07: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_06: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_04: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_03: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_02: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c21_01: Named int  1 2 3
.. ..- attr(*, "names")= chr  "Yes" "No" "Doesnt know"
..$ m8c1e   : Named int  1 2
.. ..- attr(*, "names")= chr  "Yes" "No"
```

```
  ..$ m8c1d   : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m8c1c   : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m8c1b   : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m8c1a   : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
NULL


## 36 ####  muc8vayno  ##########
'data.frame':   1367 obs. of  12 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 2 2 ...
 $ huyen : int  16 16 17 250 273 275 277 281 24 26 ...
 $ xa    : num  382 406 484 9013 9790 ...
 $ diaban: int  10 19 11 3 9 3 7 2 3 2 ...
 $ hoso  : int  14 15 13 15 14 14 13 15 15 13 ...
 $ m8ma  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ m8c4  : int  1 4 4 5 3 1 1 1 5 1 ...
 $ m8c5  : int  6000 3000 5000 16000 4000 10000 8000 10000 15000 20000 ...
 $ m8c6a : num  0.6 0.03 0.3 0.5 0.65 ...
 $ m8c6b : int  1 4 1 4 1 1 1 1 1 4 ...
 $ m8c7  : int  0 0 0 0 0 0 0 50 0 0 ...
 $ m8c8  : int  5000 3000 5090 16840 4000 10000 8000 10000 15000 20000 ...
 - attr(*, "datalabel")= chr ""
 - attr(*, "time.stamp")= chr " 9 May 2012 09:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
 - attr(*, "types")= int  252 252 254 252 252 251 251 253 254 251 ...
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
 - attr(*, "version")= int 12
 - attr(*, "label.table")=List of 2
  ..$ m8c6b: Named int  1 2 3 4
  .. ..- attr(*, "names")= chr  "month" "quarter" "6 months" "year"
  ..$ m8c4 : Named int  1 2 3 4 5
  .. ..- attr(*, "names")= chr  "Social Policy Bank" "Employment Support Fund" "Poverty Reduction
Fund" "Socio-political organisations" ...
NULL


## 37 ####  ttchung  ##########
'data.frame':   9399 obs. of  118 variables:
 $ tinh      : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen     : int  1 1 1 1 1 1 1 1 1 1 ...
 $ xa        : num  4 4 4 7 7 7 16 16 16 22 ...
 $ diaban    : int  12 12 12 22 22 22 15 15 15 19 ...
 $ hoso      : int  13 14 15 13 15 20 14 19 20 13 ...
 $ quyen     : int  1 1 1 1 1 1 1 1 1 1 ...
 $ tsphieu   : int  1 1 1 1 1 1 1 1 1 1 ...
 $ ttnt      : int  1 1 1 1 1 1 1 1 1 1 ...
 $ dantoc    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ phdich    : int  2 2 2 2 2 2 2 2 2 2 ...
 $ dtv       : int  2 2 2 1 1 1 48 48 48 2 ...
 $ dt        : int  1 1 1 1 1 1 1 1 1 1 ...
 $ ngaydt    : int  13 9 13 5 18 12 21 20 22 6 ...
```

```
$ thangdt   : int  9 9 9 7 7 7 9 9 9 12 ...
$ tsnguoi   : int  6 2 4 4 4 5 2 3 4 5 ...
$ m1b1      : int  2 2 2 2 2 2 2 2 2 2 ...
$ tsmuc1b   : int  NA NA NA NA NA NA NA NA NA NA ...
$ m2act     : num  24800 0 10000 12500 7200 ...
$ m2atn     : num  0 0 0 0 0 95 0 0 0 0 ...
$ m2btn     : num  NA NA NA NA NA NA NA NA NA NA ...
$ m4atn1    : num  73716 159870 148469 79965 56712 ...
$ m4atn2    : num  4725 2855 9517 6664 30246 ...
$ m4atn3    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4atn4    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4atn5    : int  0 0 0 0 0 0 0 0 0 0 ...
$ m4atn6    : num  0 63948 105071 53691 22685 ...
$ m4atn     : num  78441 226672 263057 140320 109643 ...
$ m4b21a    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b21b    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b21t    : num  0 0 0 0 0 0 0 0 0 0 ...
$ kydt      : int  2 2 2 1 1 1 2 2 2 3 ...
$ m4b0c1    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b0tn    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b1a     : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b1b     : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b11t    : int  0 0 0 0 0 0 0 0 0 0 ...
$ m4b12t    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b13t    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b14t    : num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_01: num  256114 255316 265912 142700 126657 ...
$ tongthu_02: num  0 0 0 0 0 95 0 0 0 0 ...
$ tongthu_03: num  0 0 0 0 0 ...
$ tongthu_04: num  78441 226672 263057 140320 109643 ...
$ tongthu_05: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_06: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_07: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_08: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_09: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_10: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_11: num  0 0 0 0 0 0 0 0 0 0 ...
$ tongthu_12: num  170113 0 0 0 0 ...
$ tongthu_13: num  7561 28643 2855 2380 17014 ...
$ tongthu_14: num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b22t    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b21c    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b22c    : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b31a    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b31b    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b3t     : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b3c     : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b41a    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b41b    : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b4t     : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b4c     : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_1 : num  117378 0 0 0 0 ...
$ chisxkd_2 : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_3 : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_4 : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_5 : num  0 0 0 0 0 0 0 0 0 0 ...
```

```
$ chisxkd_6 : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_7 : num  0 0 0 0 0 0 0 0 0 0 ...
$ chisxkd_8 : num  117378 0 0 0 0 ...
$ thunhap   : num  138736 255316 265912 142700 126657 ...
$ thubq     : num  1927 10638 5540 2973 2639 ...
$ chikhac_1 : num  24800 0 10000 12500 7200 ...
$ chikhac_2 : num  1410 100 450 500 700 ...
$ chikhac_3 : num  4016 2216 3461 6217 6111 ...
$ chikhac_4 : num  4911 2103 3121 3481 5979 ...
$ chikhac_5 : num  2560 1090 2000 2308 3650 ...
$ chikhac_6 : num  33460 33230 32050 17938 37440 ...
$ chikhac_7 : num  10050 8550 3800 2200 12300 ...
$ chikhac_8 : num  0 0 0 38000 0 0 25000 0 800 0 ...
$ chikhac_9 : num  15676 9372 6604 6588 6984 ...
$ m4b5c1a   : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b5c1b   : int  2 2 2 2 2 2 2 2 2 2 ...
$ m4b5t     : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4b5c     : num  0 0 0 0 0 0 0 0 0 0 ...
$ m4c1      : int  1 2 2 2 2 2 2 2 2 2 ...
$ m4ctt     : num  170113 0 0 0 0 ...
$ m4ct      : num  170113 0 0 0 0 ...
$ m4cct     : num  117378 0 0 0 0 ...
$ m4cc      : num  117378 0 0 0 0 ...
$ m4dtn     : num  7561 28643 2855 2380 17014 ...
$ m5a1ct    : num  4016 2216 3461 6217 6111 ...
$ m5a1c4    : num  3616 2216 3461 6217 6111 ...
$ m5a1c5    : num  400 0 0 0 0 0 0 0 0 0 ...
$ m5a2ct    : num  4911 2103 3121 3481 5979 ...
$ m5a2c6    : num  4911 2103 3121 3481 5979 ...
$ m5a2c7    : num  0 0 0 0 0 0 0 0 0 0 ...
 [list output truncated]
- attr(*, "datalabel")= chr ""
- attr(*, "time.stamp")= chr " 9 May 2012 09:33"
- attr(*, "formats")= chr  "%8.0g" "%8.0g" "%9.0g" "%8.0g" ...
- attr(*, "types")= int  252 252 254 252 252 251 251 251 251 251 ...
- attr(*, "val.labels")= chr  "" "" "" "" ...
- attr(*, "var.labels")= chr  "Province" "District" "Commune" "Enumerator area" ...
- attr(*, "version")= int 12
- attr(*, "label.table")=List of 16
 ..$ M4C1   : Named int  1 2
 .. ..- attr(*, "names")= chr  "C¥xe3" "Kh┼ng"
 ..$ quyen  : Named int  1 2
 .. ..- attr(*, "names")= chr  "Income & Expenditure" "Income"
 ..$ ttnt   : Named int  1 2
 .. ..- attr(*, "names")= chr  "Urban" "Rural"
 ..$ phdich : Named int  1 2
 .. ..- attr(*, "names")= chr  "Yes" "No"
 ..$ m1b1   : Named int  1 2
 .. ..- attr(*, "names")= chr  "Yes" "No"
 ..$ m4b21a : Named int  1 2
 .. ..- attr(*, "names")= chr  "Yes" "No"
 ..$ m4b21b : Named int  1 2
 .. ..- attr(*, "names")= chr  "Yes" "No"
 ..$ m4b0c1 : Named int  1 2
 .. ..- attr(*, "names")= chr  "Yes" "No"
 ..$ m4b1a  : Named int  1 2
```

```
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b1b  : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b31a : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b31b : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b41a : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b41b : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m4b5c1b: Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
  ..$ m3c1   : Named int  1 2
  .. ..- attr(*, "names")= chr  "Yes" "No"
NULL


## 38 ####  weight10  ##########
'data.frame':   3133 obs. of  5 variables:
 $ tinh  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ huyen : int  1 1 1 1 1 1 2 2 2 2 ...
 $ xa    : int  4 7 16 22 28 34 40 55 67 79 ...
 $ diaban: int  12 22 15 19 20 25 6 11 23 11 ...
 $ wt9   : int  3977 4805 4140 4471 3820 3997 4088 3571 3992 4137 ...
 - attr(*, "datalabel")= chr "VHLSS08 Weight"
 - attr(*, "time.stamp")= chr "27 Jul 2011 15:25"
 - attr(*, "formats")= chr  "%8.0g" "%8.0g" "%8.0g" "%8.0g" ...
 - attr(*, "types")= int  251 252 252 251 252
 - attr(*, "val.labels")= chr  "" "" "" "" ...
 - attr(*, "var.labels")= chr  "Tinh/Province" "Huyen/District" "Xa/Commune" "Dia ban/Cluster" ...
 - attr(*, "version")= int 12
NULL
```

5.2 Summary of each variable

```
> Rnames<-sub(".dta","",file.names)
> for(j in 1:38){
+ cat("#### ",j, ": ",Rnames[j]," ############################¥n")
+ print(summary(lss2010[[j]]))
+ cat("¥n¥n")
+ }

####  1 :  hhexpe10  ############################
      tinh           huyen             xa            diaban           hoso         compfoodnom
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :    78
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 15035
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median : 21924
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51   Mean   :
25913
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 31864
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00
Max.   :310910

  compricenom    compnonricenom    bestfoodnom      bestricenom    bestnonricenom
 Min.   :    0   Min.   :    68   Min.   :  1041   Min.   :    0   Min.   :   222
 1st Qu.: 2735   1st Qu.: 10829   1st Qu.: 15286   1st Qu.: 2744   1st Qu.: 11092
 Median : 4018   Median : 17271   Median : 22527   Median : 4031   Median : 17789
 Mean   : 4362   Mean   : 21551   Mean   : 26442   Mean   : 4377   Mean   : 22065
 3rd Qu.: 5574   3rd Qu.: 27027   3rd Qu.: 32508   3rd Qu.: 5593   3rd Qu.: 27678
 Max.   :90005   Max.   :305524   Max.   :316143   Max.   :90315   Max.   :310738

    urban10          reg8          reg6         monthint         hhsize
 Min.   :0.0000   Min.   :1.000   Min.   :1.000   Min.   : 6.000   Min.   : 1.000
 1st Qu.:0.0000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.: 7.000   1st Qu.: 3.000
 Median :0.0000   Median :5.000   Median :3.000   Median : 9.000   Median : 4.000
 Mean   :0.2818   Mean   :4.547   Mean   :3.315   Mean   : 9.297   Mean   : 3.936
 3rd Qu.:1.0000   3rd Qu.:7.000   3rd Qu.:5.000   3rd Qu.:12.000   3rd Qu.: 5.000
 Max.   :1.0000   Max.   :8.000   Max.   :6.000   Max.   :12.000   Max.   :15.000

      wt9           hhszwt       defltemrice     defltemnonricefood defltemnonfood
 Min.   : 369   Min.   :  737   Min.   :0.9547   Min.   :1.052      Min.   :1.031
 1st Qu.:1834   1st Qu.: 5758   1st Qu.:0.9547   1st Qu.:1.057      1st Qu.:1.031
 Median :2157   Median : 8315   Median :0.9870   Median :1.063      Median :1.041
 Mean   :2370   Mean   : 9175   Mean   :1.0241   Mean   :1.088      Mean   :1.048
 3rd Qu.:2682   3rd Qu.:11378   3rd Qu.:1.1307   3rd Qu.:1.147      3rd Qu.:1.071
 Max.   :7936   Max.   :46592   Max.   :1.1307   Max.   :1.147      Max.   :1.071

 deflGSOspatialfood deflGSOspatialnonfood   deflSCOLI        compfoodrl          compfoodpcrl
 Min.   :0.9181     Min.   :0.9379        Min.   :0.8890   Min.   :    79.21   Min.   :
79.21
 1st Qu.:0.9466     1st Qu.:0.9543        1st Qu.:0.8990   1st Qu.: 14310.17   1st Qu.: 4022.56
 Median :0.9712     Median :0.9757        Median :0.9830   Median : 20612.40   Median : 5593.15
 Mean   :0.9952     Mean   :0.9945        Mean   :0.9912   Mean   : 23970.00   Mean   : 6484.15
 3rd Qu.:1.0179     3rd Qu.:1.0251        3rd Qu.:1.0030   3rd Qu.: 29488.10   3rd Qu.: 7835.43
 Max.   :1.1604     Max.   :1.1609        Max.   :1.2650   Max.   :287750.53
Max.   :63772.52
```

```
  bestfoodrl      bestfoodpcrl     compnonfoodnom     compnonfoodrl      compnonfoodpcrl
Min.   :  1072   Min.   :  425.7   Min.   :    11.2   Min.   :    11.2   Min.   :    11.2
1st Qu.: 14675   1st Qu.: 4151.1   1st Qu.:  9839.3   1st Qu.:  9653.7   1st Qu.:  2686.5
Median : 21417   Median : 5749.2   Median : 18169.2   Median : 17641.1   Median :  4818.6
Mean   : 24613   Mean   : 6649.5   Mean   : 26699.7   Mean   : 25058.8   Mean   :  6761.9
3rd Qu.: 30508   3rd Qu.: 8060.0   3rd Qu.: 32160.6   3rd Qu.: 30495.8   3rd Qu.:  8208.5
Max.   :331285   Max.   :67123.6   Max.   :926879.2   Max.   :766715.7   Max.   :251322.9

  comphhnom          comphhrl          comppcnom          comppcrl        bestnonfoodnom
Min.   :   247.9   Min.   :   250.6   Min.   :   247.9   Min.   :   250.6   Min.   :    506.1
1st Qu.: 26221.8   1st Qu.: 25377.5   1st Qu.:  7326.9   1st Qu.:  7126.4   1st Qu.:  13870.2
Median : 40856.1   Median : 39148.1   Median : 11193.1   Median : 10654.0   Median :  25045.2
Mean   : 52613.1   Mean   : 49028.8   Mean   : 14247.2   Mean   : 13246.0   Mean   :  39472.3
3rd Qu.: 64326.5   3rd Qu.: 60284.9   3rd Qu.: 17212.5   3rd Qu.: 16098.7   3rd Qu.:  44711.8
Max.   :989327.9   Max.   :817496.6   Max.   :376520.9   Max.   :313108.8   Max.   :1270749.0

bestnonfoodrl      bestnonfoodpcrl      besthhnom          besthhrl         bestpcnom
Min.   :   484.5   Min.   :   244.4   Min.   :   2453   Min.   :   2467   Min.   :  1189
1st Qu.: 13704.9   1st Qu.:  3863.2   1st Qu.:  31029   1st Qu.:  30483   1st Qu.:  8613
Median : 24636.1   Median :  6786.2   Median :  48149   Median :  47124   Median : 13241
Mean   : 36541.3   Mean   : 10139.2   Mean   :  65914   Mean   :  61155   Mean   : 18157
3rd Qu.: 42747.5   3rd Qu.: 11712.4   3rd Qu.:  77948   3rd Qu.:  73278   3rd Qu.: 20948
Max.   :938037.8   Max.   :278797.3   Max.   :1542215   Max.   :1125245   Max.   :424904

   bestpcrl      bestrlpopquint  bestrlpopquinturb bestrlpopquintrur bestfoodpcnom
Min.   :  1206   Min.   :1.000   Min.   :1.000     Min.   :1.000     Min.   :  452.9
1st Qu.:  8489   1st Qu.:2.000   1st Qu.:2.000     1st Qu.:2.000     1st Qu.: 4299.9
Median : 12882   Median :3.000   Median :3.000     Median :3.000     Median : 6059.3
Mean   : 16789   Mean   :3.002   Mean   :2.941     Mean   :3.046     Mean   : 7168.5
3rd Qu.: 19725   3rd Qu.:4.000   3rd Qu.:4.000     3rd Qu.:4.000     3rd Qu.: 8634.1
Max.   :330399   Max.   :5.000   Max.   :5.000     Max.   :5.000     Max.   :77866.8
                                 NA's   :6750      NA's   :2649
compfoodpcnom   compricepcnom     bestricepcnom     compnonricepcnom bestnonricepcnom
Min.   :   78   Min.   :    0.0   Min.   :    0.0   Min.   :   68    Min.   :   74
1st Qu.: 4190   1st Qu.:  833.7   1st Qu.:  836.5   1st Qu.: 3041    1st Qu.: 3147
Median : 5939   Median : 1075.5   Median : 1079.0   Median : 4791    Median : 4899
Mean   : 7029   Mean   : 1125.8   Mean   : 1129.6   Mean   : 5903    Mean   : 6039
3rd Qu.: 8462   3rd Qu.: 1365.2   3rd Qu.: 1369.8   3rd Qu.: 7310    3rd Qu.: 7459
Max.   :77188   Max.   :15000.8   Max.   :15052.5   Max.   :76138    Max.   :76251

compnonfoodpcnom    bestnonfoodpcnom
Min.   :    11.18   Min.   :   249.6
1st Qu.:  2744.69   1st Qu.:  3848.5
Median :  5000.88   Median :  6882.7
Mean   :  7218.00   Mean   : 10988.6
3rd Qu.:  8616.79   3rd Qu.: 12372.3
Max.   :300905.44   Max.   :347772.8
```

```
####  2 :  mucla  ##########################
     tinh            huyen             xa            diaban          hoso            matv
Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 1.00
1st Qu.:26.00   1st Qu.:260.0   1st Qu.: 9325   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 1.00
Median :48.00   Median :493.0   Median :20269   Median : 8.00   Median :14.00   Median : 3.00
Mean   :49.38   Mean   :498.1   Mean   :18140   Mean   :10.49   Mean   :14.49   Mean   : 2.78
```

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 3rd Qu.:75.00   3rd Qu.:741.0   3rd Qu.:26437   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 4.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :15.00

     m1ac2           m1ac3           m1ac4a          m1ac4b          m1ac5           m1ac6
 Min.   :1.000   Min.   :1.000   Min.   :-2.000   Min.   :1908   Min.   :  0.00
Min.   :1.000
 1st Qu.:1.000   1st Qu.:1.000   1st Qu.: 3.000   1st Qu.:1964   1st Qu.: 15.00   1st Qu.:1.000
 Median :2.000   Median :3.000   Median : 6.000   Median :1981   Median : 28.00   Median :2.000
 Mean   :1.509   Mean   :2.586   Mean   : 6.205   Mean   :1979   Mean   : 31.23   Mean   :1.802
 3rd Qu.:2.000   3rd Qu.:3.000   3rd Qu.: 9.000   3rd Qu.:1995   3rd Qu.: 46.00   3rd Qu.:2.000
 Max.   :2.000   Max.   :7.000   Max.   :12.000   Max.   :2010   Max.   :102.00
Max.   :5.000
                                                                                  NA's   :7744
     m1ac7           m1ac8           m1ac9           m1ac10          m1ac11n         m1ac11t
 Min.   : 0.0   Min.   :1.00    Min.   :1.000   Min.   : 1.00   Min.   :-1.0    Min.   : 0.00
 1st Qu.:12.0   1st Qu.:1.00    1st Qu.:1.000   1st Qu.:38.00   1st Qu.: 2.0    1st Qu.: 1.00
 Median :12.0   Median :1.00    Median :1.000   Median :60.00   Median : 4.0    Median : 3.00
 Mean   :11.5   Mean   :2.35    Mean   :1.049   Mean   :58.43   Mean   : 6.3    Mean   : 3.79
 3rd Qu.:12.0   3rd Qu.:4.00    3rd Qu.:1.000   3rd Qu.:83.00   3rd Qu.: 7.0    3rd Qu.: 6.00
 Max.   :12.0   Max.   :6.00    Max.   :5.000   Max.   :99.00   Max.   :62.0    Max.   :11.00
                NA's   :35559                   NA's   :36453   NA's   :36424   NA's   :36425


####  3 :  muc1b  ##########################
      tinh            huyen            xa            diaban          hoso            m1bma
 Min.   : 1.00   Min.   :  4   Min.   :  124   Min.   : 1.000   Min.   :13.00   Min.   :31.00
 1st Qu.:35.00   1st Qu.:349   1st Qu.:13342   1st Qu.: 4.000   1st Qu.:13.00   1st Qu.:31.00
 Median :46.00   Median :477   Median :19888   Median : 8.000   Median :14.00   Median :31.00
 Mean   :53.03   Mean   :538   Mean   :19582   Mean   : 9.936   Mean   :14.57   Mean   :31.33
 3rd Qu.:83.00   3rd Qu.:834   3rd Qu.:28981   3rd Qu.:13.000   3rd Qu.:15.00   3rd Qu.:32.00
 Max.   :96.00   Max.   :973   Max.   :32248   Max.   :73.000   Max.   :20.00   Max.   :35.00

     m1bc3           m1bc4           m1bc5           m1bc6           m1bc7a          m1bc7b
 Min.   :1.000   Min.   :1.000   Min.   : 6.00   Min.   :1.00   Min.   : 0.000   Min.   :0.0000
 1st Qu.:1.000   1st Qu.:2.000   1st Qu.:21.00   1st Qu.:1.00   1st Qu.: 1.000   1st Qu.:0.0000
 Median :1.000   Median :2.000   Median :24.00   Median :1.00   Median : 2.000   Median :0.0000
 Mean   :1.417   Mean   :1.955   Mean   :26.19   Mean   :1.35   Mean   : 2.802
Mean   :0.9058
 3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:28.00   3rd Qu.:2.00   3rd Qu.: 3.000   3rd Qu.:0.0000
 Max.   :2.000   Max.   :2.000   Max.   :75.00   Max.   :5.00   Max.   :12.000
Max.   :7.0000
                                                NA's   :2
     m1bc8           m1bc9           m1bc10          m1bc11n         m1bc11t
 Min.   : 0.000   Min.   :1.000   Min.   : 1.00   Min.   :-1.000   Min.   : 0.000
 1st Qu.: 1.000   1st Qu.:1.000   1st Qu.:38.00   1st Qu.: 1.000   1st Qu.: 1.000
 Median : 1.000   Median :1.000   Median :74.00   Median : 2.000   Median : 3.000
 Mean   : 1.916   Mean   :1.222   Mean   :61.59   Mean   : 5.422   Mean   : 4.269
 3rd Qu.: 2.000   3rd Qu.:1.000   3rd Qu.:79.00   3rd Qu.: 6.000   3rd Qu.: 7.000
 Max.   :12.000   Max.   :5.000   Max.   :99.00   Max.   :40.000   Max.   :11.000
                                  NA's   :1113    NA's   :1112     NA's   :1113


####  4 :  muc2  ##########################
      tinh            huyen            xa            diaban          hoso            matv
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 1.00
 1st Qu.:26.00   1st Qu.:260.0   1st Qu.: 9325   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 1.00
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 Median :48.00   Median :493.0   Median :20269   Median : 8.00   Median :14.00   Median : 3.00
 Mean   :49.38   Mean   :498.1   Mean   :18140   Mean   :10.49   Mean   :14.49   Mean   : 2.78
 3rd Qu.:75.00   3rd Qu.:741.0   3rd Qu.:26437   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 4.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :15.00

    m2c1               m2c2a            m2c2b            m2c3            m2c4
Length:36999       Min.   : 0.000   Min.   :0.000   Min.   :1.000   Min.   :1.000
Class :character   1st Qu.: 0.000   1st Qu.:0.000   1st Qu.:1.000   1st Qu.:2.000
Mode  :character   Median : 1.000   Median :0.000   Median :1.000   Median :3.000
                   Mean   : 1.725   Mean   :0.416   Mean   :1.057   Mean   :2.494
                   3rd Qu.: 2.000   3rd Qu.:0.000   3rd Qu.:1.000   3rd Qu.:3.000
                   Max.   :12.000   Max.   :7.000   Max.   :5.000   Max.   :3.000
                   NA's   :4482     NA's   :4482    NA's   :4482    NA's   :4482
     m2c5            m2c6            m2c7            m2c8            m2c9
Min.   :1.000   Min.   : 0.000   Min.   : 1.000   Min.   :1.000   Min.   :1.000
1st Qu.:2.000   1st Qu.: 1.000   1st Qu.: 3.000   1st Qu.:1.000   1st Qu.:1.000
Median :2.000   Median : 2.000   Median : 6.000   Median :1.000   Median :2.000
Mean   :1.981   Mean   : 2.647   Mean   : 6.342   Mean   :1.127   Mean   :1.568
3rd Qu.:2.000   3rd Qu.: 3.000   3rd Qu.: 9.000   3rd Qu.:1.000   3rd Qu.:2.000
Max.   :2.000   Max.   :12.000   Max.   :12.000   Max.   :4.000   Max.   :2.000
NA's   :14037   NA's   :27017    NA's   :30019    NA's   :27017   NA's   :27017
    m2c10a          m2c10b          m2c11a           m2c11b           m2c11c
Min.   :0.00    Min.   :0.00    Min.   :   -2.0   Min.   : -2.000   Min.   : -2
1st Qu.:5.00    1st Qu.:0.00    1st Qu.:    0.0   1st Qu.:  0.000   1st Qu.:  0
Median :7.00    Median :0.00    Median :   67.5   Median :  0.000   Median : 40
Mean   :5.59    Mean   :0.82    Mean   :  854.3   Mean   :  4.964   Mean   :104
3rd Qu.:7.00    3rd Qu.:1.00    3rd Qu.:  400.0   3rd Qu.:  0.000   3rd Qu.:120
Max.   :9.00    Max.   :9.00    Max.   :390000.0  Max.   :5000.000  Max.   :5000
NA's   :32689   NA's   :32689   NA's   :27017     NA's   :27017     NA's   :27017
    m2c11d          m2c11e          m2c11f          m2c11g          m2c11h
Min.   :  -2   Min.   : -2.0   Min.   : -2    Min.   :  -2.0   Min.   :  -2
1st Qu.:   0   1st Qu.:  0.0   1st Qu.:  0    1st Qu.:  50.0   1st Qu.:   0
Median :  40   Median :  80.0   Median :120    Median :  110.0   Median :   0
Mean   :  82   Mean   : 122.7   Mean   :179    Mean   :  150.2   Mean   :  322
3rd Qu.: 100   3rd Qu.: 180.0   3rd Qu.:230    3rd Qu.:  200.0   3rd Qu.:  210
Max.   :10000   Max.   :8000.0   Max.   :5000    Max.   :13300.0   Max.   :29000
NA's   :27017   NA's   :27017    NA's   :27017   NA's   :27017     NA's   :27017
    m2c11i          m2c11k          m2c12           m2c13           m2c14
Min.   :  -2.0   Min.   :     0.0   Min.   :    0.00   Min.   :    0.00   Min.   :    0.00
1st Qu.:   0.0   1st Qu.:   487.2   1st Qu.:    0.00   1st Qu.:    0.00   1st Qu.:    0.00
Median :  55.0   Median :  1031.5   Median :    0.00   Median :    0.00   Median :    0.00
Mean   : 516.6   Mean   :  2562.8   Mean   :   98.03   Mean   :   34.15   Mean   :   40.69
3rd Qu.: 200.0   3rd Qu.:  2650.0   3rd Qu.:    0.00   3rd Qu.:    0.00   3rd Qu.:    0.00
Max.   :25920.0   Max.   :390000.0   Max.   :46184.00   Max.   :16684.00   Max.   :32000.00
NA's   :27017     NA's   :27017      NA's   :27017      NA's   :27017
    m2c15a          m2c15b          m2c16
Min.   :1.00    Min.   :1.00    Min.   : 0.000
1st Qu.:1.00    1st Qu.:2.00    1st Qu.: 0.000
Median :1.00    Median :2.00    Median : 0.000
Mean   :1.34    Mean   :1.86    Mean   : 2.807
3rd Qu.:2.00    3rd Qu.:2.00    3rd Qu.: 5.000
Max.   :9.00    Max.   :9.00    Max.   :10.000
NA's   :34030   NA's   :34030   NA's   :30610
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5 : muc3a

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      tinh           huyen             xa           diaban          hoso           matv
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.0   Min.   :13.00   Min.   : 1.000
 1st Qu.:31.00   1st Qu.:307.0   1st Qu.:11446   1st Qu.: 4.0   1st Qu.:13.00   1st Qu.: 1.000
 Median :56.00   Median :570.0   Median :22498   Median : 8.0   Median :14.00   Median : 2.000
 Mean   :53.64   Mean   :538.4   Mean   :19538   Mean   :10.8   Mean   :14.49   Mean   : 2.549
 3rd Qu.:80.00   3rd Qu.:794.0   3rd Qu.:27685   3rd Qu.:15.0   3rd Qu.:15.00   3rd Qu.: 3.000
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.0   Max.   :21.00   Max.   :12.000
                                                                                NA's   :1
     m3c2              m3c3a           m3c3b            m3c4          m3c5a
 Length:19647       Min.   :1.000   Min.   : 1.000   Min.   :1.00   Min.   : 0.000
 Class :character   1st Qu.:1.000   1st Qu.: 4.000   1st Qu.:3.00   1st Qu.: 1.000
 Mode  :character   Median :1.000   Median : 5.000   Median :4.00   Median : 1.000
                    Mean   :1.278   Mean   : 5.789   Mean   :3.62   Mean   : 2.554
                    3rd Qu.:1.000   3rd Qu.:10.000   3rd Qu.:4.00   3rd Qu.: 3.000
                    Max.   :8.000   Max.   :13.000   Max.   :4.00   Max.   :80.000
                    NA's   :1       NA's   :1        NA's   :1      NA's   :1
     m3c5b             m3c6a            m3c6b            m3c7          m3c8
 Min.   :     0.0   Min.   : 0.0000   Min.   :     0   Min.   :1.00   Min.   :    0
 1st Qu.:    35.0   1st Qu.: 0.0000   1st Qu.:   300   1st Qu.:1.00   1st Qu.:  200
 Median :   150.0   Median : 0.0000   Median :  1000   Median :1.00   Median :  800
 Mean   :   588.6   Mean   : 0.2329   Mean   :  3077   Mean   :1.07   Mean   : 2795
 3rd Qu.:   450.0   3rd Qu.: 0.0000   3rd Qu.:  3000   3rd Qu.:1.00   3rd Qu.: 2500
 Max.   :168000.0   Max.   :30.0000   Max.   :236000   Max.   :3.00   Max.   :90000
 NA's   :2553       NA's   :1         NA's   :16204    NA's   :1      NA's   :18463


####  6 :  muc3b  ############################
      tinh           huyen             xa           diaban          hoso           matv
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 1.00
 1st Qu.:26.00   1st Qu.:260.0   1st Qu.: 9325   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 1.00
 Median :48.00   Median :493.0   Median :20269   Median : 8.00   Median :14.00   Median : 3.00
 Mean   :49.38   Mean   :498.1   Mean   :18140   Mean   :10.49   Mean   :14.49   Mean   : 2.78
 3rd Qu.:75.00   3rd Qu.:741.0   3rd Qu.:26437   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 4.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :15.00

     m3c9          m3c10a           m3c10b           m3c11           m3c12a
 Min.   :1.00   Min.   :-1.000   Min.   : 0.000   Min.   :    0.0   Min.   :1.000
 1st Qu.:1.00   1st Qu.: 2.000   1st Qu.: 0.000   1st Qu.:  120.0   1st Qu.:1.000
 Median :1.00   Median : 5.000   Median : 0.000   Median :  174.0   Median :2.000
 Mean   :1.39   Mean   : 5.218   Mean   : 0.098   Mean   :  194.3   Mean   :1.716
 3rd Qu.:2.00   3rd Qu.: 8.000   3rd Qu.: 0.000   3rd Qu.:  254.0   3rd Qu.:2.000
 Max.   :2.00   Max.   :10.000   Max.   :10.000   Max.   :11600.0   Max.   :2.000
                NA's   :14420    NA's   :14420    NA's   :29246     NA's   :14420
     m3c12b          m3c13            m3c14            m3c15
 Min.   :1.000   Min.   :    0.0   Min.   :    0.00   Min.   :    0.0
 1st Qu.:2.000   1st Qu.:  100.0   1st Qu.:    0.00   1st Qu.:    0.0
 Median :2.000   Median :  200.0   Median :    0.00   Median :    0.0
 Mean   :1.908   Mean   :  505.9   Mean   :   36.44   Mean   :  592.7
 3rd Qu.:2.000   3rd Qu.:  450.0   3rd Qu.:   20.00   3rd Qu.:  221.0
 Max.   :9.000   Max.   :44000.0   Max.   :10000.00   Max.   :142745.0
 NA's   :14420   NA's   :27600     NA's   :27600      NA's   :27600


####  7 :  muc4a  ############################
      tinh           huyen             xa           diaban          hoso           matv
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 1.00
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 1st Qu.:26.00   1st Qu.:260.0   1st Qu.: 9325   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 1.00
 Median :48.00   Median :493.0   Median :20269   Median : 8.00   Median :14.00   Median : 3.00
 Mean   :49.38   Mean   :498.1   Mean   :18140   Mean   :10.49   Mean   :14.49   Mean   : 2.78
 3rd Qu.:75.00   3rd Qu.:741.0   3rd Qu.:26437   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 4.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :15.00

     m4ac1a          m4ac1b          m4ac1c          m4ac2           m4ac3a
 Min.   :1.000   Min.   :1.00   Min.   :1.000   Min.   :1.000   Min.   :  1.0
 1st Qu.:1.000   1st Qu.:1.00   1st Qu.:2.000   1st Qu.:1.000   1st Qu.:160.0
 Median :2.000   Median :2.00   Median :2.000   Median :1.000   Median :240.0
 Mean   :1.707   Mean   :1.59   Mean   :1.851   Mean   :1.337   Mean   :221.4
 3rd Qu.:2.000   3rd Qu.:2.00   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:300.0
 Max.   :2.000   Max.   :2.00   Max.   :2.000   Max.   :2.000   Max.   :365.0
 NA's   :3593    NA's   :3593   NA's   :3593    NA's   :3593    NA's   :14836
    m4ac3m              m4ac3          m4ac4c             m4ac4m              m4ac4
 Length:36999       Min.   : 1.00   Length:36999       Length:36999       Min.   :  2.00
 Class :character   1st Qu.:61.00   Class :character   Class :character   1st Qu.: 41.00
 Mode  :character   Median :92.00   Mode  :character   Mode  :character   Median : 85.00
                    Mean   :75.83                                         Mean   : 75.08
                    3rd Qu.:92.00                                         3rd Qu.:110.00
                    Max.   :96.00                                         Max.   :160.00
                    NA's   :14836                                         NA's   :14836
     m4ac5           m4ac6           m4ac7           m4ac8a          m4ac8b          m4ac9
 Min.   :1.000   Min.   :-1.00   Min.   :-1.000   Min.   :1.000   Min.   :1.00
Min.   :1.000
 1st Qu.:1.000   1st Qu.:17.00   1st Qu.: 5.000   1st Qu.:1.000   1st Qu.:1.00    1st Qu.:1.000
 Median :1.000   Median :22.00   Median : 8.000   Median :1.000   Median :1.00    Median :2.000
 Mean   :1.077   Mean   :21.12   Mean   : 6.786   Mean   :1.961   Mean   :1.27
Mean   :1.658
 3rd Qu.:1.000   3rd Qu.:26.00   3rd Qu.: 8.000   3rd Qu.:2.000   3rd Qu.:2.00    3rd Qu.:2.000
 Max.   :9.000   Max.   :30.00   Max.   :24.000   Max.   :6.000   Max.   :2.00
Max.   :2.000
 NA's   :14836   NA's   :14836   NA's   :14836    NA's   :14836   NA's   :34821
NA's   :14836
     m4ac10          m4ac11          m4ac12a         m4ac12b         m4ac13a
 Min.   :   -1   Min.   :    99   Min.   :    0   Min.   :    0   Min.   :1.000
 1st Qu.: 1300   1st Qu.: 11808   1st Qu.:    0   1st Qu.:    0   1st Qu.:1.000
 Median : 1930   Median : 20521   Median :  101   Median :    0   Median :1.000
 Mean   : 2319   Mean   : 25243   Mean   : 1174   Mean   :  1506   Mean   :1.474
 3rd Qu.: 2835   3rd Qu.: 31917   3rd Qu.:  945   3rd Qu.:  1499   3rd Qu.:2.000
 Max.   :46784   Max.   :561409   Max.   :56141   Max.   :132141   Max.   :2.000
 NA's   :29412   NA's   :29412    NA's   :29412   NA's   :29412    NA's   :29412
    m4ac13b         m4ac13c         m4ac14          m4ac15a         m4ac15m
 Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :  1.0   Length:36999
 1st Qu.:1.000   1st Qu.:1.000   1st Qu.:1.000   1st Qu.: 55.0   Class :character
 Median :2.000   Median :2.000   Median :2.000   Median : 90.0   Mode  :character
 Mean   :1.592   Mean   :1.615   Mean   :1.547   Mean   :111.8
 3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:144.0
 Max.   :2.000   Max.   :2.000   Max.   :2.000   Max.   :365.0
 NA's   :29412   NA's   :29412   NA's   :14836   NA's   :26965
     m4ac15          m4ac16c            m4ac16m             m4ac16          m4ac17
 Min.   : 2.00   Length:36999       Length:36999       Min.   :  2.00   Min.   :1.000
 1st Qu.:92.00   Class :character   Class :character   1st Qu.: 41.00   1st Qu.:1.000
 Median :92.00   Mode  :character   Mode  :character   Median :110.00   Median :1.000
 Mean   :85.26                                         Mean   : 86.43   Mean   :1.187
 3rd Qu.:92.00                                         3rd Qu.:110.00   3rd Qu.:1.000
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 Max.    :96.00                                          Max.    :160.00   Max.    :2.000
 NA's    :26965                                          NA's    :26965    NA's    :26965
     m4ac18          m4ac19           m4ac20          m4ac21          m4ac22
 Min.    :-1.00   Min.    :-1.000   Min.    :1.000   Min.    :1.000   Min.    :   -1.0
 1st Qu.: 8.00   1st Qu.: 3.000   1st Qu.:1.000   1st Qu.:2.000   1st Qu.:  445.5
 Median :12.00   Median : 4.000   Median :1.000   Median :2.000   Median :  800.0
 Mean   :14.79   Mean   : 4.839   Mean   :1.297   Mean   :1.791   Mean   : 1076.9
 3rd Qu.:20.00   3rd Qu.: 7.000   3rd Qu.:1.000   3rd Qu.:2.000   3rd Qu.: 1479.0
 Max.    :30.00   Max.    :20.000   Max.    :6.000   Max.    :2.000   Max.    :15727.0
 NA's    :26965   NA's    :26965   NA's    :26965   NA's    :26965   NA's    :34904
     m4ac23          m4ac24a          m4ac24b          m4ac25          m4ac26
 Min.    :    40   Min.    :   0.00   Min.    :    0.0   Min.    :1.000   Min.    :    0
 1st Qu.:  2549   1st Qu.:   0.00   1st Qu.:    0.0   1st Qu.:2.000   1st Qu.: 1030
 Median :  4425   Median :   0.00   Median :    0.0   Median :2.000   Median : 2043
 Mean   :  5724   Mean   :  38.57   Mean   :  129.4   Mean   :1.919   Mean   : 2748
 3rd Qu.:  7200   3rd Qu.:   0.00   3rd Qu.:    0.0   3rd Qu.:2.000   3rd Qu.: 3687
 Max.    :120832   Max.    :8055.00   Max.    :23392.0   Max.    :2.000   Max.    :24523
 NA's    :34904   NA's    :34904   NA's    :34904   NA's    :26965   NA's    :36186
     m4ac27          m4ac28a          m4ac28b          m4ac28c          m4ac28d
 Min.    :1.000   Min.    :   0.00   Min.    :    0.0   Min.    :    0   Min.    :    0
 1st Qu.:2.000   1st Qu.:   0.00   1st Qu.:    0.0   1st Qu.:  4944   1st Qu.:    0
 Median :2.000   Median :   0.00   Median :    0.0   Median : 19200   Median :    0
 Mean   :1.961   Mean   :  16.21   Mean   :  426.5   Mean   : 18834   Mean   : 2434
 3rd Qu.:2.000   3rd Qu.:   0.00   3rd Qu.:    0.0   3rd Qu.: 25614   3rd Qu.:    0
 Max.    :2.000   Max.    :9357.00   Max.    :139785.0   Max.    :102861   Max.    :72082
 NA's    :9132   NA's    :35916   NA's    :35916   NA's    :35916   NA's    :35916
    m4ac28e
 Min.    :    0
 1st Qu.:    0
 Median :    0
 Mean   : 1005
 3rd Qu.:    0
 Max.    :35025
 NA's    :35916


####  8 :  muc4b0  ##########################
      tinh            huyen             xa            diaban           hoso          m4b0ma
 Min.    : 1.00   Min.    :  3.0   Min.    :   91   Min.    : 1.000   Min.    :13.0   Min.    :1.000
 1st Qu.:20.00   1st Qu.:187.0   1st Qu.: 6448   1st Qu.: 3.000   1st Qu.:13.0   1st Qu.:1.000
 Median :38.00   Median :387.0   Median :15022   Median : 7.000   Median :14.0   Median :2.000
 Mean   :42.17   Mean   :425.7   Mean   :15626   Mean   : 8.207   Mean   :14.4   Mean   :2.602
 3rd Qu.:64.00   3rd Qu.:638.5   3rd Qu.:24103   3rd Qu.:11.000   3rd Qu.:15.0   3rd Qu.:5.000
 Max.    :96.00   Max.    :973.0   Max.    :32248   Max.    :73.000   Max.    :24.0   Max.    :7.000

     m4b0c3           m4b0c4           m4b0c5
 Min.    :      4   Min.    :    0.0   Min.    :    0.0
 1st Qu.:    480   1st Qu.:    0.0   1st Qu.:    0.0
 Median :   1590   Median :    0.0   Median :    0.0
 Mean   :   5157   Mean   :  191.1   Mean   :  148.4
 3rd Qu.:   4500   3rd Qu.:    0.0   3rd Qu.:    0.0
 Max.    :2815072   Max.    :80000.0   Max.    :48938.0
                                      NA's    :4


####  9 :  muc4b11  ##########################
```

```
      tinh           huyen             xa           diaban           hoso          m4b11ma
 Min.   : 1.00   Min.   :  4.0   Min.   :  148   Min.   : 1.000   Min.   :13.0   Min.   :1.00
 1st Qu.:24.00   1st Qu.:223.0   1st Qu.: 7831   1st Qu.: 3.000   1st Qu.:13.0   1st Qu.:1.00
 Median :36.00   Median :360.0   Median :13879   Median : 7.000   Median :14.0   Median :3.00
 Mean   :39.79   Mean   :406.8   Mean   :15054   Mean   : 8.274   Mean   :14.4   Mean   :3.38
 3rd Qu.:52.00   3rd Qu.:546.0   3rd Qu.:21802   3rd Qu.:11.000   3rd Qu.:15.0   3rd Qu.:5.00
 Max.   :96.00   Max.   :972.0   Max.   :32215   Max.   :73.000   Max.   :24.0   Max.   :7.00

    m4b11c3          m4b11c4          m4b11c5          m4b11c6          m4b11c7
 Min.   :    40   Min.   :   12   Min.   :   0.000   Min.   :    0   Min.   :     0
 1st Qu.:  1008   1st Qu.:  475   1st Qu.:   0.000   1st Qu.:    0   1st Qu.:  1842
 Median :  2000   Median :  936   Median :   0.000   Median :    0   Median :  4121
 Mean   :  4115   Mean   : 2074   Mean   :   6.639   Mean   : 1285   Mean   : 12555
 3rd Qu.:  4000   3rd Qu.: 1807   3rd Qu.:   0.000   3rd Qu.:  700   3rd Qu.: 10637
 Max.   :161000   Max.   :89770   Max.   :1000.000   Max.   :87770   Max.   :383440
                                                                     NA's   :7393
    m4b11c8
 Min.   :    72
 1st Qu.:  2423
 Median :  4790
 Mean   :  9754
 3rd Qu.:  9200
 Max.   :393319


####  10 :  muc4b12  ############################
      tinh           huyen             xa           diaban           hoso          m4b12ma
 Min.   : 1.00   Min.   :  3.0   Min.   :   91   Min.   : 1.000   Min.   :13.00   Min.   : 8.00
 1st Qu.:14.00   1st Qu.:119.0   1st Qu.: 3778   1st Qu.: 3.000   1st Qu.:13.00   1st Qu.:12.00
 Median :25.00   Median :236.0   Median : 8461   Median : 6.000   Median :14.00   Median :16.00
 Mean   :29.27   Mean   :292.5   Mean   :10910   Mean   : 7.068   Mean   :14.37
Mean   :14.88
 3rd Qu.:40.00   3rd Qu.:420.0   3rd Qu.:17071   3rd Qu.:10.000   3rd Qu.:15.00   3rd Qu.:19.00
 Max.   :96.00   Max.   :973.0   Max.   :32239   Max.   :68.000   Max.   :24.00
Max.   :21.00

    m4b12c3          m4b12c4          m4b12c5          m4b12c6          m4b12c7
 Min.   :   -1   Min.   :     1.0   Min.   :     0.0   Min.   :     0   Min.   :    5
 1st Qu.:   20   1st Qu.:    25.0   1st Qu.:     0.0   1st Qu.:     0   1st Qu.:   93
 Median :   50   Median :    70.0   Median :     0.0   Median :   106   Median :  230
 Mean   :  735   Mean   :   780.5   Mean   :   606.2   Mean   :  3315   Mean   : 2061
 3rd Qu.:  360   3rd Qu.:   300.0   3rd Qu.:    25.0   3rd Qu.:  1410   3rd Qu.:  885
 Max.   :80000   Max.   :114000.0   Max.   :114000.0   Max.   :798447   Max.   :798447
                 NA's   :3727       NA's   :3727       NA's   :6906


####  11 :  muc4b13  ############################
      tinh           huyen             xa           diaban           hoso          m4b13ma
 Min.   : 1.00   Min.   :  4.0   Min.   :  148   Min.   : 1.000   Min.   :13.00   Min.   :22.00
 1st Qu.:24.00   1st Qu.:221.0   1st Qu.: 7704   1st Qu.: 3.000   1st Qu.:13.00   1st Qu.:23.00
 Median :42.00   Median :446.0   Median :18565   Median : 6.000   Median :14.00   Median :28.00
 Mean   :44.73   Mean   :451.5   Mean   :16757   Mean   : 8.068   Mean   :14.39
Mean   :28.46
 3rd Qu.:67.00   3rd Qu.:664.0   3rd Qu.:24691   3rd Qu.:11.000   3rd Qu.:15.00   3rd Qu.:34.00
 Max.   :96.00   Max.   :973.0   Max.   :32239   Max.   :61.000   Max.   :20.00
```

```
Max.    :38.00

   m4b13c3a          m4b13c3b        m4b13c4          m4b13c5          m4b13c6
 Min.    :     1   Min.    :1.000   Min.    :     1   Min.    :     0   Min.    :      0
 1st Qu.:   100   1st Qu.:1.000   1st Qu.:    50   1st Qu.:     0   1st Qu.:    780
 Median :   500   Median :1.000   Median :   160   Median :   100   Median :   2666
 Mean   :  3063   Mean   :1.201   Mean   :  2175   Mean   :  2079   Mean   :  17635
 3rd Qu.:  2160   3rd Qu.:1.000   3rd Qu.:   855   3rd Qu.:   700   3rd Qu.:  12878
 Max.    :500000   Max.    :2.000   Max.    :236250   Max.    :236250   Max.    :3508317
                                    NA's    :77       NA's    :77       NA's    :839
   m4b13c7
 Min.    :      9
 1st Qu.:    490
 Median :   1586
 Mean   :  13460
 3rd Qu.:   7500
 Max.    :3508317


####  12 :  muc4b14  ############################
      tinh           huyen             xa            diaban          hoso          m4b14ma
 Min.    : 1.00   Min.    : 16.0   Min.    :  382   Min.    : 1.00   Min.    :13.00   Min.    :39.00
 1st Qu.:20.00   1st Qu.:199.0   1st Qu.: 6637   1st Qu.: 3.00   1st Qu.:13.00   1st Qu.:41.00
 Median :36.00   Median :364.0   Median :14104   Median : 7.00   Median :14.00   Median :45.00
 Mean   :40.82   Mean   :409.5   Mean   :15026   Mean   : 8.09   Mean   :14.38   Mean   :44.93
 3rd Qu.:64.00   3rd Qu.:628.5   3rd Qu.:23785   3rd Qu.:11.00   3rd Qu.:15.00   3rd Qu.:49.00
 Max.    :96.00   Max.    :973.0   Max.    :32239   Max.    :61.00   Max.    :20.00   Max.    :54.00

   m4b14c3a          m4b14c3b        m4b14c4          m4b14c5          m4b14c6
 Min.    :    1.0   Min.    :1.000   Min.    :    1.0   Min.    :    0.0   Min.    :     0.0
 1st Qu.:    2.0   1st Qu.:2.000   1st Qu.:   20.0   1st Qu.:    0.0   1st Qu.:    80.0
 Median :    4.0   Median :2.000   Median :   45.0   Median :    0.0   Median :   297.0
 Mean   :  208.8   Mean   :1.867   Mean   :  294.4   Mean   :  244.3   Mean   :  3045.6
 3rd Qu.:   10.0   3rd Qu.:2.000   3rd Qu.:  120.0   3rd Qu.:   50.0   3rd Qu.:   957.2
 Max.    :50000.0   Max.    :2.000   Max.    :62500.0   Max.    :62300.0   Max.    :225000.0
                                    NA's    :930      NA's    :930      NA's    :3995
   m4b14c7
 Min.    :     5.0
 1st Qu.:    90.5
 Median :   199.0
 Mean   :  1595.9
 3rd Qu.:   507.0
 Max.    :225000.0


####  13 :  muc4b15  ############################
      tinh           huyen             xa            diaban          hoso          m4b15ma
 Min.    : 1.0   Min.    : 16.0   Min.    :  382   Min.    : 1.000   Min.    :13.0   Min.    : 1.00
 1st Qu.:22.0   1st Qu.:217.0   1st Qu.: 7360   1st Qu.: 3.000   1st Qu.:13.0   1st Qu.: 1.00
 Median :36.0   Median :365.5   Median :14218   Median : 7.000   Median :14.0   Median : 3.00
 Mean   :39.7   Mean   :403.5   Mean   :14950   Mean   : 8.052   Mean   :14.4   Mean   : 3.87
 3rd Qu.:52.0   3rd Qu.:550.0   3rd Qu.:21978   3rd Qu.:11.000   3rd Qu.:15.0   3rd Qu.: 8.00
 Max.    :96.0   Max.    :969.0   Max.    :32149   Max.    :73.000   Max.    :24.0   Max.    :10.00
```

```
    m4b15c2           m4b15c3           m4b15c4           m4b15c5
 Min.   :   0.00   Min.   :   0.00   Min.   :    0.0   Min.   :    4
 1st Qu.:   0.00   1st Qu.:   0.00   1st Qu.:    0.0   1st Qu.:   84
 Median :   0.00   Median :   0.00   Median :   89.0   Median :  178
 Mean   :  41.96   Mean   :  85.33   Mean   :  201.2   Mean   :  313
 3rd Qu.:   0.00   3rd Qu.:  96.00   3rd Qu.:  226.0   3rd Qu.:  350
 Max.   :9302.00   Max.   :5528.00   Max.   :10502.0   Max.   :10502
                   NA's   :1207
```

```
####  14 :  muc4b16  ############################
      tinh            huyen             xa            diaban           hoso
 Min.   : 1.00   Min.   :  3.0   Min.   :   91   Min.   : 1.000   Min.   :13.00
 1st Qu.:24.00   1st Qu.:240.0   1st Qu.: 8662   1st Qu.: 3.000   1st Qu.:13.00
 Median :38.00   Median :396.0   Median :15643   Median : 7.000   Median :14.00
 Mean   :43.36   Mean   :440.9   Mean   :16267   Mean   : 8.594   Mean   :14.42
 3rd Qu.:64.00   3rd Qu.:639.0   3rd Qu.:24103   3rd Qu.:12.000   3rd Qu.:15.00
 Max.   :96.00   Max.   :973.0   Max.   :32239   Max.   :73.000   Max.   :24.00
    m4b16ma          m4b16c2a          m4b16c2b          m4b16c2c          m4b16c2d
 Min.   :  1.00   Min.   :  -2.0   Min.   :   -2.0   Min.   :   -2   Min.   :  -2.00
 1st Qu.:  3.00   1st Qu.:  17.0   1st Qu.:    0.0   1st Qu.:    0   1st Qu.:   0.00
 Median :  7.00   Median :  140.0   Median :    0.0   Median :    0   Median :   0.00
 Mean   : 14.51   Mean   :  690.5   Mean   :  187.6   Mean   :  330   Mean   :  64.08
 3rd Qu.: 13.00   3rd Qu.:  513.0   3rd Qu.:   55.0   3rd Qu.:    0   3rd Qu.:   0.00
 Max.   :911.00   Max.   :92447.0   Max.   :257497.0   Max.   :752401   Max.   :40023.00
    m4b16c2e        m4b16c2e1          m4b16c2e2
 Min.   :     2   Min.   :    0.00   Min.   :   0.000
 1st Qu.:   108   1st Qu.:    0.00   1st Qu.:   0.000
 Median :   324   Median :    0.00   Median :   0.000
 Mean   :  1272   Mean   :    4.94   Mean   :   0.325
 3rd Qu.:   990   3rd Qu.:    0.00   3rd Qu.:   0.000
 Max.   :752401   Max.   :39566.00   Max.   :3368.000
```

```
####  15 :  muc4b17  ############################
      tinh            huyen             xa            diaban           hoso          m4b17ma
 Min.   : 1.0   Min.   :  3   Min.   :   91   Min.   : 1.000   Min.   :13.00   Min.   :1.00
 1st Qu.:25.0   1st Qu.:252   1st Qu.: 9037   1st Qu.: 4.000   1st Qu.:13.00   1st Qu.:1.00
 Median :40.0   Median :421   Median :17158   Median : 7.000   Median :14.00   Median :3.00
 Mean   :44.9   Mean   :457   Mean   :16839   Mean   : 8.833   Mean   :14.43   Mean   :2.58
 3rd Qu.:66.0   3rd Qu.:655   3rd Qu.:24538   3rd Qu.:12.000   3rd Qu.:15.00   3rd Qu.:4.00
 Max.   :96.0   Max.   :972   Max.   :32215   Max.   :73.000   Max.   :21.00   Max.   :5.00
    m4b17c2         m4b17c3           m4b17c4           m4b17c5          m4b17c6
 Min.   :  -1   Min.   :   -1.00   Min.   :   -1.00   Min.   :  -1.0   Min.   :    1.0
 1st Qu.:  10   1st Qu.:    0.00   1st Qu.:    0.00   1st Qu.:   0.0   1st Qu.:   40.0
 Median :  48   Median :    0.00   Median :    0.00   Median :   0.0   Median :   98.0
 Mean   : 105   Mean   :   32.84   Mean   :   69.39   Mean   :  11.3   Mean   :  218.5
 3rd Qu.: 110   3rd Qu.:   15.00   3rd Qu.:    2.00   3rd Qu.:   0.0   3rd Qu.:  210.0
 Max.   :4650   Max.   :30000.00   Max.   :15000.00   Max.   :3600.0   Max.   :30000.0
```

```
####  16 :  muc4b21  ############################
      tinh            huyen             xa            diaban           hoso
 Min.   : 1.00   Min.   : 16.0   Min.   :  382   Min.   : 1.000   Min.   :13.00
 1st Qu.:17.00   1st Qu.:164.0   1st Qu.: 5494   1st Qu.: 3.000   1st Qu.:13.00
 Median :35.00   Median :351.0   Median :13471   Median : 6.000   Median :14.00
```

```
 Mean   :36.79   Mean   :370.6   Mean   :13790   Mean   : 7.695   Mean   :14.38
 3rd Qu.:51.00   3rd Qu.:528.0   3rd Qu.:21268   3rd Qu.:10.000   3rd Qu.:15.00
 Max.   :96.00   Max.   :973.0   Max.   :32239   Max.   :65.000   Max.   :24.00

    m4b21ma          m4b21c3          m4b21c4a          m4b21c4b          m4b21c5
 Min.   : 1.000   Min.   :      0   Min.   :     0.0   Min.   :     0.0   Min.   :      0
 1st Qu.: 5.000   1st Qu.:     20   1st Qu.:     0.0   1st Qu.:    23.5   1st Qu.:    358
 Median : 6.000   Median :     45   Median :     8.0   Median :  1028.0   Median :   1092
 Mean   : 8.401   Mean   :   1321   Mean   :   949.7   Mean   :  7989.8   Mean   :   6961
 3rd Qu.:12.000   3rd Qu.:    145   3rd Qu.:    65.0   3rd Qu.:  4366.5   3rd Qu.:   3250
 Max.   :19.000   Max.   :3285000   Max.   :1319000.0   Max.   :2315764.0   Max.   :9801013
                  NA's   :2802      NA's   :2802        NA's   :4309


####  17 :  muc4b22  ##########################
      tinh            huyen             xa            diaban           hoso
 Min.   : 1.00   Min.   : 16.0   Min.   :  382   Min.   : 1.000   Min.   :13.00
 1st Qu.:19.00   1st Qu.:172.0   1st Qu.: 5896   1st Qu.: 3.000   1st Qu.:13.00
 Median :36.00   Median :363.0   Median :14038   Median : 6.000   Median :14.00
 Mean   :38.87   Mean   :391.8   Mean   :14513   Mean   : 7.849   Mean   :14.39
 3rd Qu.:52.00   3rd Qu.:549.0   3rd Qu.:21946   3rd Qu.:11.000   3rd Qu.:15.00
 Max.   :96.00   Max.   :973.0   Max.   :32239   Max.   :65.000   Max.   :24.00

    m4b22ma          m4b22c7          m4b22c8          m4b22c9          m4b22c10a
 Min.   : 1.000   Min.   :      0   Min.   :     0   Min.   :     0.0   Min.   :    -2.00
 1st Qu.: 1.000   1st Qu.:     56   1st Qu.:   267   1st Qu.:     0.0   1st Qu.:     0.00
 Median : 5.000   Median :    172   Median :   665   Median :    17.0   Median :     0.00
 Mean   : 4.203   Mean   :   1696   Mean   :  4915   Mean   :   140.6   Mean   :    56.36
 3rd Qu.: 5.000   3rd Qu.:    554   3rd Qu.:  1821   3rd Qu.:    58.0   3rd Qu.:     0.00
 Max.   :11.000   Max.   :3252154   Max.   :1812846   Max.   :118800.0   Max.   :201960.00
                  NA's   :107
   m4b22c10b          m4b22c10c          m4b22c10d          m4b22c10e          m4b22c10f
 Min.   :    0.000   Min.   :    0.000   Min.   :    0.00   Min.   :  0.00000   Min.   :
0.00000
 1st Qu.:    0.000   1st Qu.:    0.000   1st Qu.:    0.00   1st Qu.:  0.00000   1st Qu.: 0.00000
 Median :    0.000   Median :    0.000   Median :    0.00   Median :  0.00000   Median : 0.00000
 Mean   :    3.859   Mean   :    9.327   Mean   :   11.88   Mean   :  0.04808   Mean   :
0.00814
 3rd Qu.:    0.000   3rd Qu.:    0.000   3rd Qu.:    0.00   3rd Qu.:  0.00000   3rd Qu.: 0.00000
 Max.   :12289.000   Max.   :9500.000   Max.   :16653.00   Max.   :208.00000
Max.   :66.00000

   m4b22c10g          m4b22c10h          m4b22c10i          m4b22c10j          m4b22c10k
 Min.   :    0.000   Min.   :    0.000   Min.   :    0.000   Min.   :    0.00   Min.   :    -2.00
 1st Qu.:    0.000   1st Qu.:    0.000   1st Qu.:    0.000   1st Qu.:    0.00   1st Qu.:     0.00
 Median :    0.000   Median :    0.000   Median :    0.000   Median :    0.00   Median :     0.00
 Mean   :    5.467   Mean   :    2.435   Mean   :    1.228   Mean   :   65.33   Mean   :    12.88
 3rd Qu.:    0.000   3rd Qu.:    0.000   3rd Qu.:    0.000   3rd Qu.:    0.00   3rd Qu.:     0.00
 Max.   :22163.000   Max.   :4725.000   Max.   :1210.000   Max.   :4764.00   Max.   :11816.00

    m4b22c11          m4b22c12          m4b22c13          m4b22c14          m4b22c15
 Min.   :    0.000   Min.   :    0.0   Min.   :     0.0   Min.   :   -2.000   Min.   :
0.00
 1st Qu.:    0.000   1st Qu.:    0.0   1st Qu.:     0.0   1st Qu.:    0.000   1st Qu.:     0.00
 Median :    0.000   Median :    0.0   Median :     0.0   Median :    0.000   Median :     0.00
 Mean   :    5.987   Mean   :  175.6   Mean   :   188.5   Mean   :    9.596   Mean   :
```

```
33.55
 3rd Qu.:   0.000   3rd Qu.:   92.0   3rd Qu.:       0.0   3rd Qu.:    0.000   3rd Qu.:      0.00
 Max.   :9449.000   Max.   :38154.0   Max.   :1467182.0   Max.   :20598.000
Max.   :106180.00

   m4b22c16          m4b22c17          m4b22c18          m4b22c19
 Min.   :     0.0   Min.   :  0.0000   Min.   :  -2.00   Min.   :      5
 1st Qu.:     0.0   1st Qu.:  0.0000   1st Qu.:   0.00   1st Qu.:    466
 Median :     0.0   Median :  0.0000   Median :  22.00   Median :   1098
 Mean   :    90.9   Mean   :  0.2552   Mean   :  73.44   Mean   :   7476
 3rd Qu.:     0.0   3rd Qu.:  0.0000   3rd Qu.:  62.00   3rd Qu.:   3146
 Max.   :594001.0   Max.   :1453.0000   Max.   :23026.00   Max.   :6950799



####  18 :  muc4b31  ##########################
     tinh            huyen             xa            diaban           hoso          m4b31ma
 Min.   : 1.00   Min.   : 16.0   Min.   :  382   Min.   : 1.00   Min.   :13.00   Min.   :1.000
 1st Qu.:34.00   1st Qu.:340.0   1st Qu.:12703   1st Qu.: 5.00   1st Qu.:13.00   1st Qu.:1.000
 Median :44.50   Median :459.5   Median :19264   Median : 8.00   Median :14.00   Median :1.000
 Mean   :49.28   Mean   :500.9   Mean   :18487   Mean   :10.37   Mean   :14.32   Mean   :2.095
 3rd Qu.:72.00   3rd Qu.:707.8   3rd Qu.:25596   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:4.000
 Max.   :95.00   Max.   :959.0   Max.   :31951   Max.   :65.00   Max.   :20.00   Max.   :5.000
   m4b31c3          m4b31c4          m4b31c5
 Min.   : 0.500   Min.   :    67   Min.   :    67
 1st Qu.: 2.000   1st Qu.:  1719   1st Qu.:  4486
 Median : 2.000   Median :  3998   Median : 10280
 Mean   : 3.288   Mean   :  7978   Mean   : 24643
 3rd Qu.: 4.000   3rd Qu.:  8116   3rd Qu.: 21634
 Max.   :12.000   Max.   :142660   Max.   :427981



####  19 :  muc4b32  ##########################
     tinh            huyen             xa            diaban           hoso          m4b32ma
 Min.   : 1.00   Min.   : 16.0   Min.   :  382   Min.   : 1.00   Min.   :13.00   Min.   :1.000
 1st Qu.:34.00   1st Qu.:340.0   1st Qu.:12700   1st Qu.: 5.00   1st Qu.:13.00   1st Qu.:1.000
 Median :44.00   Median :450.0   Median :18880   Median : 8.00   Median :14.00   Median :1.000
 Mean   :49.12   Mean   :499.2   Mean   :18434   Mean   :10.39   Mean   :14.32   Mean   :2.075
 3rd Qu.:72.00   3rd Qu.:706.5   3rd Qu.:25549   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:4.000
 Max.   :95.00   Max.   :959.0   Max.   :31951   Max.   :65.00   Max.   :20.00   Max.   :5.000
   m4b32c7          m4b32c8          m4b32c9a           m4b32c9b    m4b32c9c
 Min.   :     0   Min.   :    0.0   Min.   :    0.00   Min.   :0   Min.   :   0.00
 1st Qu.:     0   1st Qu.:   29.0   1st Qu.:    0.00   1st Qu.:0   1st Qu.:   0.00
 Median :     0   Median :  100.0   Median :    0.00   Median :0   Median :   0.00
 Mean   :  1678   Mean   :  307.9   Mean   :   81.92   Mean   :0   Mean   :  10.24
 3rd Qu.:     0   3rd Qu.:  220.5   3rd Qu.:    0.00   3rd Qu.:0   3rd Qu.:   0.00
 Max.   :302258   Max.   :24001.0   Max.   :10016.00   Max.   :0   Max.   :1645.00
   m4b32c9d          m4b32c9e          m4b32c9f          m4b32c9g         m4b32c9h
 Min.   :    0.0   Min.   :    0.0   Min.   :   0.0   Min.   :    0   Min.   :   0.00
 1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:   0.0   1st Qu.:    0   1st Qu.:   0.00
 Median :    0.0   Median :    0.0   Median :   0.0   Median : 1140   Median :   0.00
 Mean   :  341.5   Mean   :  536.3   Mean   : 146.4   Mean   : 4368   Mean   :  45.92
 3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:   0.0   3rd Qu.: 3766   3rd Qu.:   0.00
 Max.   :39296.0   Max.   :90240.0   Max.   :7707.0   Max.   :83340   Max.   :8568.00
   m4b32c9i     m4b32c9j          m4b32c9k          m4b32c10          m4b32c11
 Min.   :0   Min.   :   0.000   Min.   :   0.0   Min.   :    0.0   Min.   :    0
```

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 1st Qu.:0   1st Qu.:   0.000   1st Qu.:   0.0   1st Qu.:   97.5   1st Qu.:  300
 Median :0   Median :   0.000   Median :   0.0   Median :  269.0   Median :  800
 Mean   :0   Mean   :   9.045   Mean   : 104.4   Mean   : 1137.0   Mean   : 1764
 3rd Qu.:0   3rd Qu.:   0.000   3rd Qu.:   0.0   3rd Qu.:  847.0   3rd Qu.: 1300
 Max.   :0   Max.   :1800.000   Max.   :4320.0   Max.   :30529.0   Max.   :26250
    m4b32c12          m4b32c13         m4b32c14         m4b32c15          m4b32c16
 Min.   :   0.00   Min.   :     0   Min.   :   0.0   Min.   :   0.00   Min.   :    0.0
 1st Qu.:   0.00   1st Qu.:     0   1st Qu.:   0.0   1st Qu.:   0.00   1st Qu.:    0.0
 Median :   0.00   Median :     0   Median :   0.0   Median :   0.00   Median :    0.0
 Mean   :  11.06   Mean   :  2155   Mean   : 172.7   Mean   :  23.42   Mean   :  392.2
 3rd Qu.:   0.00   3rd Qu.:     0   3rd Qu.:   0.0   3rd Qu.:   0.00   3rd Qu.:  180.0
 Max.   :1800.00   Max.   :105000   Max.   :9360.0   Max.   :1000.00   Max.   :18000.0
    m4b32c17
 Min.   :    10
 1st Qu.:  1604
 Median :  3772
 Mean   : 13254
 3rd Qu.: 10249
 Max.   :322355


####  20 :  muc4b41  ############################
      tinh            huyen             xa            diaban           hoso          m4b41ma
 Min.   : 1.00   Min.   : 26.0   Min.   :  703   Min.   : 1.00   Min.   :13.00   Min.   : 1.0
 1st Qu.:11.00   1st Qu.:100.8   1st Qu.: 3301   1st Qu.: 3.00   1st Qu.:13.00   1st Qu.:11.0
 Median :20.00   Median :183.0   Median : 6208   Median : 5.00   Median :14.00   Median :11.0
 Mean   :31.44   Mean   :313.3   Mean   :11645   Mean   : 6.64   Mean   :14.33   Mean   :10.4
 3rd Qu.:49.00   3rd Qu.:511.0   3rd Qu.:20701   3rd Qu.: 9.00   3rd Qu.:15.00   3rd Qu.:11.0
 Max.   :96.00   Max.   :969.0   Max.   :32149   Max.   :61.00   Max.   :24.00   Max.   :14.0
    m4b41c3a          m4b41c3b          m4b41c3c          m4b41c3d          m4b41c3e
 Min.   :    0.0   Min.   :    0.0   Min.   :    0.0   Min.   :    0.0   Min.   :    0.0
 1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:    0.0
 Median :    0.0   Median :    0.0   Median :    0.0   Median :    0.0   Median :   53.5
 Mean   :  641.8   Mean   :  165.1   Mean   :  110.4   Mean   :  302.4   Mean   :  723.8
 3rd Qu.:   93.0   3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:  700.0
 Max.   :60604.0   Max.   :26664.0   Max.   :16497.0   Max.   :62088.0   Max.   :67000.0
    m4b41c3f         m4b41c4
 Min.   :   19   Min.   :    0.0
 1st Qu.:  400   1st Qu.:    0.0
 Median :  917   Median :    0.0
 Mean   : 1943   Mean   :  812.5
 3rd Qu.: 2034   3rd Qu.:    0.0
 Max.   :67000   Max.   :67000.0


####  21 :  muc4b42  ############################
      tinh           huyen             xa            diaban           hoso          m4b42ma
 Min.   : 1.0   Min.   : 26   Min.   :  703   Min.   : 1.000   Min.   :13.00   Min.   :1.000
 1st Qu.:12.0   1st Qu.:107   1st Qu.: 3439   1st Qu.: 3.000   1st Qu.:13.00   1st Qu.:1.000
 Median :25.0   Median :231   Median : 8026   Median : 6.000   Median :14.00   Median :1.000
 Mean   :34.1   Mean   :341   Mean   :12696   Mean   : 6.907   Mean   :14.31   Mean   :1.026
 3rd Qu.:51.0   3rd Qu.:532   3rd Qu.:21378   3rd Qu.: 9.000   3rd Qu.:15.00   3rd Qu.:1.000
 Max.   :96.0   Max.   :969   Max.   :32143   Max.   :40.000   Max.   :24.00   Max.   :2.000

    m4b42c1           m4b42c2          m4b42c3          m4b42c4a          m4b42c4b
 Min.   :   0.00   Min.   :    0   Min.   :   0.0   Min.   : 0.0000   Min.   : 0.0000
```

```
 1st Qu.:   0.00   1st Qu.:   0   1st Qu.:  36.0   1st Qu.:  0.0000   1st Qu.:  0.0000
 Median :   0.00   Median :   0   Median :  65.0   Median :  0.0000   Median :  0.0000
 Mean   :  30.13   Mean   :  23   Mean   : 109.9   Mean   :  0.4011   Mean   :  0.1057
 3rd Qu.:   0.00   3rd Qu.:   0   3rd Qu.: 134.0   3rd Qu.:  0.0000   3rd Qu.:  0.0000
 Max.   :6631.00   Max.   :8673   Max.   :2133.0   Max.   :683.0000   Max.   :120.0000
 NA's   :55        NA's   :55
    m4b42c4c          m4b42c4d          m4b42c4e          m4b42c4f          m4b42c4g
 Min.   :   0.000   Min.   :    0.00   Min.   : 0.00000   Min.   :  0.0000   Min.   :  0.0000
 1st Qu.:   0.000   1st Qu.:    0.00   1st Qu.: 0.00000   1st Qu.:  0.0000   1st Qu.:  0.0000
 Median :   0.000   Median :    0.00   Median : 0.00000   Median :  0.0000   Median :  0.0000
 Mean   :   3.081   Mean   :   33.78   Mean   : 0.03209   Mean   :  0.3256   Mean   :  0.8008
 3rd Qu.:   0.000   3rd Qu.:    0.00   3rd Qu.: 0.00000   3rd Qu.:  0.0000   3rd Qu.:  0.0000
 Max.   :3200.000   Max.   :12500.00   Max.   :68.00000   Max.   :332.0000   Max.   :265.0000

    m4b42c4h          m4b42c4i    m4b42c4j          m4b42c4k          m4b42c5
 Min.   :   0.0000   Min.   :0   Min.   :   0.000   Min.   :   0.000   Min.   :   0
 1st Qu.:   0.0000   1st Qu.:0   1st Qu.:   0.000   1st Qu.:   0.000   1st Qu.:   0
 Median :   0.0000   Median :0   Median :   0.000   Median :   0.000   Median :   0
 Mean   :   0.5168   Mean   :0   Mean   :   3.205   Mean   :   3.359   Mean   :  11
 3rd Qu.:   0.0000   3rd Qu.:0   3rd Qu.:   0.000   3rd Qu.:   0.000   3rd Qu.:   0
 Max.   :1006.0000   Max.   :0   Max.   :1466.000   Max.   :1184.000   Max.   :2000

    m4b42c6           m4b42c7           m4b42c8           m4b42c9           m4b42c10
 Min.   :   0.00   Min.   :    0.000   Min.   :   0.00   Min.   :   0.00   Min.   :    0.00
 1st Qu.:   0.00   1st Qu.:    0.000   1st Qu.:   0.00   1st Qu.:   0.00   1st Qu.:    0.00
 Median :   0.00   Median :    0.000   Median :   0.00   Median :   0.00   Median :    0.00
 Mean   :  34.13   Mean   :    9.112   Mean   :  32.47   Mean   :  12.16   Mean   :   76.36
 3rd Qu.:   0.00   3rd Qu.:    0.000   3rd Qu.:   0.00   3rd Qu.:   0.00   3rd Qu.:    0.00
 Max.   :3001.00   Max.   :10000.000   Max.   :8891.00   Max.   :3879.00   Max.   :13798.00

    m4b42c11          m4b42c12          m4b42c13          m4b42c14
 Min.   :   0.000   Min.   :   0.00   Min.   :    0.0   Min.   :    0.0
 1st Qu.:   0.000   1st Qu.:   0.00   1st Qu.:    0.0   1st Qu.:   48.5
 Median :   0.000   Median :   0.00   Median :    0.0   Median :  106.0
 Mean   :   4.592   Mean   :   3.26   Mean   :   48.6   Mean   :  438.9
 3rd Qu.:   0.000   3rd Qu.:   0.00   3rd Qu.:    0.0   3rd Qu.:  255.0
 Max.   :4642.000   Max.   :2809.00   Max.   :20373.0   Max.   :31768.0



####  22 :  muc4b51  ############################
      tinh            huyen             xa            diaban           hoso          m4b51ma
 Min.   : 1.00   Min.   : 16.0   Min.   :  397   Min.   : 1.000   Min.   :13.00   Min.   : 3.00
 1st Qu.:30.00   1st Qu.:296.0   1st Qu.:10954   1st Qu.: 4.000   1st Qu.:13.00   1st Qu.:11.00
 Median :62.00   Median :610.0   Median :23371   Median : 7.000   Median :14.00   Median :14.00
 Mean   :57.59   Mean   :578.4   Mean   :20414   Mean   : 9.176   Mean   :14.46
Mean   :16.03
 3rd Qu.:87.00   3rd Qu.:877.0   3rd Qu.:30261   3rd Qu.:13.000   3rd Qu.:15.00   3rd Qu.:21.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :69.000   Max.   :24.00
Max.   :23.00

    m4b51c3           m4b51c4a          m4b51c4b          m4b51c5
 Min.   :    1   Min.   :    0.0   Min.   :     0   Min.   :    13
 1st Qu.:   20   1st Qu.:    0.0   1st Qu.:   285   1st Qu.:   394
 Median :   60   Median :    0.0   Median :  2041   Median :  1285
 Mean   : 1010   Mean   :  954.3   Mean   : 27700   Mean   : 17528
```

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 3rd Qu.:   200   3rd Qu.:   120.0   3rd Qu.:  10259   3rd Qu.:   5046
 Max.   :357000   Max.   :357000.0   Max.   :3328000   Max.   :3328000
 NA's   :566      NA's   :566        NA's   :1078
```

```
####  23 :  muc4b52  ############################
      tinh            huyen              xa             diaban            hoso           m4b52ma
 Min.   : 1.00   Min.   : 16.0   Min.   :  397   Min.   : 1.000   Min.   :13.00   Min.   :1.000
 1st Qu.:27.00   1st Qu.:262.0   1st Qu.: 9439   1st Qu.: 4.000   1st Qu.:13.00   1st Qu.:1.000
 Median :54.00   Median :557.0   Median :22066   Median : 7.000   Median :14.00   Median :1.000
 Mean   :55.57   Mean   :557.6   Mean   :19734   Mean   : 9.218   Mean   :14.46
Mean   :1.427
 3rd Qu.:86.00   3rd Qu.:863.0   3rd Qu.:29839   3rd Qu.:13.000   3rd Qu.:15.00   3rd Qu.:2.000
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :69.000   Max.   :24.00
Max.   :3.000
    m4b52c6          m4b52c7           m4b52c8          m4b52c9a          m4b52c9b
 Min.   :     0   Min.   :      0   Min.   :    0.0   Min.   :    0.0   Min.   :0
 1st Qu.:     0   1st Qu.:      0   1st Qu.:   21.0   1st Qu.:    0.0   1st Qu.:0
 Median :    50   Median :      0   Median :   61.0   Median :    0.0   Median :0
 Mean   :  1259   Mean   :   4664   Mean   :  332.2   Mean   :   53.1   Mean   :0
 3rd Qu.:   342   3rd Qu.:    190   3rd Qu.:  190.0   3rd Qu.:    0.0   3rd Qu.:0
 Max.   :150000   Max.   :2771000   Max.   :46636.0   Max.   :18000.0   Max.   :0
    m4b52c9c          m4b52c9d          m4b52c9e          m4b52c9f          m4b52c9g
 Min.   : 0.0000   Min.   :   0.00   Min.   :     0.0   Min.   :    0.00   Min.   :      0
 1st Qu.: 0.0000   1st Qu.:   0.00   1st Qu.:     0.0   1st Qu.:    0.00   1st Qu.:      0
 Median : 0.0000   Median :   0.00   Median :     0.0   Median :    0.00   Median :      0
 Mean   : 0.3477   Mean   :  38.34   Mean   :   130.8   Mean   :   25.15   Mean   :   3383
 3rd Qu.: 0.0000   3rd Qu.:   0.00   3rd Qu.:     0.0   3rd Qu.:    0.00   3rd Qu.:      0
 Max.   :700.0000   Max.   :9000.00   Max.   :106710.0   Max.   :20969.00   Max.   :1492682
    m4b52c9h          m4b52c9i    m4b52c9j          m4b52c9k          m4b52c10
 Min.   :    0.0   Min.   :0   Min.   : 0.0000   Min.   :     0.0   Min.   :    0.0
 1st Qu.:    0.0   1st Qu.:0   1st Qu.: 0.0000   1st Qu.:     0.0   1st Qu.:    0.0
 Median :    0.0   Median :0   Median : 0.0000   Median :     0.0   Median :    0.0
 Mean   :   34.3   Mean   :0   Mean   : 0.9384   Mean   :   402.1   Mean   :  313.7
 3rd Qu.:    0.0   3rd Qu.:0   3rd Qu.: 0.0000   3rd Qu.:     0.0   3rd Qu.:    0.0
 Max.   :41567.0   Max.   :0   Max.   :360.0000   Max.   :684532.0   Max.   :92606.0
    m4b52c11          m4b52c12          m4b52c13          m4b52c14          m4b52c15
 Min.   :     0.0   Min.   :     0.0   Min.   :    0.0   Min.   :     0.0   Min.   :     0
 1st Qu.:     0.0   1st Qu.:     0.0   1st Qu.:    0.0   1st Qu.:     0.0   1st Qu.:     0
 Median :     0.0   Median :     0.0   Median :    0.0   Median :     0.0   Median :     0
 Mean   :   335.3   Mean   :   517.4   Mean   :  164.3   Mean   :   193.6   Mean   :  2184
 3rd Qu.:     0.0   3rd Qu.:    62.0   3rd Qu.:    0.0   3rd Qu.:     0.0   3rd Qu.:     0
 Max.   :147198.0   Max.   :176730.0   Max.   :40000.0   Max.   :179449.0   Max.   :636226
    m4b52c16          m4b52c17          m4b52c18          m4b52c19
 Min.   :     0.0   Min.   :   0.00   Min.   :     0.0   Min.   :      2
 1st Qu.:     0.0   1st Qu.:   0.00   1st Qu.:     0.0   1st Qu.:    113
 Median :     0.0   Median :   0.00   Median :     0.0   Median :    374
 Mean   :   148.3   Mean   :   5.68   Mean   :   747.4   Mean   :  14934
 3rd Qu.:     0.0   3rd Qu.:   0.00   3rd Qu.:    10.0   3rd Qu.:   1425
 Max.   :144000.0   Max.   :5438.00   Max.   :189518.0   Max.   :3200100
```

```
####  24 :  muc4c1  ############################
      tinh            huyen              xa             diaban            hoso           m4c1ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :1.000
 1st Qu.:27.00   1st Qu.:281.0   1st Qu.:10417   1st Qu.: 5.00   1st Qu.:13.00   1st Qu.:1.000
```

```
 Median :51.00   Median :527.0   Median :21208   Median : 9.00   Median :14.00   Median :1.000
 Mean   :51.67   Mean   :521.5   Mean   :18953   Mean   :11.51   Mean   :14.49   Mean   :1.207
 3rd Qu.:79.00   3rd Qu.:769.0   3rd Qu.:27097   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:1.000
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :21.00   Max.   :4.000

     m4c1c2          m4c1c3          m4c1c4          m4c1c5          m4c1c6          m4c1c7
 Min.   : 6.00   Min.   : 0.30   Min.   :1.000   Min.   :2.000   Min.   : 14.0   Min.   :1.000
 1st Qu.:32.00   1st Qu.:10.00   1st Qu.:1.000   1st Qu.:2.000   1st Qu.:100.0   1st Qu.:2.000
 Median :47.00   Median :12.00   Median :1.000   Median :2.000   Median :100.0   Median :3.000
 Mean   :44.14   Mean   :10.44   Mean   :1.011   Mean   :2.326   Mean   : 99.4   Mean   :2.675
 3rd Qu.:49.00   3rd Qu.:12.00   3rd Qu.:1.000   3rd Qu.:2.000   3rd Qu.:100.0   3rd Qu.:3.000
 Max.   :98.00   Max.   :12.00   Max.   :2.000   Max.   :7.000   Max.   :100.0   Max.   :3.000
                                                 NA's   :3961
     m4c1c8          m4c1c9          m4c1c10         m4c1c11         m4c1c12
 Min.   :1.000   Min.   :    40   Min.   :    40   Min.   :1.000   Min.   :  24
 1st Qu.:1.000   1st Qu.:  1500   1st Qu.: 14189   1st Qu.:2.000   1st Qu.: 419
 Median :1.000   Median :  2900   Median : 31000   Median :2.000   Median : 808
 Mean   :1.047   Mean   :  7884   Mean   : 84750   Mean   :1.992   Mean   :1836
 3rd Qu.:1.000   3rd Qu.:  6327   3rd Qu.: 70057   3rd Qu.:2.000   3rd Qu.:1437
 Max.   :2.000   Max.   :576737   Max.   :6920845  Max.   :2.000   Max.   :9363
 NA's   :1646    NA's   :110      NA's   :110      NA's   :1756    NA's   :3990
    m4c1c13         m4c1c14         m4c1c15         m4c1c16         m4c1c17
 Min.   :1.000   Min.   :   10.0   Min.   :1.000   Min.   :   4.0   Min.   :      0
 1st Qu.:1.000   1st Qu.:  212.5   1st Qu.:2.000   1st Qu.:  201.8   1st Qu.:  13100
 Median :2.000   Median :  534.5   Median :2.000   Median :  558.0   Median :  30000
 Mean   :1.683   Mean   : 1509.5   Mean   :1.825   Mean   : 1621.3   Mean   :  82996
 3rd Qu.:2.000   3rd Qu.: 1377.8   3rd Qu.:2.000   3rd Qu.: 1607.0   3rd Qu.:  68408
 Max.   :2.000   Max.   :72323.0   Max.   :2.000   Max.   :63182.0   Max.   :6920845
 NA's   :1646    NA's   :3259                      NA's   :3307
    m4c1c18
 Min.   :      0
 1st Qu.:  12992
 Median :  29892
 Mean   :  81168
 3rd Qu.:  68350
 Max.   :6920845


####  25 :  muc4c2  ############################
      tinh            huyen             xa           diaban          hoso          m4c2ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :1.000
 1st Qu.:27.00   1st Qu.:281.0   1st Qu.:10417   1st Qu.: 5.00   1st Qu.:13.00   1st Qu.:1.000
 Median :51.00   Median :527.0   Median :21208   Median : 9.00   Median :14.00   Median :1.000
 Mean   :51.67   Mean   :521.5   Mean   :18953   Mean   :11.51   Mean   :14.49   Mean   :1.207
 3rd Qu.:79.00   3rd Qu.:769.0   3rd Qu.:27097   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:1.000
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :21.00   Max.   :4.000
    m4c2c19          m4c2c20          m4c2c21a         m4c2c21b          m4c2c21c
 Min.   :      0   Min.   :    0.0   Min.   :     0.0   Min.   :      0.0   Min.   :    0.0
 1st Qu.:      0   1st Qu.:   52.0   1st Qu.:     0.0   1st Qu.:      0.0   1st Qu.:    0.0
 Median :      0   Median :  186.0   Median :    67.0   Median :      0.0   Median :    0.0
 Mean   :  26782   Mean   :  641.8   Mean   :   912.5   Mean   :    568.3   Mean   :  152.6
 3rd Qu.:   5030   3rd Qu.:  479.0   3rd Qu.:   500.0   3rd Qu.:      0.0   3rd Qu.:    0.0
 Max.   :4151528   Max.   :68530.0   Max.   :161688.0   Max.   :1565437.0   Max.   :21873.0
    m4c2c21d         m4c2c21e          m4c2c21f         m4c2c21g          m4c2c21h
 Min.   :     0.0   Min.   :    0.00   Min.   :     0.0   Min.   :     0   Min.   :    0.00
```

```
 1st Qu.:      0.0   1st Qu.:     0.00   1st Qu.:      0.0   1st Qu.:      0   1st Qu.:     0.00
 Median :      0.0   Median :     0.00   Median :      0.0   Median :      0   Median :     0.00
 Mean   :   1414.4   Mean   :    43.62   Mean   :    166.2   Mean   :   1898   Mean   :    94.57
 3rd Qu.:    756.5   3rd Qu.:     0.00   3rd Qu.:      0.0   3rd Qu.:      0   3rd Qu.:     0.00
 Max.   :135668.0   Max.   :71280.00   Max.   :209140.0   Max.   :762330   Max.   :53732.00
    m4c2c21i          m4c2c21j          m4c2c21k          m4c2c22          m4c2stt
 Min.   :   0.000   Min.   :    0.0   Min.   :    0.0   Min.   :    0.0   Min.   :1.000
 1st Qu.:   0.000   1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:1.000
 Median :   0.000   Median :    0.0   Median :    0.0   Median :    0.0   Median :1.000
 Mean   :   3.226   Mean   :  215.2   Mean   :  120.5   Mean   :  121.8   Mean   :1.207
 3rd Qu.:   0.000   3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:1.000
 Max.   :8641.000   Max.   :59201.0   Max.   :27336.0   Max.   :24168.0   Max.   :4.000
    m4c2c23           m4c2c24          m4c2c25           m4c2c26          m4c2c27
 Min.   :      0.0   Min.   :      0   Min.   :      0.0   Min.   :      0.0   Min.   :       0
 1st Qu.:      0.0   1st Qu.:      0   1st Qu.:      0.0   1st Qu.:      0.0   1st Qu.:       0
 Median :      0.0   Median :    245   Median :      0.0   Median :      0.0   Median :       0
 Mean   :    668.8   Mean   :   1816   Mean   :    835.3   Mean   :    805.6   Mean   :    7771
 3rd Qu.:    287.0   3rd Qu.:   1010   3rd Qu.:      0.0   3rd Qu.:      0.0   3rd Qu.:       0
 Max.   :113981.0   Max.   :237502   Max.   :226075.0   Max.   :133216.0   Max.   :2037011
    m4c2c28           m4c2c29           m4c2c30           m4c2c31          m4c2c32
 Min.   :      0.0   Min.   :      0.0   Min.   :   0.00   Min.   :      0   Min.   :      0
 1st Qu.:      0.0   1st Qu.:      0.0   1st Qu.:   0.00   1st Qu.:      0   1st Qu.:   1871
 Median :      0.0   Median :      0.0   Median :   0.00   Median :     87   Median :   6564
 Mean   :    615.9   Mean   :   1271.2   Mean   :  13.91   Mean   :   1043   Mean   :  47977
 3rd Qu.:      0.0   3rd Qu.:    388.5   3rd Qu.:   0.00   3rd Qu.:    524   3rd Qu.:  24744
 Max.   :261152.0   Max.   :582149.0   Max.   :5000.00   Max.   :880765   Max.   :5830543
    m4c2c33
 Min.   :      0
 1st Qu.:   1838
 Median :   6500
 Mean   :  46915
 3rd Qu.:  24608
 Max.   :5830543


####  26 :  muc4d  ############################
      tinh            huyen             xa            diaban           hoso          m4dc2_01
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :     0
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:     0
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median :     0
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51   Mean   :
1421
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:     0
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00
Max.   :661227

    m4dc2_02          m4dc2_03          m4dc2_04    m4dc2_05          m4dc2_06
 Min.   :      0.0   Min.   :    0.00   Min.   :0   Min.   :    0.00   Min.   :      0
 1st Qu.:      0.0   1st Qu.:    0.00   1st Qu.:0   1st Qu.:    0.00   1st Qu.:     95
 Median :      0.0   Median :    0.00   Median :0   Median :    0.00   Median :    567
 Mean   :    977.9   Mean   :   16.66   Mean   :0   Mean   :   39.59   Mean   :   3306
 3rd Qu.:      0.0   3rd Qu.:    0.00   3rd Qu.:0   3rd Qu.:    0.00   3rd Qu.:   2550
 Max.   :661227.0   Max.   :66509.00   Max.   :0   Max.   :91240.00   Max.   :1112385

    m4dc2_07          m4dc2_08          m4dc2_09          m4dc2_10          m4dc2_11
 Min.   :      0.0   Min.   :      0.0   Min.   :      0.0   Min.   :      0.0   Min.   :-20199.0
```

```
 1st Qu.:     0.0   1st Qu.:     0.0   1st Qu.:     0.0   1st Qu.:     0.0   1st Qu.:     0.0
 Median :     0.0   Median :     0.0   Median :     0.0   Median :     0.0   Median :     0.0
 Mean   :  1424.4   Mean   :   245.1   Mean   :    51.9   Mean   :   116.3   Mean   :   193.5
 3rd Qu.:   105.5   3rd Qu.:     0.0   3rd Qu.:     0.0   3rd Qu.:     0.0   3rd Qu.:     0.0
 Max.   :193345.0   Max.   :889908.0   Max.   :472516.0   Max.   :207293.0   Max.   : 54384.0

    m4dc2_12           m4dc2_13          m4dc2_14          m4dc2_15          m4dc2_16
 Min.   :-12000.00   Min.   :    0.0   Min.   :    0.0   Min.   :    0.00   Min.   :    0.00
 1st Qu.:     0.00   1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:    0.00   1st Qu.:    0.00
 Median :     0.00   Median :    0.0   Median :    0.0   Median :    0.00   Median :    0.00
 Mean   :    96.62   Mean   :  463.8   Mean   :  153.3   Mean   :   23.84   Mean   :   12.49
 3rd Qu.:     0.00   3rd Qu.:    0.0   3rd Qu.:    0.0   3rd Qu.:    0.00   3rd Qu.:    0.00
 Max.   :136907.00   Max.   :79642.0   Max.   :37618.0   Max.   :16010.00   Max.   :37427.00

    m4dc2_17          m4dc2_18          m4dc2_19          m4dc2_20          m4dc2_21
 Min.   :     0   Min.   :    0.0   Min.   :    0.00   Min.   :    0.0   Min.   : NA
 1st Qu.:     0   1st Qu.:    0.0   1st Qu.:    0.00   1st Qu.:    0.0   1st Qu.: NA
 Median :     0   Median :    0.0   Median :    0.00   Median :    0.0   Median : NA
 Mean   :  1426   Mean   :  174.8   Mean   :   55.29   Mean   :  555.4   Mean   :NaN
 3rd Qu.:     0   3rd Qu.:    0.0   3rd Qu.:    0.00   3rd Qu.:    0.0   3rd Qu.: NA
 Max.   :842162   Max.   :543781.0   Max.   :47455.00   Max.   :648921.0   Max.   : NA
                                                                          NA's   :9399
    m4dc2_22       m4dc2_23       m4dc2_24
 Min.   : NA    Min.   : NA    Min.   : NA
 1st Qu.: NA    1st Qu.: NA    1st Qu.: NA
 Median : NA    Median : NA    Median : NA
 Mean   :NaN    Mean   :NaN    Mean   :NaN
 3rd Qu.: NA    3rd Qu.: NA    3rd Qu.: NA
 Max.   : NA    Max.   : NA    Max.   : NA
 NA's   :9399   NA's   :9399   NA's   :9399


####  27 :  muc5a1  ############################
      tinh            huyen             xa            diaban           hoso           m5a1ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :101.0
 1st Qu.:26.00   1st Qu.:268.0   1st Qu.: 9538   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:114.0
 Median :46.00   Median :474.0   Median :19756   Median : 8.00   Median :14.00   Median :134.0
 Mean   :48.48   Mean   :489.8   Mean   :17885   Mean   :10.75   Mean   :14.52   Mean   :130.1
 3rd Qu.:75.00   3rd Qu.:732.0   3rd Qu.:26119   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:145.0
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :154.0

    m5a1c2a          m5a1c2b          m5a1c3a          m5a1c3b
 Min.   : -1.00   Min.   :   0.0   Min.   : -1.00   Min.   :   0.00
 1st Qu.:  1.00   1st Qu.:  35.0   1st Qu.:  0.00   1st Qu.:   0.00
 Median :  2.00   Median :  70.0   Median :  0.00   Median :   0.00
 Mean   :  4.26   Mean   : 121.5   Mean   :  1.24   Mean   :  66.32
 3rd Qu.:  5.00   3rd Qu.: 150.0   3rd Qu.:  0.00   3rd Qu.:  54.00
 Max.   :535.00   Max.   :8000.0   Max.   :425.00   Max.   :8000.00
 NA's   :35609    NA's   :12554    NA's   :35609    NA's   :85383


####  28 :  muc5a2  ############################
      tinh            huyen             xa            diaban           hoso           m5a2ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :101.0
 1st Qu.:27.00   1st Qu.:278.0   1st Qu.:10126   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:117.0
 Median :48.00   Median :495.0   Median :20302   Median : 9.00   Median :14.00   Median :128.0
```

```
 Mean   :49.81   Mean   :502.6   Mean   :18313   Mean   :11.13   Mean   :14.53   Mean   :127.4
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26533   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:138.0
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :154.0

    m5a2c2a          m5a2c2b          m5a2c3a          m5a2c3b          m5a2c4a
 Min.   :   0.10   Min.   :    0.00   Min.   :  0.00   Min.   :    0.00   Min.   :  0.00
 1st Qu.:   1.00   1st Qu.:   15.00   1st Qu.:  0.50   1st Qu.:   14.00   1st Qu.:  0.00
 Median :   2.00   Median :   30.00   Median :  1.20   Median :   28.00   Median :  0.00
 Mean   :   5.18   Mean   :   83.08   Mean   :  3.55   Mean   :   76.52   Mean   :  1.56
 3rd Qu.:   4.00   3rd Qu.:   70.00   3rd Qu.:  3.00   3rd Qu.:   60.00   3rd Qu.:  0.00
 Max.   :1000.00   Max.   :22800.00   Max.   :1000.00   Max.   :22800.00   Max.   :220.00
 NA's   :60124                        NA's   :60124     NA's   :18518      NA's   :60124
    m5a2c4b          m5a2c5a          m5a2c5b
 Min.   :   0.0   Min.   :  0.00   Min.   :   0.00
 1st Qu.:   0.0   1st Qu.:  0.00   1st Qu.:   0.00
 Median :   0.0   Median :  0.00   Median :   0.00
 Mean   :  34.8   Mean   :  0.07   Mean   :   4.62
 3rd Qu.:  10.0   3rd Qu.:  0.00   3rd Qu.:   0.00
 Max.   :6800.0   Max.   :150.00   Max.   :4000.00
 NA's   :159740   NA's   :60124    NA's   :173244


####  29 :  muc5b1  ############################
      tinh            huyen             xa            diaban          hoso            m5b1ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :201.0
 1st Qu.:30.00   1st Qu.:290.0   1st Qu.:10552   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:213.0
 Median :49.00   Median :512.0   Median :20680   Median : 8.50   Median :14.00   Median :217.0
 Mean   :50.81   Mean   :512.2   Mean   :18643   Mean   :11.01   Mean   :14.52   Mean   :216.6
 3rd Qu.:79.00   3rd Qu.:760.0   3rd Qu.:26743   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:221.0
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :228.0
     m5b1c2           m5b1c3           m5b1c4           m5b1c5
 Min.   :    1.0   Min.   :    0.00   Min.   :   0.000   Min.   :   0.0000
 1st Qu.:   10.0   1st Qu.:   10.00   1st Qu.:   0.000   1st Qu.:   0.0000
 Median :   20.0   Median :   20.00   Median :   0.000   Median :   0.0000
 Mean   :   53.4   Mean   :   48.62   Mean   :   4.386   Mean   :   0.3914
 3rd Qu.:   50.0   3rd Qu.:   42.00   3rd Qu.:   0.000   3rd Qu.:   0.0000
 Max.   :11500.0   Max.   :11500.00   Max.   :2500.000   Max.   :1170.0000


####  30 :  muc5b2  ############################
      tinh            huyen             xa            diaban          hoso            m5b2ma
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :301.0
 1st Qu.:27.00   1st Qu.:277.0   1st Qu.:10018   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:306.0
 Median :48.00   Median :492.0   Median :20245   Median : 8.00   Median :14.00   Median :310.0
 Mean   :49.67   Mean   :501.2   Mean   :18282   Mean   :10.85   Mean   :14.51   Mean   :312.6
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26509   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:319.0
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :336.0
     m5b2c2           m5b2c3
 Min.   :     0.0   Min.   :    0.00
 1st Qu.:    47.0   1st Qu.:    0.00
 Median :   100.0   Median :    0.00
 Mean   :   352.7   Mean   :   12.22
 3rd Qu.:   300.0   3rd Qu.:    0.00
 Max.   :150000.0   Max.   :50000.00
```

```
####  31 :  muc5b3  ##########################
      tinh           huyen             xa            diaban           hoso
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00
    m5b3c2_1          m5b3c2_2          m5b3c2_3          m5b3c2_4          m5b3c2_5
 Min.   :     0.00   Min.   :   0.00   Min.   :   0.00   Min.   :    0.00   Min.   :    0.0
 1st Qu.:     0.00   1st Qu.:   0.00   1st Qu.:   0.00   1st Qu.:    0.00   1st Qu.:    0.0
 Median :     0.00   Median :  50.00   Median :   0.00   Median :    0.00   Median :    0.0
 Mean   :    37.36   Mean   :  89.06   Mean   :  16.14   Mean   :   82.63   Mean   :  285.3
 3rd Qu.:    15.00   3rd Qu.: 100.00   3rd Qu.:   0.00   3rd Qu.:   42.50   3rd Qu.:    0.0
 Max.   :120000.00   Max.   :7000.00   Max.   :4000.00   Max.   :38500.00   Max.   :60000.0
    m5b3c2_6          m5b3c2_7          m5b3c2_8          m5b3c2_9
 Min.   :    0.0   Min.   :    0.0   Min.   :    0   Min.   :    0.0
 1st Qu.:    0.0   1st Qu.:    0.0   1st Qu.:  500   1st Qu.:    0.0
 Median :    0.0   Median :    0.0   Median : 1300   Median :    0.0
 Mean   :  457.4   Mean   :  238.8   Mean   : 1995   Mean   :  114.1
 3rd Qu.:  300.0   3rd Qu.:    0.0   3rd Qu.: 2500   3rd Qu.:    0.0
 Max.   :80000.0   Max.   :30000.0   Max.   :153150   Max.   :74000.0


####  32 :  muc6  ##########################
      tinh           huyen             xa            diaban           hoso          m6ma_01
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 0.000
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 2.000
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median : 2.000
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51   Mean   :
3.536
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 2.000
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00
Max.   :37.000

    m6ma_02          m6ma_03          m6ma_04          m6ma_05          m6ma_06          m6ma_07
 Min.   : 0.000   Min.   : 0.00   Min.   : 0.00   Min.   : 0.00   Min.   : 0.0   Min.   : 0.0
 1st Qu.: 3.000   1st Qu.: 7.00   1st Qu.:12.00   1st Qu.:14.00   1st Qu.:15.0   1st Qu.:20.0
 Median : 7.000   Median :12.00   Median :14.00   Median :15.00   Median :22.0   Median :25.0
 Mean   : 8.084   Mean   :12.44   Mean   :15.51   Mean   :17.94   Mean   :20.4   Mean   :22.7
 3rd Qu.:12.000   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:25.00   3rd Qu.:27.0   3rd Qu.:28.0
 Max.   :37.000   Max.   :37.00   Max.   :37.00   Max.   :37.00   Max.   :37.0   Max.   :37.0
 NA's   :95       NA's   :241     NA's   :477     NA's   :735     NA's   :1082   NA's   :1494
    m6ma_08          m6ma_09          m6ma_10          m6ma_11          m6ma_12          m6ma_13
 Min.   : 0      Min.   : 0.00   Min.   : 0.00   Min.   : 0.00   Min.   : 0.00   Min.   : 0.00
 1st Qu.:22      1st Qu.:24.00   1st Qu.:24.00   1st Qu.:25.00   1st Qu.:25.00   1st Qu.:24.00
 Median :27      Median :27.00   Median :28.00   Median :28.00   Median :30.00   Median :30.00
 Mean   :24      Mean   :24.63   Mean   :24.11   Mean   :24.51   Mean   :23.72   Mean   :23.07
 3rd Qu.:30      3rd Qu.:30.00   3rd Qu.:30.00   3rd Qu.:31.00   3rd Qu.:31.00   3rd Qu.:31.00
 Max.   :37      Max.   :37.00   Max.   :37.00   Max.   :37.00   Max.   :37.00   Max.   :37.00
 NA's   :1960    NA's   :2550    NA's   :3227    NA's   :4117    NA's   :4928    NA's   :5807
    m6ma_14          m6ma_15          m6ma_16          m6ma_17          m6ma_18          m6ma_19
 Min.   : 0.0   Min.   : 0.00   Min.   : 0.00   Min.   : 0.0   Min.   : 0.00   Min.   : 0.00
 1st Qu.: 0.0   1st Qu.: 0.00   1st Qu.: 0.00   1st Qu.: 0.0   1st Qu.: 0.00   1st Qu.: 0.00
 Median :30.0   Median :30.00   Median :31.00   Median :31.0   Median :31.00   Median :32.00
 Mean   :22.6   Mean   :22.33   Mean   :22.54   Mean   :22.5   Mean   :21.72   Mean   :21.64
```

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 3rd Qu.:32.0   3rd Qu.:32.00   3rd Qu.:32.00   3rd Qu.:32.0   3rd Qu.:34.00   3rd Qu.:34.00
 Max.   :37.0   Max.   :37.00   Max.   :37.00   Max.   :37.0   Max.   :37.00   Max.   :37.00
 NA's   :6643   NA's   :7361    NA's   :7932    NA's   :8354   NA's   :8668    NA's   :8912
    m6ma_20         m6ma_21         m6ma_22         m6ma_23         m6ma_24         m6ma_25
 Min.   : 0.00   Min.   : 0.00   Min.   : 0.00   Min.   : 0.0   Min.   : 0.00   Min.   : 0.00
 1st Qu.: 0.00   1st Qu.: 0.00   1st Qu.: 0.00   1st Qu.: 0.0   1st Qu.: 0.00   1st Qu.: 0.00
 Median :32.00   Median :33.00   Median :33.00   Median : 0.0   Median : 0.00   Median : 0.00
 Mean   :22.73   Mean   :22.55   Mean   :21.76   Mean   :17.1   Mean   :16.18   Mean   :16.57
 3rd Qu.:35.00   3rd Qu.:35.00   3rd Qu.:35.00   3rd Qu.:35.0   3rd Qu.:35.00   3rd Qu.:35.00
 Max.   :37.00   Max.   :37.00   Max.   :37.00   Max.   :37.0   Max.   :37.00   Max.   :37.00
 NA's   :9079    NA's   :9182    NA's   :9255    NA's   :9308   NA's   :9354    NA's   :9378
    m6ma_26         m6ma_27         m6ma_28         m6ma_29         m6ma_30         m6ma_31
 Min.   : 0.00   Min.   : 0.00   Min.   :0       Min.   : NA     Min.   : NA     Min.   : NA
 1st Qu.: 0.00   1st Qu.: 0.00   1st Qu.:0       1st Qu.: NA     1st Qu.: NA     1st Qu.: NA
 Median : 0.00   Median : 0.00   Median :0       Median : NA     Median : NA     Median : NA
 Mean   :14.00   Mean   : 8.75   Mean   :0       Mean   :NaN     Mean   :NaN     Mean   :NaN
 3rd Qu.:34.75   3rd Qu.: 8.75   3rd Qu.:0       3rd Qu.: NA     3rd Qu.: NA     3rd Qu.: NA
 Max.   :36.00   Max.   :35.00   Max.   :0       Max.   : NA     Max.   : NA     Max.   : NA
 NA's   :9389    NA's   :9395    NA's   :9398    NA's   :9399    NA's   :9399    NA's   :9399
    m6ma_32         m6ma_33         m6ma_34         m6ma_35         m6ma_36         m6ma_37
 Min.   : NA     Min.   : NA     Min.   : NA     Min.   : NA     Min.   : NA     Min.   : NA
 1st Qu.: NA     1st Qu.: NA     1st Qu.: NA     1st Qu.: NA     1st Qu.: NA     1st Qu.: NA
 Median : NA     Median : NA     Median : NA     Median : NA     Median : NA     Median : NA
 Mean   :NaN     Mean   :NaN     Mean   :NaN     Mean   :NaN     Mean   :NaN     Mean   :NaN
 3rd Qu.: NA     3rd Qu.: NA     3rd Qu.: NA     3rd Qu.: NA     3rd Qu.: NA     3rd Qu.: NA
 Max.   : NA     Max.   : NA     Max.   : NA     Max.   : NA     Max.   : NA     Max.   : NA
 NA's   :9399    NA's   :9399    NA's   :9399    NA's   :9399    NA's   :9399    NA's   :9399
```

```
####  33 :  muc6b  ############################
      tinh           huyen             xa          diaban          hoso           m6c2
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 1.00
 1st Qu.:27.00   1st Qu.:275.0   1st Qu.: 9910   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:12.00
 Median :48.00   Median :493.0   Median :20272   Median : 9.00   Median :14.00   Median :22.00
 Mean   :49.79   Mean   :502.3   Mean   :18275   Mean   :11.32   Mean   :14.54   Mean   :18.96
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26539   3rd Qu.:15.00   3rd Qu.:15.00   3rd Qu.:28.00
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :37.00

      m6c3            m6c4t            m6c4n           m6c5              m6c6
 Min.   :-1.000   Min.   :-1.000   Min.   : -1   Min.   :      0   Min.   :     -1
 1st Qu.: 1.000   1st Qu.: 0.000   1st Qu.:2004   1st Qu.:    100   1st Qu.:    250
 Median : 1.000   Median : 0.000   Median :2007   Median :    670   Median :    600
 Mean   : 1.096   Mean   : 1.081   Mean   :2006   Mean   :   3813   Mean   :   2344
 3rd Qu.: 1.000   3rd Qu.: 0.000   3rd Qu.:2008   3rd Qu.:   2500   3rd Qu.:   1750
 Max.   :15.000   Max.   :12.000   Max.   :2010   Max.   :1080000   Max.   :1200000
                                                 NA's   :78796
```

```
####  34 :  muc7  ############################
      tinh           huyen             xa          diaban          hoso           m7c1
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   : 0.000
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.: 1.000
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median : 1.000
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51   Mean   :
1.021
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.: 1.000
```

```
 Max.    :96.00   Max.    :973.0   Max.    :32248   Max.    :91.00   Max.    :24.00
Max.    :11.000

      m7c2            m7c3            m7c4            m7c5            m7c6
 Min.    : -1.00   Min.    :1.000   Min.    :1.000   Min.    :1.000   Min.    :1.000
 1st Qu.: 40.00   1st Qu.:1.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
 Median : 60.00   Median :2.000   Median :3.000   Median :2.000   Median :2.000
 Mean    : 69.91   Mean    :2.099   Mean    :2.381   Mean    :2.531   Mean    :1.974
 3rd Qu.: 84.00   3rd Qu.:3.000   3rd Qu.:3.000   3rd Qu.:3.000   3rd Qu.:2.000
 Max.    :660.00   Max.    :5.000   Max.    :5.000   Max.    :6.000   Max.    :2.000
 NA's    :9        NA's    :9        NA's    :9        NA's    :9        NA's    :9
      m7c7            m7c8            m7c9            m7c10           m7c11
 Min.    :   120   Min.    :   -1   Min.    :      -1   Min.    :1.000   Min.    :1.000
 1st Qu.:  3000   1st Qu.:   12   1st Qu.:   60000   1st Qu.:2.000   1st Qu.:2.000
 Median :  4500   Median :   12   Median :  150000   Median :2.000   Median :2.000
 Mean    :  7993   Mean    :  118   Mean    :  425340   Mean    :1.915   Mean    :1.828
 3rd Qu.:  7200   3rd Qu.:   23   3rd Qu.:  400000   3rd Qu.:2.000   3rd Qu.:2.000
 Max.    :180000   Max.    :24000   Max.    :30000000   Max.    :2.000   Max.    :2.000
 NA's    :9156     NA's    :9156     NA's    :9          NA's    :9        NA's    :8603
     m7c12           m7c13           m7c14           m7c15a          m7c15b
 Min.    :     0   Min.    :    0.0   Min.    : 1.000   Min.    :1.000   Min.    :1.000
 1st Qu.:  5366   1st Qu.:    0.0   1st Qu.: 2.000   1st Qu.:1.000   1st Qu.:2.000
 Median : 13806   Median :    0.0   Median : 4.000   Median :1.000   Median :2.000
 Mean    : 32526   Mean    :  396.9   Mean    : 4.191   Mean    :1.093   Mean    :1.854
 3rd Qu.: 29375   3rd Qu.:    0.0   3rd Qu.: 6.000   3rd Qu.:1.000   3rd Qu.:2.000
 Max.    :543781   Max.    :87977.0   Max.    :10.000   Max.    :2.000   Max.    :2.000
 NA's    :9262     NA's    :9
     m7c16           m7c17           m7c18           m7c19           m7c19k
 Min.    :   0.0   Min.    :1.000   Min.    :1.000   Min.    :   -1.0   Min.    :  -1.0
 1st Qu.:   0.0   1st Qu.:1.000   1st Qu.:1.000   1st Qu.:   30.0   1st Qu.:  42.0
 Median :   0.0   Median :2.000   Median :1.000   Median :   60.0   Median :  73.0
 Mean    : 185.7   Mean    :2.708   Mean    :1.059   Mean    :  107.3   Mean    : 104.4
 3rd Qu.: 240.0   3rd Qu.:4.000   3rd Qu.:1.000   3rd Qu.:  124.5   3rd Qu.: 130.0
 Max.    :8400.0   Max.    :9.000   Max.    :4.000   Max.    :23000.0   Max.    :2538.0
                                                    NA's    :324       NA's    :324
     m7c20           m7c21           m7c22           m7c23
 Min.    :     0   Min.    :1.000   Min.    :  0.00   Min.    :     0
 1st Qu.:   360   1st Qu.:1.000   1st Qu.:  0.00   1st Qu.:   420
 Median :   700   Median :3.000   Median :  0.00   Median :   906
 Mean    :  1201   Mean    :3.232   Mean    : 37.03   Mean    :  2027
 3rd Qu.:  1440   3rd Qu.:5.000   3rd Qu.: 60.00   3rd Qu.:  2065
 Max.    :280000   Max.    :6.000   Max.    :900.00   Max.    :280000



####  35 :  muc8  ############################
      tinh            huyen             xa            diaban          hoso            m8c1a
 Min.    : 1.00   Min.    :  1.0   Min.    :    4   Min.    : 1.00   Min.    :13.00   Min.    :1.000
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:2.000
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median :2.000
 Mean    :49.74   Mean    :501.7   Mean    :18258   Mean    :10.68   Mean    :14.51   Mean    :1.873
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:2.000
 Max.    :96.00   Max.    :973.0   Max.    :32248   Max.    :91.00   Max.    :24.00   Max.    :9.000

     m8c1b           m8c1c           m8c1d           m8c1e           m8c21_01        m8c21_02
 Min.    :1.000   Min.    :1.000   Min.    :1.000   Min.    :1.000   Min.    :1.000   Min.    :1.000
```

```
1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000
Mean   :1.872   Mean   :1.871   Mean   :1.878   Mean   :1.883   Mean   :1.896   Mean   :1.871
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000
Max.   :9.000   Max.   :9.000   Max.   :2.000   Max.   :2.000   Max.   :3.000   Max.   :3.000

   m8c21_03        m8c21_04        m8c21_05        m8c21_06        m8c21_07        m8c21_08
Min.   :1.000   Min.   :1.00   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
1st Qu.:2.000   1st Qu.:2.00   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
Median :2.000   Median :2.00   Median :2.000   Median :2.000   Median :2.000   Median :2.000
Mean   :1.959   Mean   :2.01   Mean   :2.028   Mean   :2.006   Mean   :1.997   Mean   :2.033
3rd Qu.:2.000   3rd Qu.:2.00   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000
Max.   :3.000   Max.   :3.00   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000

   m8c21_09        m8c21_10        m8c21_11        m8c21_12        m8c21_13        m8c21_14
Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000
Mean   :1.945   Mean   :2.033   Mean   :1.959   Mean   :2.034   Mean   :1.917   Mean   :1.949
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000
Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000

   m8c21_15        m8c22_01        m8c22_02        m8c22_03        m8c22_04        m8c22_05
Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.00   Min.   :1.000
1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.00   1st Qu.:2.000
Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.00   Median :2.000
Mean   :1.997   Mean   :1.897   Mean   :1.875   Mean   :1.961   Mean   :2.01   Mean   :2.027
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.00   3rd Qu.:2.000
Max.   :9.000   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.00   Max.   :3.000

   m8c22_06        m8c22_07        m8c22_08        m8c22_09        m8c22_10        m8c22_11
Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000   Median :2.000
Mean   :2.009   Mean   :1.998   Mean   :2.033   Mean   :1.946   Mean   :2.033   Mean   :1.965
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000
Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :3.000

   m8c22_12        m8c22_13        m8c22_14        m8c22_15      m8c2a            m8c2b
Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1   Min.   : 1.000   Min.   :  500
1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2   1st Qu.: 1.000   1st Qu.: 1000
Median :2.000   Median :2.000   Median :2.000   Median :2   Median : 3.000   Median : 1500
Mean   :2.035   Mean   :1.895   Mean   :1.934   Mean   :2   Mean   : 2.818   Mean   :14286
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2   3rd Qu.: 3.000   3rd Qu.:19500
Max.   :3.000   Max.   :3.000   Max.   :3.000   Max.   :9   Max.   :10.000   Max.   :57000
                                                            NA's   :9388     NA's   :9392
     m8c3            m8c9           m8c10a          m8c10b          m8c10c
Min.   :1.000   Min.   :1.000   Min.   : 1.000   Min.   : 0.000   Min.   : 0.000
1st Qu.:2.000   1st Qu.:1.000   1st Qu.: 5.000   1st Qu.: 4.000   1st Qu.: 1.000
Median :2.000   Median :2.000   Median : 6.000   Median : 6.000   Median : 6.000
Mean   :1.866   Mean   :1.949   Mean   : 6.345   Mean   : 5.735   Mean   : 5.147
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.: 7.000   3rd Qu.: 7.000   3rd Qu.: 8.000
Max.   :2.000   Max.   :9.000   Max.   :12.000   Max.   :12.000   Max.   :12.000
                NA's   :1       NA's   :7774     NA's   :7774     NA's   :7950
    m8c11a          m8c11b          m8c12a          m8c12b          m8c12c          m8c13
Min.   :1.000   Min.   :1.00   Min.   :1.000   Min.   :1.000   Min.   :1.000   Min.   :1.000
```

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 1st Qu.:2.000   1st Qu.:2.00   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000   1st Qu.:2.000
 Median :2.000   Median :2.00   Median :2.000   Median :2.000   Median :2.000   Median :2.000
 Mean   :2.038   Mean   :1.97   Mean   :1.822   Mean   :2.049   Mean   :2.031   Mean   :2.037
 3rd Qu.:2.000   3rd Qu.:2.00   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:2.000
 Max.   :4.000   Max.   :4.00   Max.   :9.000   Max.   :4.000   Max.   :4.000   Max.   :4.000
 NA's   :1       NA's   :1      NA's   :1       NA's   :1       NA's   :1       NA's   :1


####  36 :  muc8vayno  ############################
      tinh           huyen             xa            diaban           hoso           m8ma
 Min.   : 1.00   Min.   : 16.0   Min.   :  382   Min.   : 1.000   Min.   :13.00   Min.   :1.000
 1st Qu.:15.00   1st Qu.:137.0   1st Qu.: 4495   1st Qu.: 3.000   1st Qu.:13.00   1st Qu.:1.000
 Median :38.00   Median :394.0   Median :15427   Median : 6.000   Median :14.00   Median :1.000
 Mean   :41.04   Mean   :410.8   Mean   :15077   Mean   : 8.011   Mean   :14.46
Mean   :1.086
 3rd Qu.:64.00   3rd Qu.:627.5   3rd Qu.:23755   3rd Qu.:10.000   3rd Qu.:15.00   3rd Qu.:1.000
 Max.   :96.00   Max.   :972.0   Max.   :32218   Max.   :68.000   Max.   :24.00
Max.   :4.000

      m8c4            m8c5            m8c6a             m8c6b            m8c7
 Min.   :1.000   Min.   :   220   Min.   : 0.0000   Min.   :1.000   Min.   :   0.000
 1st Qu.:1.000   1st Qu.:  6000   1st Qu.: 0.5000   1st Qu.:1.000   1st Qu.:   0.000
 Median :1.000   Median : 10000   Median : 0.6500   Median :1.000   Median :   0.000
 Mean   :1.576   Mean   : 12319   Mean   : 0.7488   Mean   :1.603   Mean   :   8.334
 3rd Qu.:1.000   3rd Qu.: 15000   3rd Qu.: 0.6500   3rd Qu.:1.000   3rd Qu.:   0.000
 Max.   :5.000   Max.   :200000   Max.   :18.0000   Max.   :9.000   Max.   :2000.000
                                                    NA's   :104
      m8c8
 Min.   :     0
 1st Qu.:  5000
 Median :  9720
 Mean   : 11636
 3rd Qu.: 15000
 Max.   :180000


####  37 :  ttchung  ############################
      tinh           huyen             xa            diaban           hoso           quyen
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   :13.00   Min.   :1
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:13.00   1st Qu.:1
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :14.00   Median :1
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :14.51   Mean   :1
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:15.00   3rd Qu.:1
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :24.00   Max.   :1

    tsphieu       ttnt           dantoc           phdich           dtv             dt
 Min.   :1   Min.   :1.000   Min.   : 1.000   Min.   :1.000   Min.   : 1.0   Min.   : 1.000
 1st Qu.:1   1st Qu.:1.000   1st Qu.: 1.000   1st Qu.:2.000   1st Qu.: 6.0   1st Qu.: 3.000
 Median :1   Median :2.000   Median : 1.000   Median :2.000   Median :13.0   Median : 6.000
 Mean   :1   Mean   :1.718   Mean   : 2.246   Mean   :1.948   Mean   :16.3   Mean   : 9.694
 3rd Qu.:1   3rd Qu.:2.000   3rd Qu.: 1.000   3rd Qu.:2.000   3rd Qu.:22.0   3rd Qu.:10.000
 Max.   :1   Max.   :2.000   Max.   :56.000   Max.   :2.000   Max.   :90.0   Max.   :90.000

     ngaydt         thangdt          tsnguoi            m1b1          tsmuc1b
 Min.   : 1.00   Min.   : 6.000   Min.   : 1.000   Min.   :1.000   Min.   :1.00
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1st Qu.: 9.00   1st Qu.: 7.000   1st Qu.: 3.000   1st Qu.:2.000   1st Qu.:1.00
Median :15.00   Median : 9.000   Median : 4.000   Median :2.000   Median :1.00
Mean   :15.43   Mean   : 9.297   Mean   : 3.936   Mean   :1.904   Mean   :1.36
3rd Qu.:21.00   3rd Qu.:12.000   3rd Qu.: 5.000   3rd Qu.:2.000   3rd Qu.:2.00
Max.   :31.00   Max.   :12.000   Max.   :15.000   Max.   :2.000   Max.   :5.00
                                                                  NA's   :8501
    m2act            m2atn            m2btn          m4atn1           m4atn2
Min.   :     0   Min.   :    0.0   Min.   : NA    Min.   :     0   Min.   :     0
1st Qu.:     0   1st Qu.:    0.0   1st Qu.: NA    1st Qu.:     0   1st Qu.:     0
Median :   663   Median :    0.0   Median : NA    Median :  3244   Median :     0
Mean   :  2882   Mean   :  140.4   Mean   :NaN    Mean   : 20376   Mean   :  2163
3rd Qu.:  2801   3rd Qu.:    0.0   3rd Qu.: NA    3rd Qu.: 29464   3rd Qu.:   706
Max.   :455500   Max.   :46184.0   Max.   : NA    Max.   :842113   Max.   :176610
                                   NA's   :9399
    m4atn3           m4atn4           m4atn5           m4atn6           m4atn
Min.   :     0   Min.   :    0.00   Min.   :    0.0   Min.   :     0   Min.   :     0
1st Qu.:     0   1st Qu.:    0.00   1st Qu.:    0.0   1st Qu.:     0   1st Qu.:     0
Median :     0   Median :    0.00   Median :    0.0   Median :     0   Median : 12726
Mean   :  1276   Mean   :   37.45   Mean   :  237.7   Mean   :  2617   Mean   : 26708
3rd Qu.:     0   3rd Qu.:    0.00   3rd Qu.:    0.0   3rd Qu.:     0   3rd Qu.: 36273
Max.   :163145   Max.   :26901.00   Max.   :24523.0   Max.   :176552   Max.   :935096

    m4b21a           m4b21b           m4b21t             kydt           m4b0c1
Min.   :1.000   Min.   :1.000   Min.   :       0   Min.   :1.000   Min.   :1.000
1st Qu.:1.000   1st Qu.:2.000   1st Qu.:       0   1st Qu.:1.000   1st Qu.:1.000
Median :2.000   Median :2.000   Median :       0   Median :2.000   Median :1.000
Mean   :1.521   Mean   :1.998   Mean   :    9569   Mean   :1.996   Mean   :1.333
3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:    4638   3rd Qu.:3.000   3rd Qu.:2.000
Max.   :2.000   Max.   :2.000   Max.   :13088807   Max.   :3.000   Max.   :2.000
                NA's   :4504
    m4b0tn           m4b1a            m4b1b           m4b11t           m4b12t
Min.   :    0.0   Min.   :1.000   Min.   :1.000   Min.   :     0   Min.   :     0
1st Qu.:    0.0   1st Qu.:1.000   1st Qu.:2.000   1st Qu.:     0   1st Qu.:     0
Median :    0.0   Median :1.000   Median :2.000   Median :     0   Median :     0
Mean   :  183.4   Mean   :1.379   Mean   :1.999   Mean   :  7464   Mean   :  2885
3rd Qu.:    0.0   3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:  8065   3rd Qu.:  1318
Max.   :66500.0   Max.   :2.000   Max.   :2.000   Max.   :393319   Max.   :798447
                                  NA's   :5839
    m4b13t           m4b14t          tongthu_01        tongthu_02        tongthu_03
Min.   :     0   Min.   :    0.0   Min.   :  1387   Min.   :    0.0   Min.   :    0.0
1st Qu.:     0   1st Qu.:    0.0   1st Qu.: 36020   1st Qu.:    0.0   1st Qu.:    0.0
Median :     0   Median :    0.0   Median : 60724   Median :    0.0   Median :    0.0
Mean   :  4313   Mean   :  1223.7   Mean   :102523   Mean   :  140.4   Mean   :  592.7
3rd Qu.:     0   3rd Qu.:  236.5   3rd Qu.:104914   3rd Qu.:    0.0   3rd Qu.:  221.0
Max.   :3508317   Max.   :369377.0   Max.   :16728795   Max.   :46184.0   Max.   :142745.0

  tongthu_04        tongthu_05        tongthu_06        tongthu_07        tongthu_08
Min.   :     0   Min.   :    0.0   Min.   :     0   Min.   :     0   Min.   :    0.00
1st Qu.:     0   1st Qu.:    0.0   1st Qu.:     0   1st Qu.:     0   1st Qu.:    0.00
Median : 12726   Median :    0.0   Median :  5194   Median :     0   Median :    0.00
Mean   : 26708   Mean   :  183.4   Mean   : 16106   Mean   :  9569   Mean   :   35.17
3rd Qu.: 36273   3rd Qu.:    0.0   3rd Qu.: 17259   3rd Qu.:  4638   3rd Qu.:    0.00
Max.   :935096   Max.   :66500.0   Max.   :3508317   Max.   :13088807   Max.   :40650.00

  tongthu_09        tongthu_10        tongthu_11        tongthu_12        tongthu_13
Min.   :    0.0   Min.   :    0.0   Min.   :     0   Min.   :     0   Min.   : -20149.0
```

```
1st Qu.:      0.0   1st Qu.:     0.0   1st Qu.:       0   1st Qu.:       0   1st Qu.:    263.5
Median :      0.0   Median :     0.0   Median :       0   Median :       0   Median :   1332.0
Mean   :    524.4   Mean   :   724.4   Mean   :    4981   Mean   :   34604   Mean   :   7881.1
3rd Qu.:      0.0   3rd Qu.:     0.0   3rd Qu.:       0   3rd Qu.:   18136   3rd Qu.:   6198.0
Max.   :485583.0   Max.   :67000.0   Max.   :3328050   Max.   :6920845   Max.   :1112385.0

  tongthu_14          m4b22t            m4b21c            m4b22c            m4b31a
Min.   :      0.0   Min.   :     0.00   Min.   :       0   Min.   :   0.000   Min.   :1.000
1st Qu.:      0.0   1st Qu.:     0.00   1st Qu.:       0   1st Qu.:   0.000   1st Qu.:2.000
Median :      0.0   Median :     0.00   Median :       0   Median :   0.000   Median :2.000
Mean   :    474.1   Mean   :    35.17   Mean   :    6447   Mean   :   4.179   Mean   :1.982
3rd Qu.:      0.0   3rd Qu.:     0.00   3rd Qu.:    2376   3rd Qu.:   0.000   3rd Qu.:2.000
Max.   :543781.0   Max.   :40650.00   Max.   :6950799   Max.   :4440.000   Max.   :2.000

    m4b31b        m4b3t             m4b3c             m4b41a          m4b41b
Min.   :2     Min.   :     0.0   Min.   :     0.0   Min.   :1.000   Min.   :2
1st Qu.:2     1st Qu.:     0.0   1st Qu.:     0.0   1st Qu.:2.000   1st Qu.:2
Median :2     Median :     0.0   Median :     0.0   Median :2.000   Median :2
Mean   :2     Mean   :   524.4   Mean   :   280.6   Mean   :1.776   Mean   :2
3rd Qu.:2     3rd Qu.:     0.0   3rd Qu.:     0.0   3rd Qu.:2.000   3rd Qu.:2
Max.   :2     Max.   :485583.0   Max.   :322355.0   Max.   :2.000   Max.   :2
NA's   :173                                                          NA's   :2110
    m4b4t             m4b4c            chisxkd_1         chisxkd_2         chisxkd_3
Min.   :    0.0   Min.   :    0.00   Min.   :      0   Min.   :      0   Min.   :      0
1st Qu.:    0.0   1st Qu.:    0.00   1st Qu.:   1334   1st Qu.:      0   1st Qu.:      0
Median :    0.0   Median :    0.00   Median :   7890   Median :   1593   Median :      0
Mean   :  724.4   Mean   :   98.95   Mean   :  36457   Mean   :   6426   Mean   :   6447
3rd Qu.:    0.0   3rd Qu.:    0.00   3rd Qu.:  22393   3rd Qu.:   5888   3rd Qu.:   2376
Max.   :67000.0   Max.   :31768.00   Max.   :8159789   Max.   :1208990   Max.   :6950799

  chisxkd_4         chisxkd_5         chisxkd_6         chisxkd_7         chisxkd_8
Min.   :   0.000   Min.   :     0.0   Min.   :    0.00   Min.   :      0   Min.   :      0
1st Qu.:   0.000   1st Qu.:     0.0   1st Qu.:    0.00   1st Qu.:      0   1st Qu.:      0
Median :   0.000   Median :     0.0   Median :    0.00   Median :      0   Median :      0
Mean   :   4.179   Mean   :   280.6   Mean   :   98.95   Mean   :   3198   Mean   :  20001
3rd Qu.:   0.000   3rd Qu.:     0.0   3rd Qu.:    0.00   3rd Qu.:      0   3rd Qu.:   2890
Max.   :4440.000   Max.   :322355.0   Max.   :31768.00   Max.   :3200105   Max.   :5830543

   thunhap           thubq          chikhac_1         chikhac_2        chikhac_3
Min.   :   1387   Min.   :    34   Min.   :     0   Min.   :     0   Min.   :    0
1st Qu.:  28282   1st Qu.:   649   1st Qu.:     0   1st Qu.:   365   1st Qu.: 1016
Median :  47224   Median :  1064   Median :   663   Median :   980   Median : 1633
Mean   :  66066   Mean   :  1507   Mean   :  2882   Mean   :  2900   Mean   : 1970
3rd Qu.:  77936   3rd Qu.:  1770   3rd Qu.:  2801   3rd Qu.:  2700   3rd Qu.: 2496
Max.   :8569006   Max.   :238028   Max.   :455500   Max.   :260000   Max.   :28170

  chikhac_4        chikhac_5         chikhac_6         chikhac_7        chikhac_8
Min.   :   89   Min.   :    0.0   Min.   :     0   Min.   :     0   Min.   :      0
1st Qu.: 1193   1st Qu.:  279.5   1st Qu.:  1570   1st Qu.:   860   1st Qu.:      0
Median : 1766   Median :  477.0   Median :  2881   Median :  2000   Median :      0
Mean   : 2092   Mean   :  630.9   Mean   :  4625   Mean   :  3315   Mean   :   5193
3rd Qu.: 2574   3rd Qu.:  781.5   3rd Qu.:  5228   3rd Qu.:  3933   3rd Qu.:   3000
Max.   :26343   Max.   :13362.0   Max.   :241600   Max.   :155537   Max.   :1092000

  chikhac_9         m4b5c1a           m4b5c1b           m4b5t             m4b5c
Min.   :     0   Min.   :1.000   Min.   :1       Min.   :      0   Min.   :      0
```

```
1st Qu.:   420   1st Qu.:2.000   1st Qu.:2       1st Qu.:       0   1st Qu.:       0
Median :   906   Median :2.000   Median :2       Median :       0   Median :       0
Mean   :  2027   Mean   :1.803   Mean   :2       Mean   :    4981   Mean   :    3198
3rd Qu.:  2065   3rd Qu.:2.000   3rd Qu.:2       3rd Qu.:       0   3rd Qu.:       0
Max.   :280000   Max.   :2.000   Max.   :2       Max.   :3328050   Max.   :3200105
                                 NA's   :1856
     m4c1           m4ctt             m4ct             m4cct             m4cc
Min.   :1.000   Min.   :       0   Min.   :       0   Min.   :       0   Min.   :       0
1st Qu.:1.000   1st Qu.:       0   1st Qu.:       0   1st Qu.:       0   1st Qu.:       0
Median :2.000   Median :       0   Median :       0   Median :       0   Median :       0
Mean   :1.653   Mean   :   35383   Mean   :   34604   Mean   :   20453   Mean   :   20001
3rd Qu.:2.000   3rd Qu.:   18348   3rd Qu.:   18136   3rd Qu.:    2932   3rd Qu.:    2890
Max.   :2.000   Max.   :6920845   Max.   :6920845   Max.   :5830543   Max.   :5830543

    m4dtn              m5a1ct          m5a1c4           m5a1c5          m5a2ct
Min.   : -20149.0   Min.   :    0   Min.   :    0.0   Min.   :    0.0   Min.   :   89
1st Qu.:    263.5   1st Qu.: 1016   1st Qu.:  748.5   1st Qu.:    0.0   1st Qu.: 1193
Median :   1332.0   Median : 1633   Median : 1280.0   Median :  166.0   Median : 1766
Mean   :   7881.1   Mean   : 1970   Mean   : 1606.5   Mean   :  363.2   Mean   : 2092
3rd Qu.:   6198.0   3rd Qu.: 2496   3rd Qu.: 2042.5   3rd Qu.:  495.0   3rd Qu.: 2574
Max.   :1112385.0   Max.   :28170   Max.   :28170.0   Max.   :12812.0   Max.   :26343

    m5a2c6          m5a2c7          m5a2c8          m5b1ct          m5b1c6
Min.   :    0   Min.   :   0.0   Min.   :   0.00   Min.   :    0.0   Min.   :    0.0
1st Qu.:  803   1st Qu.:   0.0   1st Qu.:   0.00   1st Qu.:  279.5   1st Qu.:  215.0
Median : 1423   Median : 150.0   Median :   0.00   Median :  477.0   Median :  423.0
Mean   : 1776   Mean   : 284.7   Mean   :  31.15   Mean   :  630.9   Mean   :  574.4
3rd Qu.: 2288   3rd Qu.: 474.5   3rd Qu.:   0.00   3rd Qu.:  781.5   3rd Qu.:  730.0
Max.   :26343   Max.   :6800.0   Max.   :4000.00   Max.   :13362.0   Max.   :13362.0

    m5b1c7          m5b1c8           m5b2ct          m5b2c4          m5b2c5
Min.   :   0.00   Min.   :   0.000   Min.   :     0   Min.   :     0   Min.   :     0.0
1st Qu.:   0.00   1st Qu.:   0.000   1st Qu.:  1570   1st Qu.:  1504   1st Qu.:     0.0
Median :   0.00   Median :   0.000   Median :  2881   Median :  2810   Median :     0.0
Mean   :  51.82   Mean   :   4.623   Mean   :  4625   Mean   :  4470   Mean   :   154.9
3rd Qu.:  60.00   3rd Qu.:   0.000   3rd Qu.:  5228   3rd Qu.:  5108   3rd Qu.:     0.0
Max.   :2600.00   Max.   :1386.000   Max.   :241600   Max.   :161110   Max.   :120800.0

    m5b3ct           m6c7             m3c1          m3ct1           m3ct2
Min.   :    0   Min.   :      0   Min.   :1.000   Min.   :    0   Min.   :    0
1st Qu.:  860   1st Qu.:      0   1st Qu.:1.000   1st Qu.:    0   1st Qu.:    0
Median : 2000   Median :      0   Median :1.000   Median :  190   Median :    0
Mean   : 3315   Mean   :   5193   Mean   :1.202   Mean   : 1070   Mean   : 1127
3rd Qu.: 3933   3rd Qu.:   3000   3rd Qu.:1.000   3rd Qu.:  850   3rd Qu.:   75
Max.   :155537   Max.   :1092000   Max.   :2.000   Max.   :192500   Max.   :246000

    m3ct3            m3ct             m3tn            m4b15t          m4b1t
Min.   :   0.0   Min.   :    0   Min.   :    0.0   Min.   :   0   Min.   :    0
1st Qu.:   0.0   1st Qu.:  365   1st Qu.:    0.0   1st Qu.:   0   1st Qu.:    0
Median :   0.0   Median :  980   Median :    0.0   Median :   0   Median :  5194
Mean   : 160.3   Mean   : 2900   Mean   :  592.7   Mean   : 221   Mean   : 16106
3rd Qu.: 205.0   3rd Qu.: 2700   3rd Qu.:  221.0   3rd Qu.: 270   3rd Qu.: 17259
Max.   :16160.0   Max.   :260000   Max.   :142745.0   Max.   :10502   Max.   :3508317

    m4b1c
Min.   :      0
```

```
 1st Qu.:      0
 Median :   1593
 Mean   :   6426
 3rd Qu.:   5888
 Max.   :1208990
```

```
####  38 :  weight10  ############################
      tinh            huyen             xa            diaban           wt9
 Min.   : 1.00   Min.   :  1.0   Min.   :    4   Min.   : 1.00   Min.   : 369
 1st Qu.:26.00   1st Qu.:271.0   1st Qu.: 9646   1st Qu.: 4.00   1st Qu.:1834
 Median :48.00   Median :493.0   Median :20260   Median : 8.00   Median :2157
 Mean   :49.74   Mean   :501.7   Mean   :18258   Mean   :10.68   Mean   :2370
 3rd Qu.:77.00   3rd Qu.:747.0   3rd Qu.:26545   3rd Qu.:14.00   3rd Qu.:2682
 Max.   :96.00   Max.   :973.0   Max.   :32248   Max.   :91.00   Max.   :7936
```

5.3 Frequency table of categorical variables

Data check of categorical variables

```
> # file.names: Rnames[j]
> # file.list: lss2010[[j]]
> # variable.labels: var.names[[j]]
> # list of column numbers of categorical variables
> check.list<-list()
> check.list[[1]]<-c(12:14)
> check.list[[2]]<-c(7,8,12,14:16)
> check.list[[3]]<-c(7,8,10:12,14,15)
> check.list[[4]]<-c(8:13,15:18,32,33)
> check.list[[5]]<-c(9,10,15)
> check.list[[6]]<-c(7:9,11,12)
> check.list[[7]]<-c(7:10,16,17,20:22,27:30,36,37,40,41,46,48)
> check.list[[8]]<-c(6)
> check.list[[9]]<-c(6)
> check.list[[10]]<-c(6)
> check.list[[11]]<-c(6,8)
> check.list[[12]]<-c(6,8)
> check.list[[13]]<-c(6)
> check.list[[14]]<-c(6)
> check.list[[15]]<-c(6)
> check.list[[16]]<-c(6)
> check.list[[17]]<-c(6)
> check.list[[18]]<-c(6)
> check.list[[19]]<-c(6)
> check.list[[20]]<-c(6)
> check.list[[21]]<-c(6)
> check.list[[22]]<-c(6)
> check.list[[23]]<-c(6)
> check.list[[24]]<-c(7,9,12,13,16,18,20)
> check.list[[25]]<-c()
> check.list[[26]]<-c()
> check.list[[27]]<-c(6)
> check.list[[28]]<-c(6)
> check.list[[29]]<-c(6)
> check.list[[30]]<-c()
> check.list[[31]]<-c()
> check.list[[32]]<-c()
> check.list[[33]]<-c()
> check.list[[34]]<-c(8:11,15,16,19:21,23,24,28,29)
> check.list[[35]]<-c(6:14,16:29,31:40,43:53)
> check.list[[36]]<-c(7,10)
> check.list[[37]]<-c(6,8,10,16,28,29,32,34,35,57,58,61,62,85,110)
> check.list[[38]]<-c()



> for(j in 1:38){
+ if(length(check.list[[j]])==0){ next }
+ cat(c("¥n¥n","#### FREQUENCY OF VARIABLES IN ",j, ": ",Rnames[j],
+ "################################"),"¥n¥n")
+ for(k in check.list[[j]]){
```

```
+ variable.name<-colnames(lss2010[[j]])[k]
+ variable.label<-var.names[[j]][k]
+ cat(c("---",k,": ",variable.name,": ",variable.label,"------------- "))
+ print(table(lss2010[[j]][k],useNA="ifany"))
+ }}



 #### FREQUENCY OF VARIABLES IN  1 :  hhexpe10 ##############################

--- 12 :  urban10 :  Indicator that household is urban; 0 means rural -------------
   0    1
6750 2649
--- 13 :  reg8 :  8-region coding -------------
   1    2    3    4    5    6    7    8
1845 1365  444  978  852  651 1359 1905
--- 14 :  reg6 :  6-region coding -------------
   1    2    3    4    5    6
1992 1662 2067  651 1122 1905


 #### FREQUENCY OF VARIABLES IN  2 :  muc1a ##############################

--- 7 :  m1ac2 :  Sex -------------
    1     2
18184 18815
--- 8 :  m1ac3 :  Relationship -------------
    1     2     3     4     5     6     7
 9399  7489 16165   846    49  2162   889
--- 12 :  m1ac6 :  Marial status -------------
    1     2     3     4     5  <NA>
 8641 18315  1858   321   120  7744
--- 14 :  m1ac8 :  Why has not lived household -------------
    1     2     3     4     5     6  <NA>
  891     7    13   327    85   117 35559
--- 15 :  m1ac9 :  Place of registering for residency -------------
    1     2     3     4     5
35838   586   536    10    29
--- 16 :  m1ac10 :  Province registering for residency -------------
    1     2     8    17    19    20    24    25    26    27    30    31    33    34    35    36
   34     1     7     3     4     3     4     3     5     3     6     2     2    17    13    17
   37    38    40    42    44    46    48    49    51    52    54    56    58    60    62    64
    5    28    14    13     7    25     4    11     7    20     7     2     1     7     2     8
   66    68    70    72    74    75    77    79    80    82    83    84    86    87    89    91
    7     9    12     9     7    12    13    30     5    11    11    22    12    20    10     6
   92    93    94    95    96    99  <NA>
   12    10    21     3    18     1 36453


 #### FREQUENCY OF VARIABLES IN  3 :  muc1b ##############################

--- 7 :  m1bc3 :  Sex -------------
  1   2
712 509
--- 8 :  m1bc4 :  Being servant, home worker, lodger or house sharer? -------------
   1    2
```

```
  55 1166
--- 10 :  m1bc6 :  Marital status -------------
   1    2    3    4    5 <NA>
 863  319    8   24    5    2
--- 11 :  m1bc7a :  The highest diploma of universalised and higher education -------------
  0   1   2   3   8   9  10  12
 95 256 398 322  35  83   4  28
--- 12 :  m1bc7b :  The highest diploma of vocational education -------------
   0    4    5    6    7
1004   80   56   61   20
--- 14 :  m1bc9 :  Place of registering for residency -------------
   1    2    3    4    5
1069   43  100    8    1
--- 15 :  m1bc10 :  Province registering for residency -------------
   1   10   14   17   19   22   25   30   31   36   37   38   42   48   49   52   56   58   60   64
   6    1    1    1    3    1    2    2    2    2    1    6    1    2    2    4    3    2    2    3
  66   68   74   75   77   79   80   84   86   91   92   94   95   99 <NA>
   3    2    5    4    1   27    2    1    2    1    2    1    3    7 1113


 #### FREQUENCY OF VARIABLES IN  4 :  muc2 ###############################

--- 8 :  m2c2a :  The highest qualification - General education and college-level upwards ---
   0    1    2    3    8    9   10   11   12 <NA>
8473 8734 8281 5351  449 1158   54    6   11 4482
--- 9 :  m2c2b :  The highest qualification - Vocational training -------------
    0     4     5     6     7  <NA>
29839  1008   586  1016    68  4482
--- 10 :  m2c3 :  Which type of school -------------
    1     2     3     4     5  <NA>
31640   325   229   231    92  4482
--- 11 :  m2c4 :  Does [name] go to school now? -------------
    1     2     3  <NA>
 6912  2643 22962  4482
--- 12 :  m2c5 :  Has [name] attended school over the past 12 months? -------------
    1     2  <NA>
  427 22535 14037
--- 13 :  m2c6 :  Level of education -------------
    0     1     2     3     4     5     6     7     8     9    10    12  <NA>
 1264  3026  2352  1602    32   124   209    88   402   837    18    28 27017
--- 15 :  m2c8 :  Which school does [name] attend? -------------
    1     2     3     4  <NA>
 9254   371   177   180 27017
--- 16 :  m2c9 :  Reduction of or exemption from tuition fees or contributions to education? ----
    1     2  <NA>
 4310  5672 27017
--- 17 :  m2c10a :  Reasons for reduction/exemption from tuition fees? -------------
    0     1     2     3     4     5     6     7     8     9  <NA>
   23   585   320     4    82   428    22  2593   189    64 32689
--- 18 :  m2c10b :  Reasons for reduction/exemption from contribution? -------------
    0     1     2     3     4     5     6     8     9  <NA>
 3152   418   300     2    34   286    27    46    45 32689
--- 32 :  m2c15a :  Toys bought in shops -------------
    1     2     9  <NA>
 1962  1005     2 34030
--- 33 :  m2c15b :  Self-made toys -------------
```

```
    1     2     9  <NA>
  447  2519     3 34030


 #### FREQUENCY OF VARIABLES IN  5 :  muc3a ##############################

--- 9 :  m3c3b :  Medical establishment code -------------
   1    2    3    4    5    6    7    8    9   10   11   12   13 <NA>
 137 4137  631 4302 3097 1003  318  630   57 3494  263 1404  173    1
--- 10 :  m3c4 :  Reasons for [name] to visit medical establishments? -------------
    1     2     3     4  <NA>
  920   706  3293 14727     1
--- 15 :  m3c7 :  Did the household afford the medical check/treatment? -------------
    1     2     3  <NA>
18462   984   200     1


 #### FREQUENCY OF VARIABLES IN  6 :  muc3b ##############################

--- 7 :  m3c9 :  Health insurance card in the last 12 months -------------
    1     2
22579 14420
--- 8 :  m3c10a :  The first type -------------
   -1     1     2     3     4     5     6     7     8     9    10  <NA>
    5  2971  3394   259  2581  2245  2694   764  5158  2117   391 14420
--- 9 :  m3c10b :  The second type -------------
    0     1     2     3     4     5     6     7     8     9    10  <NA>
22105    49   111     5   101    67    13     5    64    18    41 14420
--- 11 :  m3c12a :  Out-service -------------
    1     2  <NA>
 6419 16160 14420
--- 12 :  m3c12b :  In-service -------------
    1     2     9  <NA>
 2076 20502     1 14420


 #### FREQUENCY OF VARIABLES IN  7 :  muc4a ##############################

--- 7 :  m4ac1a :  waged/salaried employment -------------
    1     2  <NA>
 9791 23615  3593
--- 8 :  m4ac1b :  Involved in agri, fishery and farm -------------
    1     2  <NA>
13696 19710  3593
--- 9 :  m4ac1c :  involved bussiness, services -------------
    1     2  <NA>
 4977 28429  3593
--- 10 :  m4ac2 :  Working or not? -------------
    1     2  <NA>
22163 11243  3593
--- 16 :  m4ac4 :  Industry code -------------
    2     3     5     6     7     8     9    10    11    12    13    14    15    16    17    18
  168   650    33     6    13    63     1   559   641    11    71   559   179   290    58    22
   19    20    21    22    23    24    25    26    27    28    29    30    31    32    33    35
    2    42    19    54   207    31   192    60    22    27    11    26   243    67    51    55
   36    38    39    41    42    43    45    46    47    49    50    51    52    53    55    56
   20    31     2  1197   123    83   149   479  1787   499    57     5    36    15    61   716
```

```
   58    59    60    61    62    63    64    65    66    68    69    70    71    72    73    74
    5     2    11    66    17    12    62    22    16    40    14     4    27    14     8    17
   75    77    78    79    80    81    82    84    85    86    87    88    90    91    92    93
   12    11     4    10     8    13    19   633   698   184    14     5    13     8    38    29
   94    95    96    97    98    99   110   140   160  <NA>
   11    75   207    70     2     2  8620  1338   109 14836
--- 17 :  m4ac5 :  taken the most time-consuming job over the last 30 days -------------
    1     2     9  <NA>
20469  1693     1 14836
--- 20 :  m4ac8a :  8a.Economic types -------------
    1     2     3     4     5     6  <NA>
12354  5573    81  1519  2178   458 14836
--- 21 :  m4ac8b :  8b.Official? -------------
    1     2  <NA>
 1580   598 34821
--- 22 :  m4ac9 :  Has [name] received salaries, wages for this job? -------------
    1     2  <NA>
 7587 14576 14836
--- 27 :  m4ac13a :  Signing a payroll book? -------------
    1     2  <NA>
 3990  3597 29412
--- 28 :  m4ac13b :  Paid leave / festive occasions? -------------
    1     2  <NA>
 3096  4491 29412
--- 29 :  m4ac13c :  Social insurance? -------------
    1     2  <NA>
 2921  4666 29412
--- 30 :  m4ac14 :  Any other jobs in the last 12 months? -------------
    1     2  <NA>
10034 12129 14836
--- 36 :  m4ac16 :  Industry code -------------
    2     3     5     6     7     8     9    10    11    12    13    14    15    16    17    18
  802   427     2     1    17    26     3   169   385     4    26   155     9   109     7     1
   19    20    21    22    23    24    25    26    27    28    29    31    32    33    35    36
    1     3     1     5    49     2    17     2     1     1     1    33    13     2     9     4
   37    38    41    42    43    45    46    47    49    50    52    55    56    58    60    61
    2    10   354    28    23    10    88   285    68     6     7    11   109     1     2    11
   62    63    65    66    68    71    74    75    77    78    79    81    82    84    85    86
    1     2     4     2     9     1     3     6    10     1     2     2     4   146    36    30
   88    90    91    92    93    94    95    96    97    98    99   110   140   160  <NA>
    3     2     1    11    11     2    19    41    26     2     1  4052  2183   119 26965
--- 37 :  m4ac17 :  taken the second most time-consuming job over the last 30 days -------------
    1     2  <NA>
 8153  1881 26965
--- 40 :  m4ac20 :  Employer/owner? -------------
    1     2     3     4     5     6  <NA>
 8223  1349    26   187   227    22 26965
--- 41 :  m4ac21 :  Working for wage/salary? -------------
    1     2  <NA>
 2095  7939 26965
--- 46 :  m4ac25 :  Any other job for wage/salary? -------------
    1     2  <NA>
  813  9221 26965
--- 48 :  m4ac27 :  Has received unemployment benefits, one-off severance pays, pensions, ... over
t -------------
    1     2  <NA>
 1083 26784  9132
```

```
 #### FREQUENCY OF VARIABLES IN  8 :  muc4b0 ##############################

--- 6 :  m4b0ma :  Code of land plot -------------
   1    2    3    4    5    6    7
5163 1633  871  745 3102   36   69


 #### FREQUENCY OF VARIABLES IN  9 :  muc4b11 ##############################

--- 6 :  m4b11ma :  Rice code -------------
   1    2    3    4    5    6    7
3523 1385 2736  133 4231 1321  259


 #### FREQUENCY OF VARIABLES IN  10 :  muc4b12 ##############################

--- 6 :  m4b12ma :  Staple food crops, non-staple food crops, and other annual crops -------------
   8    9   10   11   12   13   14   15   16   17   18   19   20   21
1704  473  976   37  139 1600  758  827 2083  658  175  851 1941  935


 #### FREQUENCY OF VARIABLES IN  11 :  muc4b13 ##############################

--- 6 :  m4b13ma :  Annual and perennial industrial crops -------------
 22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38
398 771  65 182  75  12   8   4  30 281 310  64 125 408  20 212  47
--- 8 :  m4b13c3b :  Code -------------
   1    2
2406  606


 #### FREQUENCY OF VARIABLES IN  12 :  muc4b14 ##############################

--- 6 :  m4b14ma :  Fruit trees -------------
  39   40   41   42   43   44   45   46   47   48   49   50   51   52   53   54
 679  142 1803  824   88    4  178  652  724  115  329  731    8  757  166    7
--- 8 :  m4b14c3b :  Code -------------
   1    2
 956 6251


 #### FREQUENCY OF VARIABLES IN  13 :  muc4b15 ##############################

--- 6 :  m4b15ma :  Code of crop by-products -------------
   1    2    3    4    5    6    7    8    9   10
2672  486 1132  270   78    1   14 1192  394  399


 #### FREQUENCY OF VARIABLES IN  14 :  muc4b16 ##############################

--- 6 :  m4b16ma :  Crop planting expense code -------------
   1    2    3    4    5    6    7    8   10   11   12   13   14   15   16   17   18   91   92   93
4908 2079 5441 2433  586 4759 4076 5020  806 2168  628 3520  737 2884 1914  285 2873  829    7   15
  94   95   96   97   98   99  910  911
 744   25   51  560    3    1   54   76
```

```
 #### FREQUENCY OF VARIABLES IN  15 :  muc4b17 ##############################

--- 6 :  m4b17ma :  Code of chemical fertilizers -------------
   1    2    3    4    5
4844 2543 2833 3926  978


 #### FREQUENCY OF VARIABLES IN  16 :  muc4b21 ##############################

--- 6 :  m4b21ma :  Livestock breeding code -------------
   1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19
1757  309    3   53 3736  974   30  736  232  337  321 2276    6   16   37   22  111 1888  123


 #### FREQUENCY OF VARIABLES IN  17 :  muc4b22 ##############################

--- 6 :  m4b22ma :  Code of livestock breeding -------------
   1    2    3    4    5    6    7    8    9   10   11
2167  528    4   42 3784 1008   31   30   16  394  107


 #### FREQUENCY OF VARIABLES IN  18 :  muc4b31 ##############################

--- 6 :  m4b31ma :  Agricultural Service code -------------
  1   2   3   4   5
126   7   2  52  13


 #### FREQUENCY OF VARIABLES IN  19 :  muc4b32 ##############################

--- 6 :  m4b32ma :  Agricultural Services expense code -------------
  1   2   3   4   5
126   8   2  50  13


 #### FREQUENCY OF VARIABLES IN  20 :  muc4b41 ##############################

--- 6 :  m4b41ma :  Forestry product code -------------
   1    2    3    4    5    6    7    8    9   10   11   12   13   14
  17   20   21    5    1  218  412   20   30  109 1952   36  600   63


 #### FREQUENCY OF VARIABLES IN  21 :  muc4b42 ##############################

--- 6 :  m4b42ma :  Forestry activity code -------------
   1    2
2064   55


 #### FREQUENCY OF VARIABLES IN  22 :  muc4b51 ##############################

--- 6 :  m4b51ma :  Aquaculture code -------------
   3   11   12   13   14   21   22   23
   1 1073  225   35  152  716   91  378
```

```
 #### FREQUENCY OF VARIABLES IN  23 :  muc4b52 ##############################

--- 6 :  m4b52ma :  Aquacultural breed code -------------
   1    2    3
1156  855    2


 #### FREQUENCY OF VARIABLES IN  24 :  muc4c1 ##############################

--- 7 :  m4c1c2 :  Industry code -------------
   6    7    8   10   11   13   14   15   16   17   18   20   21   22   23   24   25   27   30   31
   1    9   17  252  225   18  149    6  155    8    8    7    2    4   21    6   43    1    2   67
  32   33   35   36   38   41   42   43   45   46   47   49   50   51   52   55   56   60   61   62
  16   21    4    3   11   38    9   10   89  220 1337  311   22    1    5   29  453    1   13    1
  63   64   65   66   68   71   72   73   74   75   77   79   82   85   86   87   88   90   91   92
   4    3    1    5   32    1    1    2    7   11   16    2    6   20   24    1    1    7    2   16
  93   94   95   96   97   98
  22    1   71  150    4    2
--- 9 :  m4c1c4 :  HH's member owned all of the business or not -------------
   1    2
3961   46
--- 12 :  m4c1c7 :  Having business license or not -------------
   1    2    3
  84 1136 2787
--- 13 :  m4c1c8 :  The product of this activity is for selling/bartering/supplying services or
not ----
   1    2 <NA>
2251  110 1646
--- 16 :  m4c1c11 :  HH exchanged goods and services produce by this business for other goods and
ser ----
   1    2 <NA>
  17 2234 1756
--- 18 :  m4c1c13 :  HH consumed any goods and services produced by this business for past 12 months?
-----
   1    2 <NA>
 748 1613 1646
--- 20 :  m4c1c15 :  HH consumed or sold and by-products produced by this business for the past
12 mo -------------
   1    2
 700 3307


 #### FREQUENCY OF VARIABLES IN  27 :  muc5a1 ##############################

--- 6 :  m5a1ma :  Consumed items -------------
 101  102  110  111  112  113  114  115  116  118  120  121  124  134  139  140  144  145  146  148
4333 6858 9128 4068  425 8245 3152  830 5774 6127 1189 8145 6479 8778 8102 8940 7618 4575 4999 2824
 150  151  153  154
7227 6105 4430 8503


 #### FREQUENCY OF VARIABLES IN  28 :  muc5a2 ##############################

--- 6 :  m5a2ma :  Things has HH consumed for last 12 months -------------
 101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116  117  118  119  120
9241 2487 1594  888 2544 3165 6284 4319 1533 8883 3633  363 5714 2665  999 2845 8934 8389 3131 2593
```

```
 121  122  123  124  125  126  127  128  129  130  131  132  133  134  135  136  137  138  139  140
7877 7243 3195 2097 4355 7511 1746 4721 6367 8428 3138 5538 2196 6383 8833 8086 5906 8544 7402 3137
 141  142  143  144  145  146  147  148  149  150  151  152  153  154
2379 2342 2126 4857 1983 1739 1167  875  623 5338 4923  439 7030 7902


 #### FREQUENCY OF VARIABLES IN  29 :  muc5b1 ##############################

--- 6 :  m5b1ma :  which of the Items has your HH consumed over the last 30 days? -------------
 201  202  203  204  205  206  207  208  209  210  211  212  213  214  215  216  217  218  219  220
3242  109  611 6734 1384   87  226 5111   16 4598 1494  254 4206 8124 9359 8323 9013 6612 2568 8949
 221  222  223  224  225  226  227  228
7042 1023  502  802 1855 6384 7410 4996


 #### FREQUENCY OF VARIABLES IN  34 :  muc7 ##############################

--- 8 :  m7c3 :  The main material as poles(or pillars,or carrying walls of the house -------------
   1    2    3    4    5 <NA>
2667 4299 1303 1074   47    9
--- 9 :  m7c4 :  The main material as roofing of the house -------------
   1    2    3    4    5 <NA>
1644 3038 4241  420   47    9
--- 10 :  m7c5 :  The main meterial as walls or surounding of the house -------------
   1    2    3    4    5    6 <NA>
 198 6770 1166  266  473  517    9
--- 11 :  m7c6 :  Does your household pay rents? -------------
   1    2 <NA>
 243 9147    9
--- 15 :  m7c10 :  Does HH have any other land plots or houses/flats? -------------
   1    2 <NA>
 796 8594    9
--- 16 :  m7c11 :  Does HH receive rents from those residential land lost or house -------------
   1    2 <NA>
 137  659 8603
--- 19 :  m7c14 :  The main drinking water supply of HH -------------
   1    2    3    4    5    6    7    8    9   10
2245  106 2256 1936  353  505  326   93 1193  386
--- 20 :  m7c15a :  Do HH treat driking water by boiling -------------
   1    2
8524  875
--- 21 :  m7c15b :  Do HH treat driking water by a filter or chemicals -------------
   1    2
1370 8029
--- 23 :  m7c17 :  Type of toilet -------------
   1    2    3    4    5    6    9
4322  431 1380 1001 1470  794    1
--- 24 :  m7c18 :  Main source of lighting? -------------
   1    2    3    4
9075  120  177   27
--- 28 :  m7c21 :  How has HH disposed garbage? -------------
   1    2    3    4    5    6
3004  411 1469  528 3886  101
--- 29 :  m7c22 :  Money paid for daily-life waste in the past 12 months -------------
   0    4    7    8   10   12   15   16   18   20   21   22   24   25   26   28   30   32   34   35
6390    2    1    5   20   25   11    4   21   22    1    2   79    8    2    8   35    5    2    1
  36   40   42   44   45   48   50   52   53   54   55   56   60   62   64   65   66   67   70   72
```

```
 108   30    7    1    2  108   23    2    1   19    1    3  326    1    2    3    4    1   10  183
  74   75   76   80   84   85   88   90   92   94   96   98  100  108  110  112  120  126  130  132
   1    2    2   17  105    4    2   26    2    1  239    1   33   49    2    1  534    5    2    1
 135  138  140  142  144  145  150  156  160  164  168  170  180  185  186  190  192  195  200  204
   1    1    3    2  117    2   21   19    8    1   29    1  309    3    2    5   44    8   13    2
 210  216  220  240  250  260  264  270  280  288  300  324  325  350  360  372  400  420  432  480
   3   28    3  158   12   15    1    2    3   11   10    1    3    1   24    3    2    3    1    3
 500  516  540  600  720  840  900
   3    1    1    5    1    1    1


 #### FREQUENCY OF VARIABLES IN  35 :  muc8 ##############################

--- 6 :  m8c1a :  HH classified as a poor of the commune/ward in the following y2006? -------------
   1    2    9
1204 8193    2
--- 7 :  m8c1b :  HH classified as a poor of the commune/ward in the following y2007? -------------
   1    2    9
1211 8187    1
--- 8 :  m8c1c :  HH classified as a poor of the commune/ward in the following y2008? -------------
   1    2    9
1223 8175    1
--- 9 :  m8c1d :  HH classified as a poor of the commune/ward in the following y2009? -------------
   1    2
1142 8257
--- 10 :  m8c1e :  HH classified as a poor of the commune/ward in the following y2010? -------------
   1    2
1098 8301
--- 11 :  m8c21_01 :  Support in purchasing health insurance cards 2009 -------------
   1    2    3
1037 8301   61
--- 12 :  m8c21_02 :  Reduction of and exemption from costs of medical checks/treament for the poor
20 -------------
   1    2    3
1281 8045   73
--- 13 :  m8c21_03 :  reduction of and exemption from tuition fees for the poor 2009 -------------
   1    2    3
 512 8759  128
--- 14 :  m8c21_04 :  Policy-based scholarships 2009 -------------
   1    2    3
 119 9063  217
--- 16 :  m8c21_06 :  Support in housing and residential land for poor households 2009 -------------
   1    2    3
 133 9072  194
--- 17 :  m8c21_07 :  Support in cleaning/improving daily-life water supplies for poor households
2009 -------------
   1    2    3
 223 8980  196
--- 18 :  m8c21_08 :  Providing productive land for poor ethnic minorities households 2009
-------------
   1    2    3
   7 9075  317
--- 19 :  m8c21_09 :  Extension services in agriculture, forestry and fisheries 2009 -------------
   1    2    3
 763 8389  247
--- 20 :  m8c21_10 :  Support in migrating abroad for employment 2009 -------------
   1    2    3
```

```
  11 9068  320
--- 21 :  m8c21_11 :  Food aid 2009 -------------
   1    2    3
 532 8721  146
--- 22 :  m8c21_12 :  Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) 2009
-------------
   1    2    3
  16 9043  340
--- 23 :  m8c21_13 :  Preferential credit for the poor 2009 -------------
   1    2    3
 919 8340  140
--- 24 :  m8c21_14 :  Support in machinery, production inputs 2009 -------------
   1    2    3
 684 8514  201
--- 25 :  m8c21_15 :  others 2009 -------------
   1    2    3    9
 269 8891  238    1
--- 26 :  m8c22_01 :  Support in purchasing health insurance cards 2010 -------------
   1    2    3
1033 8304   62
--- 27 :  m8c22_02 :  Reduction of and exemption from costs of medical checks/treament for the poor
20 -------------
   1    2    3
1247 8079   73
--- 28 :  m8c22_03 :  reduction of and exemption from tuition fees for the poor 2010 -------------
   1    2    3
 496 8778  125
--- 29 :  m8c22_04 :  Policy-based scholarships 2010 -------------
   1    2    3
 116 9072  211
--- 31 :  m8c22_06 :  Support in housing and residential land for poor households 2010 -------------
   1    2    3
 118 9081  200
--- 32 :  m8c22_07 :  Support in cleaning/improving daily-life water supplies for poor households
2010 -------------
   1    2    3
 218 8986  195
--- 33 :  m8c22_08 :  Providing productive land for poor ethnic minorities households 2010
-------------
   1    2    3
   6 9078  315
--- 34 :  m8c22_09 :  Extension services in agriculture, forestry and fisheries 2010 -------------
   1    2    3
 756 8395  248
--- 35 :  m8c22_10 :  Support in migrating abroad for employment 2010 -------------
   1    2    3
   9 9075  315
--- 36 :  m8c22_11 :  Food aid 2010 -------------
   1    2    3
 483 8766  150
--- 37 :  m8c22_12 :  Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) 2010
-------------
   1    2    3
  10 9048  341
--- 38 :  m8c22_13 :  Preferential credit for the poor 2010 -------------
   1    2    3
```

```
1124 8137  138
--- 39 :  m8c22_14 :  Support in machinery, production inputs 2010 -------------
   1    2    3
 819 8380  200
--- 40 :  m8c22_15 :  others 2010 -------------
   1    2    3    9
 247 8913  238    1
--- 43 :  m8c3 :  Borrowed from or remained to preferential credit schemes for the poor in 2010
-------------
   1    2
1258 8141
--- 44 :  m8c9 :  Compared with 2006, has HH member's life been improved? -------------
   1    2    3    4    9 <NA>
2851 4898 1045  580   24    1
--- 45 :  m8c10a :  The first reason why life is worse -------------
   1    2    3    4    5    6    7    8    9   10   11   12 <NA>
 113   39   29   74  427  214  405   69   16   34   14  191 7774
--- 46 :  m8c10b :  The second reason why life is worse -------------
   0    1    2    3    4    5    6    7    8    9   10   11   12 <NA>
 176   80   90   35   63  133  300  402  152    8   42   13  131 7774
--- 47 :  m8c10c :  The third reason why life is worse -------------
   0    1    2    3    4    5    6    7    8    9   10   11   12 <NA>
 348   65   68   34   41   62  225  236  154   14   46   11  145 7950
--- 48 :  m8c11a :  consumtion of food over the last 30 days -------------
   1    2    3    4 <NA>
 440 8218  686   54    1
--- 49 :  m8c11b :  consumtion of foodstuff over the last 30 days -------------
   1    2    3    4 <NA>
1079 7580  678   61    1
--- 50 :  m8c12a :  comsumtion of electricity over the last 30 days -------------
   1    2    3    4    9 <NA>
2257 6721  280  136    4    1
--- 51 :  m8c12b :  comsumtion of water over the last 30 days -------------
   1    2    3    4 <NA>
 402 8278  574  144    1
--- 52 :  m8c12c :  comsumtion of housing over the last 30 days -------------
   1    2    3    4 <NA>
 581 8173  419  225    1
--- 53 :  m8c13 :  comsumtion of clothing and footwear over the last 30 days -------------
   1    2    3    4 <NA>
 514 8187  535  162    1


 #### FREQUENCY OF VARIABLES IN  36 :  muc8vayno ###############################

--- 7 :  m8c4 :  Which preferential credit scheme has your household borrowed from/remained indeb
-------------
   1    2    3    4    5
1111   16   43  102   95
--- 10 :  m8c6b :  Time unit -------------
   1    2    3    4    9 <NA>
 971   46   28  217    1  104


 #### FREQUENCY OF VARIABLES IN  37 :  ttchung ###############################
```

```
--- 6 :  quyen :  Income/Income & Expenditure -------------
   1
9399
--- 8 :  ttnt :  Urban/Rural -------------
   1    2
2649 6750
--- 10 :  phdich :  Interpretation -------------
   1    2
 488 8911
--- 16 :  m1b1 :  Is there any a servant, home worker, lodger or house sharer? -------------
   1    2
 898 8501
--- 28 :  m4b21a :  Raised livestock in past 12 month? -------------
   1    2
4504 4895
--- 29 :  m4b21b :  Was the damage caused by natural disaster, pest diseases,...? -------------
   1    2 <NA>
  10 4885 4504
--- 32 :  m4b0c1 :  Used or managed land for agri&forestry or water surface aquaculture
-------------
   1    2
6270 3129
--- 34 :  m4b1a :  Harvested any products from planting activities in past 12 month? -------------
   1    2
5839 3560
--- 35 :  m4b1b :  Was the damage caused by natural disaster, pest diseases,...? -------------
   1    2 <NA>
   3 3557 5839
--- 57 :  m4b31a :  Agricul. services in past 12 months? -------------
   1    2
 173 9226
--- 58 :  m4b31b :  Was the damage caused by natural disaster, pest diseases,...? -------------
   2 <NA>
9226  173
--- 61 :  m4b41a :  Revenue from forestry activities? -------------
   1    2
2110 7289
--- 62 :  m4b41b :  Was the damage caused by natural disaster, pest diseases,...? -------------
   2 <NA>
7289 2110
--- 85 :  m4b5c1b :  Was the damage caused by natural disaster, pest diseases,...? -------------
   1    2 <NA>
   3 7540 1856
--- 110 :  m3c1 :  Has anyone in your HH visited medical establishment... -------------
   1    2
7501 1898
```

6. Household Summary Data File of TTCHUNG

6.1 Estimated mean value of each numerical variable in TTCHUNG.

```
> d<-lss2010[[37]]
> t<-apply(d[,1:118],2,function(x) weighted.mean(x,d$wt))
> t2<-var.names[37][[1]][1:118]
> t3<-data.frame(variable=names(t),value=round(t,2),label=t2,row.names=NULL)
> t3
```

	variable	value	label
1	tinh	50.42	Province
2	huyen	512.36	District
3	xa	18625.54	Commune
4	diaban	11.61	Enumerator area
5	hoso	14.56	Household code
6	quyen	1.00	Income/Income & Expenditure
7	tsphieu	1.00	T誅g s¥xe8 phiュu
8	ttnt	1.69	Urban/Rural
9	dantoc	1.94	Household head's ethnicity
10	phdich	1.97	Interpretation
11	dtv	17.64	Surveyor's ID code
12	dt	10.13	Team leader' ID code
13	ngaydt	15.40	Date of survey
14	thangdt	9.28	Month of survey
15	tsnguoi	3.87	Hosehold size
16	m1b1	1.90	Is there any a servant, home worker, lodger or house sharer?
17	tsmuc1b	NA	Total number of home worker
18	m2act	3256.61	Total Quest11k And Quest 14
19	m2atn	114.74	2TN. C駭g c ゥu 12 vオ 13 (q.xanh)
20	m2btn	NA	Total Quest 12 and Quest 13
21	m4atn1	23352.91	Total of Q11-section 4A
22	m4atn2	2819.00	Total of Q12a and 12b-section 4A
23	m4atn3	1219.14	Total of Q23-section 4A
24	m4atn4	45.76	Total of Q24a and 24b section 4A
25	m4atn5	203.31	Total of Q26 section 4A

26	m4atn6	2968.05	Total of Q28 section 4A
27	m4atn	30608.17	Total income from wages
28	m4b21a	1.56	Raised livestock in past 12 month?
29	m4b21b	NA	Was the damage caused by natural disaster, pest diseases,...?
30	m4b21t	10187.55	Total of question 5 from line 1 to 18
31	kydt	1.99	Ky dieu tra
32	m4b0c1	1.37	Used or managed land for agri&forestry or water surface aquaculture
33	m4b0tn	183.74	Total of Q5-section 4B0
34	m4b1a	1.42	Harvested any products from planting activities in past 12 month?
35	m4b1b	NA	Was the damage caused by natural disaster, pest diseases,...?
36	m4b11t	7091.34	Total of Q8 section 4B1.1
37	m4b12t	2664.81	Total of Q7 section 4B1.2
38	m4b13t	3951.61	Total of Q7 section 4B1.3
39	m4b14t	1171.96	Total of Q7 section 4B1.4
40	tongthu_01	110420.86	Total of household revenue
41	tongthu_02	114.74	Income from subsidies,scholarship
42	tongthu_03	623.36	Income from health subsidies
43	tongthu_04	30608.17	Income from wage
44	tongthu_05	183.74	Revenue from renting out agricultural and forestry land and water surface
45	tongthu_06	15087.20	Revenue from crop
46	tongthu_07	10187.55	Revenue from husbandry
47	tongthu_08	32.20	Revenue from hunting, trapping and domestication
48	tongthu_09	507.72	Revenue from agricultural services
49	tongthu_10	559.75	Revenue from forestry
50	tongthu_11	4253.12	Revenue from aquaculture
51	tongthu_12	38391.41	Other income
52	tongthu_13	9140.97	Other revenues included in incomes
53	tongthu_14	730.93	Revenues from renting out house(s) and residential land
54	m4b22t	32.20	Question 5 line 19
55	m4b21c	6955.18	Total of quest 19 from line 1 to 10
56	m4b22c	3.33	Quest 19 line 11
57	m4b31a	1.98	Agricul. services in past 12 months?
58	m4b31b	NA	Was the damage caused by natural disaster, pest diseases,...?
59	m4b3t	507.72	Total revenue from Agri Services
60	m4b3c	267.37	Total expense on Agri Services
61	m4b41a	1.82	Revenue from forestry activities?

62	m4b41b	NA	Was the damage caused by natural disaster, pest diseases,...?
63	m4b4t	559.75	Total revenue from Forestry
64	m4b4c	82.15	Total expense on Forestry
65	chisxkd_1	38100.54	Expenditure on business
66	chisxkd_2	6016.90	Expenditure on crops
67	chisxkd_3	6955.18	Expenditure on livestock
68	chisxkd_4	3.33	Expenditure on hunting, trapping..
69	chisxkd_5	267.37	Expenditure on agricultural services
70	chisxkd_6	82.15	Expenditure on forestry
71	chisxkd_7	2677.02	Expenditure on aquaculture
72	chisxkd_8	22098.59	Expenditure on non-farm business
73	thunhap	72320.32	Total Income
74	thubq	1675.63	income per capita per month
75	chikhac_1	3256.61	Expenditure on education
76	chikhac_2	2947.56	Expenditure on health
77	chikhac_3	2034.69	Expenditure on foods and drinks during holidays
78	chikhac_4	2184.11	Daily expenditure on foods and drinks
79	chikhac_5	677.00	Daily expenditure on non-food
80	chikhac_6	5026.68	Yearly Non-food expenditure
81	chikhac_7	3446.31	Other expenditure considered as consumption
82	chikhac_8	5439.14	Expenditures on durables over the past 12 month
83	chikhac_9	2381.36	Recurrent expenditures on housing, electricity, water,and daily life waste
84	m4b5c1a	1.82	Aquatic activities in past 12 months?
85	m4b5c1b	NA	Was the damage caused by natural disaster, pest diseases,...?
86	m4b5t	4253.12	Total revenue from Aquaculture
87	m4b5c	2677.02	Total expense on Aquaculture
88	m4c1	1.65	Non-farm activities?
89	m4ctt	39045.43	Total revenue from non-farm
90	m4ct	38391.41	Total revenue belongs to household
91	m4cct	22441.41	Total expense on non-farm
92	m4cc	22098.59	Total expense on non-farm allocated for HH
93	m4dtn	9140.97	Income from other sources
94	m5a1ct	2034.69	Total of Q4 and Q5 section 5A1
95	m5a1c4	1699.08	Total of Q2B section 5A1
96	m5a1c5	335.61	Total of Q3B section 5A1
97	m5a2ct	2184.11	Total of Q2B from code 101 to 154 section 5A2

98	m5a2c6	1889.46	Total of 3B from code 101 to code 154 section 5A2
99	m5a2c7	261.81	Total of 4B from code 101 to code 154 section 5A2
100	m5a2c8	32.83	Total of 5B from code 101 to code 154 section 5A2
101	m5b1ct	677.00	Total of Q2 section 5B1
102	m5b1c6	626.56	Total of Q3 section 5B1
103	m5b1c7	45.70	Total of Q4 section 5B1
104	m5b1c8	4.73	Total of Q5 section 5B1
105	m5b2ct	5026.68	Total of Q4 and Q5 section 5B2
106	m5b2c4	4858.27	Total of Q2 section 5B2
107	m5b2c5	168.41	Total of Q3 section 5B2
108	m5b3ct	3446.31	Total of Q2 section 5B3
109	m6c7	5439.14	Total of Q5 section 6
110	m3c1	1.21	Has anyone in your HH visited medical establishment...
111	m3ct1	1110.71	Total of Q5 section 3
112	m3ct2	1097.99	Total of Q6 section 3
113	m3ct3	166.47	Total of Q11 section 3
114	m3ct	2947.56	healthcare expenditures
115	m3tn	623.36	Total of Q15 section 3
116	m4b15t	207.48	Total of Q5 section 4B1.5
117	m4b1t	15087.20	Total revenues from crops
118	m4b1c	6016.90	Total cost of crops

6.2 Operational definition of variables of TTCHUNG

Data file TTCHUNG is the household-level summary data, which derived from various data files.

The next table compiled by the author shows the operational definitions of each variable.

If “yes” in the last column, the definition described in the fourth column hold for the data set provided.

No	Variable name	Description	Operational definition	Data file	Confirmed from data
1	tinh	Province			
2	huyen	District			
3	xa	Commune			
4	diaban	Enumerator area			
5	hoso	Household code			
6	quyen	Income/Income & Expenditure			
7	tsphieu	Questionnaire			
8	ttnt	Urban/Rural			
9	dantoc	Household head's ethnicity			
10	phdich	Interpretation			
11	dtv	Surveyor's ID code			
12	dt	Team leader' ID code			
13	ngaydt	Surveyed date			
14	thangdt	Surveyed month			
15	tsnguoi	Hosehold size			
16	m1b1	Having domestic help or migrant labourers?			
17	tsmuc1b	Number of domestic help or migrant labourers			
18	m2act	Sum of questions 11k and 14 in Section 2: Education	= sum (m2c11k + m2c14)	muc2	Yes
19	m2atn	Sum of questions 12 and 13 in Section 2: Education (Green questionnaire)	= sum (m2c12 + m2c13)	muc2	Yes
20	m2btn	Sum of questions 12 and 13 in Section 2: Education (Yellow questionnaire)			
21	m4atn1	Total of Q11-section 4A			
22	m4atn2	Total of Q12 a,b-section 4A			
23	m4atn3	Total of Q23-section 4A			
24	m4atn4	Total of Q24a,b-section 4A			
25	m4atn5	Total of Q26-section 4A			
26	m4atn6	Total of Q28a,b,c,d,e-section 4A			
27	m4atn	Total income from wages, including bonus, subsidy	= sum of m4ac11, m4ac12a, m4ac12b, m4ac23, m4ac24a, m4ac24b, m4ac26, m4ac28a, m4ac28b, m4ac28c, m4ac28d, m4ac28e	muc4a	Yes

28	m4b21a	Raised livestock in past 12 month?			
29	m4b21b	Due to dissater affecting to production			
30	m4b21t	4B21T. Sum of Q5, from rows 1 to 18 (revenue from livestocks)	= sum of m4b21c5 with m4b21ma <=18	muc4b21	Yes
31	kydt	Surveyed period			
32	m4b0c1	Used or managed farm land, forestry land or aquaculture surface water over the last 12 months			
33	m4b0tn	4BOTN. Sum of Qestion 5	= sum of m4b0c5	muc4b0	Yes
34	m4b1a	Harvested any products from cultivation over the last 12 months?			
35	m4b1b	Any impacts of natural disasters, diseases, etc. which have caused loss in production			
36	m4b11t	4B11T. Sum of Question 8	= sum of m4b11c8	muc4b11	Yes
37	m4b12t	4B12T. Sum of Question 7	= sum of m4b12c7	muc4b12	Yes
38	m4b13t	4B13T. Sum of Question 7	= sum of m4b13c7	muc4b13	Yes
39	m4b14t	4B14T. Sum of Question 7	= sum of m4b14c7	muc4b14	Yes
40	tongthu_01	**Total of household REVENUE**	= sum of tongthu_02 to tongthu_14 (41-53)		Yes
41	tongthu_02	**Income from subsidies,scholarship**	=m2atn (19)		Yes
42	tongthu_03	**Income from health subsidies**	=m3tn (115)		Yes
43	tongthu_04	**Income from wage**	=m4atn (27)		Yes
44	tongthu_05	**revenue from crops**	=m4b0tn (33)		Yes
45	tongthu_06	**Revenue from livestock**	=m4b1t (117)		Yes
46	tongthu_07	**Revenue from Agricultural Services**	=m4b21t (30)		Yes
47	tongthu_08	**Revenue from hunting, trapping**	=m4b22t (54)		Yes
48	tongthu_09	**Revenue from forestry**	=m4b3t (59)		Yes
49	tongthu_10	**Revenue from aquaculture**	=m4b4t (63)		Yes
50	tongthu_11	**Revenue from non-farm business**	=m4b5t (86)		Yes
51	tongthu_12	**Other income**	=m4ct (90)		Yes
52	tongthu_13	**Other money received, not considered as income**	=m4dtn (93)		Yes
53	tongthu_14	**Income from house and land renting out**	=m7c12	muc7	Yes
54	m4b22t	4B22T. Sum of Q5, row 19 (revenue from hunting)	= m4b21c5 with m4b21ma=19	muc4b21	Yes
55	m4b21c	4B21C. Sum of Q19, from rows 1 to 10 (cost of husbandry)	= m4b22c19 with m4b22ma<=10	muc4b22	Yes
56	m4b22c	4B22C. Sum of Q19, row 11 (cost of hunting)	= m4b22c19 with m4b22ma=11	muc4b22	Yes
57	m4b31a	owned machines, equipment and tools for agricultural services over the last 12 months?			
58	m4b31b	natural disasters and epidemics… damaged production			=
59	m4b3t	4B3T. Sum of Q5 (revenue from agricultural services)	= sum of m4b31c5	muc4b32	Yes

60	m4b3c	4B3C. Sum of Q17 (cost of agricultural services)	= sum of m4b32c17	muc4b32	Yes
61	m4b41a	earned revenues from planting/management/protection/attending of forests, breeding forest trees,			
62	m4b41b	natural disasters, epidemics, … damaged production?			
63	m4b4t	4B4T. Sum of Q3f (revenue from forestry)	= sum of m4b41c3f	muc4b41	Yes
64	m4b4c	4B4C. Sum of Q14 (cost of forestry)	= sum of m4b42c14	muc4b42	Yes
65	chisxkd_1	**Expenditure on business (TOTAL COST)**	= sum of chisxkd_2 to chisxkd_8		Yes
66	chisxkd_2	**Expenditure on crops**	=m4b1c (118)		Yes
67	chisxkd_3	**Expenditure on livestock**	=m4b21c (55)		Yes
68	chisxkd_4	**Expenditure on agricultural services**	=m4b22c (56)		Yes
69	chisxkd_5	**Expenditure on hunting, trapping..**	=m4b3c (60)		Yes
70	chisxkd_6	**Expenditure on forestry**	=m4b4c (64)		Yes
71	chisxkd_7	**Expenditure on aquaculture**	=m4b5c (87)		Yes
72	chisxkd_8	**Expenditure on non-farm business**	=m4cc (92)		Yes
73	thunhap	**(Yearly) Income**	= tongthu_01 (40) – chisxkd_1 (65)		Yes
74	thubq	(Yearly) Income per capita			
75	chikhac_1	**Expenditure on education**	=m2act (18)		Yes
76	chikhac_2	**Expenditure on health**	=m3ct (114)		Yes
77	chikhac_3	**Expenditure on holiday food**	=m5a1ct (94)		Yes
78	chikhac_4	**Expenditure on daily food**	=m5a2ct (97)		Yes
79	chikhac_5	**Expenditure on daily non-food**	=m5b1ct (101)		Yes
80	chikhac_6	**Expenditure on yearly non-food**	=m5b2ct (105)		Yes
81	chikhac_7	**Expenditure on other**	=m5b3ct (108)		Yes
82	chikhac_8	**Expenditure on durables**	=m6c7 (109)		Yes
83	chikhac_9	**Expenditure on housing**	= sum (m7c7 + m7c13 + m7c16 + m7c20 + m7c22)	muc7	Yes
84	m4b5c1a	household kept, bred fish, shrimps or other aquatic products;			
85	m4b5c1b	natural disasters, epidemics, … damaged production?			
86	m4b5t	4B5T. Sum of Q5 (revenue from aquaculture)	= sum of m4b51c5	muc4b51	Yes
87	m4b5c	4b5c. Sum for Q19 (costs of aquaculture)	= sum of m4b52c19	uc4b52	Yes
88	m4c1	any activities of your own production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products over the past 12 months?			
89	m4ctt	4CTT. Total revenue from activities (sum of Q17)			
90	m4ct	4CT. Total revenue from activities divided by households (sum of Q18)	= sum of m4c1c18	muc4c1	Yes
91	m4cct	4CCT. Total cost of activities (sum of Q32)			

92	m4cc	4CC. Total revenue from activities divided by households (sum of Q33)	= sum of m4c2c33	muc4c2	Yes
93	m4dtn	4DTN. Sum of Q2 items (other revenues)	= sum of m4dc2_01, m4dc2_06, and m4dc2_11 to m4dc2_20	muc4d	Yes
94	m5a1ct	5A1CT. Sum (Q4-5)	= m5a1c4 (95) + m5a1c5 (96)		Yes
95	m5a1c4	4. Sum of Q2B (Codes from 101-154)	= sum of m5a1c2b	muc5a1	Yes
96	m5a1c5	5. Sum of Q 3B (Codes from 101-154)	= sum of m5a1c3b	muc5a1	Yes
97	m5a2ct	5a2ct. Sum for question 2b (Codes from 101-154)	= m5a2c6 (98) + m5a2c7 (99) + m5a2c8 (100) = sum of m5a2c2b	 muc5a2	Yes Yes
98	m5a2c6	6.Sum for Q3b (Codes from 101-154)	= sum of m5a2c3b	muc5a2	Yes
99	m5a2c7	7.Sum for Q4b (Codes from 101-154)	= sum of m5a2c4b	muc5a2	Yes
100	m5a2c8	8.Sum for Q5b (Codes from 101-154)	= sum of m5a2c5b	muc5a2	Yes
101	m5b1ct	5b1ct. Sum for Q2 (Codes from 201-228)	= m5b1c6 (102) + m5b1c7 (103) + m5b1c8 (104) = sum of m5b1c2	 muc5b1	Yes Yes
102	m5b1c6	6. Sum for Q3 (Codes 201-228)	= sum of m5b1c3	muc5b1	Yes
103	m5b1c7	7.Sum for Q4 (Codes 201-228)	= sum of m5b1c4	muc5b1	Yes
104	m5b1c8	8.Sum for Q5 (Codes 201-228)	= sum of m5b1c5	muc5b1	Yes
105	m5b2ct	5b2ct. Sum (Q4-5)	= m5b2c4 (106) + m5b2c5 (107)		Yes
106	m5b2c4	4.Sum for Q 2	= sum of m5b2c2	muc5b2	Yes
107	m5b2c5	5. Sum for Q 3	= sum of m5b2c3	muc5b2	Yes
108	m5b3ct	5b3ct . Sum for question 2	= sum (m5b3c2_1 to m5b3c2_9)	muc5b3	Yes
109	m6c7	7. Sum for question 5, Section 6	= sum of m6c5	muc6b	
110	m3c1	household visited medical establishments or had home visits by physicians for check-ups and treatment over the last 12 months? Section 3			
111	m3ct1	3ct1. Sum for Q5, Section 3			
112	m3ct2	3ct2. Sum for Q6, Section 3			
113	m3ct3	3ct3. Sum for Q11, Section 3			
114	m3ct	3ct. Healthcare expenditures (3ct1 + 3ct2 + 3ct3 + Q13 + Q14)	= sum (m3c5b + m3c6b) + sum (m3c11 + m3c13 + m3c14)	muc3a muc3b	Yes
115	m3tn	3tn. Sum for Q15	= sum of m3c15	muc3b	Yes
116	m4b15t	4B15T. Sum of Q5, Section 4	= sum of m4b15c5	muc4b15	Yes
117	m4b1t	4B1T. Total revenues from crop production (4B11T+4B12T+4B13T+4B14T+4B15T)	= m4b11t (36) + m4b12t (37) + m4b13t (38) + m4b14t (39) + m4b15t (116)		Yes
118	m4b1c	Total costs of crop production (Sum of Q2e)	= sum of m4b16c2e	muc4b16	Yes

6.3 R scripts for verifying the contents of TTCHUNG

- Consistency check of INCOME-related variables in ttchung

□ REVENUE-related variables

```
# 37 ttchung
> d<-lss2010[[37]]
> dim(d)
[1] 9399  121


################################
# Education subsidies

No.41 = 19
> table(d$tongthu_02==d$m2atn)
TRUE
9399

# 4 muc2  Education

> df<-lss2010[[04]]
> dim(df)
[1] 36999    38
# m2c12: funds received from organizations that provide aid in education (12M)
# m2c13: values of scholarships and rewards received (12M)
> t<-tapply(df$m2c12+df$m2c13,df$ID,sum,na.rm=T)
> length(t)
[1] 9399

No.19
> table(abs(d$m2atn-t)<=2,useNA="ifany")
TRUE
9399
```

```
################################
# Health subsidies

No.42 = 115
> table(d$tongthu_03==d$m3tn)
TRUE
9399
```

6 muc3b Health

```
> df<-lss2010[[06]]
> dim(df)
[1] 36999    19
# m3c15: aid received in cash and kind for members who are sick/injured/contracts a
disease (12M)
> t<-tapply(df$m3c15,df$ID,sum,na.rm=T)
> length(t)
[1] 9399

No.115
> table(abs(d$m3tn-t)<1,useNA="ifany")
TRUE
9399



################################
# Wage

No.43 = 27
> table(d$tongthu_04==d$m4atn)
TRUE
9399
```

7 muc4a Wage

```
> df<-lss2010[[07]]
> dim(df)
[1] 36999    57
> colnames(df)
 [1] "tinh"    "huyen"   "xa"      "diaban"  "hoso"    "matv"    "m4ac1a"
 [8] "m4ac1b"  "m4ac1c"  "m4ac2"   "m4ac3a"  "m4ac3m"  "m4ac3"   "m4ac4c"
[15] "m4ac4m"  "m4ac4"   "m4ac5"   "m4ac6"   "m4ac7"   "m4ac8a"  "m4ac8b"
[22] "m4ac9"   "m4ac10"  "m4ac11"  "m4ac12a" "m4ac12b" "m4ac13a" "m4ac13b"
[29] "m4ac13c" "m4ac14"  "m4ac15a" "m4ac15m" "m4ac15"  "m4ac16c" "m4ac16m"
[36] "m4ac16"  "m4ac17"  "m4ac18"  "m4ac19"  "m4ac20"  "m4ac21"  "m4ac22"
[43] "m4ac23"  "m4ac24a" "m4ac24b" "m4ac25"  "m4ac26"  "m4ac27"  "m4ac28a"
[50] "m4ac28b" "m4ac28c" "m4ac28d" "m4ac28e" "ID"      "wt"      "eaid"
[57] "PID"

# Collapsed df by ID
# Generated function CollapseBy
> CollapseBy<-function(df,hhidno,colno){
+ y<-data.frame(id=unique(df[,hhidno]),row.names=NULL)
+ for(j in colno){
+ t<-aggregate(df[,j],list(df[,hhidno]),sum,na.rm=T)
+ colnames(t)<-c("id",colnames(df)[j])
+ y<-merge(y,t,by="id",all.x=T)
+ }
+ return (y)
+ }

> hh.wage<-CollapseBy(df,54,c(24:26,43:45,47,49:53))
> dim(hh.wage)
[1] 9399   13

> head(hh.wage)
                id m4ac11 m4ac12a m4ac12b m4ac23 m4ac24a m4ac24b m4ac26
1 ID01001000041213  73716    2835    1890      0       0       0      0
2 ID01001000041214 159870    2855       0      0       0       0      0
3 ID01001000041215 148469    7614    1904      0       0       0      0
4 ID01001000072213  79965    4760    1904      0       0       0      0
```

```
5 ID01001000072215  56712   18904   11342       0       0       0       0
6 ID01001000072220 102065   12285   14742       0       0       0       0
  m4ac28a m4ac28b m4ac28c m4ac28d m4ac28e
1       0       0       0       0       0
2       0       0   63948       0       0
3       0       0  105071       0       0
4       0       0   53691       0       0
5       0       0   22685       0       0
6       0       0   21641       0       0
> hh.wage$wage<-rowSums(hh.wage[,-1])
> head(hh.wage)
                id m4ac11 m4ac12a m4ac12b m4ac23 m4ac24a m4ac24b m4ac26
1 ID01001000041213  73716    2835    1890       0       0       0       0
2 ID01001000041214 159870    2855       0       0       0       0       0
3 ID01001000041215 148469    7614    1904       0       0       0       0
4 ID01001000072213  79965    4760    1904       0       0       0       0
5 ID01001000072215  56712   18904   11342       0       0       0       0
6 ID01001000072220 102065   12285   14742       0       0       0       0
  m4ac28a m4ac28b m4ac28c m4ac28d m4ac28e   wage
1       0       0       0       0       0  78441
2       0       0   63948       0       0 226673
3       0       0  105071       0       0 263058
4       0       0   53691       0       0 140320
5       0       0   22685       0       0 109643
6       0       0   21641       0       0 150733
```

No.27

```
> table(abs(d$m4atn - hh.wage$wage)<=4)
TRUE
9399
```

```
###################################
# Renting agricultural land
```

No.44 = 33

```
> table(d$tongthu_05==d$m4b0tn)
TRUE
```

```
9399
```

8 muc4b0 farm land

```
# m4b05c: amount obtained from land rental

> CollapseBy<-function(df,hhidno,colno){
+ y<-data.frame(unique(df[,hhidno]),row.names=NULL)
+ colnames(y)<-colnames(df)[hhidno]
+ for(j in colno){
+ t<-aggregate(df[,j],list(df[,hhidno]),sum,na.rm=T)
+ colnames(t)<-c(colnames(df)[hhidno],colnames(df)[j])
+ y<-merge(y,t,by=colnames(df)[hhidno],all.x=T)
+ }
+ return (y)
+ }

> df<-lss2010[[08]]
> hh.landrent<-CollapseBy(df,10,9)
> dim(hh.landrent)
[1] 6269    2
> head(hh.landrent[hh.landrent$m4b0c5>0,])
                 ID m4b0c5
28 ID01017004841115    993
36 ID01018005531413    136
37 ID01018005531415    142
38 ID01018005531419    181
55 ID01250089800213    425
95 ID01273098050914   5420

No.33
> d<-merge(d,hh.landrent,by="ID",all.x=T)
> d[is.na(d)]<-0
> table(abs(d$m4b0tn-d$m4b0c5)<2)
TRUE
9399
```

```
################################
# Revenue from crop

No.45 = 117
> table(d$tongthu_06==d$m4b1t)
TRUE
9399

No.117 = sum of 36:39,116
> table(abs(d$m4b1t-(d$m4b11t+d$m4b12t+d$m4b13t+d$m4b14t+d$m4b15t))<=2)
```

```
TRUE
9399
```

No	Data file	Variable of revenue	Variable at hh level	Variable in ttchung
9	muc4b11	m4b11c8	hh4B11T	m4b11t
10	muc4b12	m4b12c7	hh4B12T	m4b12t
11	muc4b13	m4b13c7	hh4B13T	m4b13t
12	muc4b14	m4b14c7	hh4B14T	m4b14t
13	muc4b15	m4b15c5	hh4B15T	m4b15t
Total			hh4B1T	m4b1t

Remarks:
According to the Users' Manual of VHLSS 2006, m4b11t is the sum of m4b11c8 with rice code (m4b11ma) = 5, 6 and 7 within hh.

```
> df<-data.frame(ID=lss2010[[37]][,"ID"])
> dim(df)
[1] 9399    1

> d<-lss2010[[9]]  # rice
> dd<-subset(d,ID=="ID01004001480614")
> dim(dd)
[1]  3 15
> dd
  tinh huyen  xa diaban hoso m4b11ma m4b11c3 m4b11c4 m4b11c5 m4b11c6 m4b11c7
1    1     4 148      6   14       1    2160    1100       0       0      NA
2    1     4 148      6   14       5    4320    2100       0       0      NA
3    1     4 148      6   14       3    2160    1000       0       0      NA
  m4b11c8               ID   wt         eaid
1    6238 ID01004001480614 4088 010040014806
2   11909 ID01004001480614 4088 010040014806
3    5671 ID01004001480614 4088 010040014806

> d<-subset(d,m4b11ma=5|m4b11ma=6|m4b11ma=7)
> d<-subset(d,m4b11ma==5|m4b11ma==6|m4b11ma==7)
> dd<-subset(d,ID=="ID01004001480614")
> dim(dd)
[1]  1 15
> dd
  tinh huyen  xa diaban hoso m4b11ma m4b11c3 m4b11c4 m4b11c5 m4b11c6 m4b11c7
2    1     4 148      6   14       5    4320    2100       0       0      NA
  m4b11c8               ID   wt         eaid
2   11909 ID01004001480614 4088 010040014806

> t<-aggregate(d$m4b11c8,list(d$ID),sum,na.rm=T)
```

```
> colnames(t)<-c("ID","hh4B11T")
> df<-merge(df,t,by="ID",all.x=T)

> d<-lss2010[[10]]
> t<-aggregate(d$m4b12c7,list(d$ID),sum,na.rm=T)
> colnames(t)<-c("ID","hh4B12T")
> df<-merge(df,t,by="ID",all.x=T)

> d<-lss2010[[11]]
> t<-aggregate(d$m4b13c7,list(d$ID),sum,na.rm=T)
> colnames(t)<-c("ID","hh4B13T")
> df<-merge(df,t,by="ID",all.x=T)

> d<-lss2010[[12]]
> t<-aggregate(d$ m4b14c7,list(d$ID),sum,na.rm=T)
> colnames(t)<-c("ID","hh4B14T")
> df<-merge(df,t,by="ID",all.x=T)

> d<-lss2010[[13]]
> t<-aggregate(d$ m4b15c5,list(d$ID),sum,na.rm=T)
> colnames(t)<-c("ID","hh4B15T")
> df<-merge(df,t,by="ID",all.x=T)

> dim(df)
[1] 9399    6
> df[is.na(df)]<-0
> df$hh4B1T<-rowSums(df[,-1])
> head(df[df$hh4B11T>0,])
                 ID hh4B11T hh4B12T hh4B13T hh4B14T hh4B15T hh4B1T
53  ID01004001480614   11909       0       0       0       0  11909
54  ID01004001480615    2801   21035     662       0       0  24498
148 ID01016003821013    8821   11640     680     369     350  21860
149 ID01016003821014    1915       0       0       0       0   1915
150 ID01016003821015    6292     372       0     135     136   6935
154 ID01016004061913    2238     669     506       0       0   3413

# Appended d$m4b1t from ttchung
> d<-lss2010[[37]]
> table(d$ID==df$ID)
TRUE
9399
> df$m4b1t<-d$m4b1t
> head(df[df$hh4B11T>0,])
                 ID hh4B11T hh4B12T hh4B13T hh4B14T hh4B15T hh4B1T m4b1t
53  ID01004001480614   11909       0       0       0       0  11909 11909
54  ID01004001480615    2801   21035     662       0       0  24498 24499
148 ID01016003821013    8821   11640     680     369     350  21860 21861
149 ID01016003821014    1915       0       0       0       0   1915  1915
150 ID01016003821015    6292     372       0     135     136   6935  6935
154 ID01016004061913    2238     669     506       0       0   3413  3412
```

```
> table(df$hh4B1T==df$m4b1t)
FALSE  TRUE
 2198  7201
> table(abs(df$hh4B1T-df$m4b1t)<=5)
TRUE
9399

> hhcrop<-df

#####################################################
# Revenue from livestock

No.46 = 30
> table(d$tongthu_07==d$m4b21t)
TRUE
9399

# 16 muc4b21 Livestock
> df<-lss2010[[16]]
> dim(df)
[1] 12967    13
> head(df)
  tinh huyen  xa diaban hoso m4b21ma m4b21c3 m4b21c4a m4b21c4b m4b21c5
1    1    16 382     10   13       5     210      125     7088   11908
2    1    16 382     10   13       1    3200     3200    76208   76208
3    1    16 382     10   15       5      10        0       NA     587
4    1    16 397      2   14       5      40        0       NA    2269
5    1    16 397      2   14      12      50        0       NA      95
6    1    16 397      2   19      15      50       50     4725    4725
                ID   wt         eaid
1 ID01016003821013 4425 010160038210
2 ID01016003821013 4425 010160038210
3 ID01016003821015 4425 010160038210
4 ID01016003970214 4581 010160039702
5 ID01016003970214 4581 010160039702
6 ID01016003970219 4581 010160039702

> df<-subset(df,m4b21ma<=18)
> dim(df)
[1] 12844    13
> hhlivestock<-CollapseBy(df,11,10)
> head(hhlivestock)
                ID m4b21c5
1 ID01016003821013   88116
2 ID01016003821015     587
3 ID01016003970214    2364
4 ID01016003970219   13585
5 ID01016004061913    4379
6 ID01016004061915    7398
```

```
> dim(hhlivestock)
[1] 4481    2
> d<-merge(d,hhlivestock,by="ID",all.x=T)
> d[is.na(d)]<-0

No.30
> table(abs(d$m4b21c5-d$m4b21t)<=2)
TRUE
9399



##########################################
# Revenue from hunting

No.47 = 54
> table(d$tongthu_08==d$m4b22t)
TRUE
9399

# 16 muc4b21 Livestock/hunting
> df<-lss2010[[16]]
> df<-subset(df,m4b21ma==19)
> dim(df)
[1] 123  13
> sum(duplicated(df$ID))
[1] 0
> df<-merge(d[,c("ID","m4b22t")],df,by="ID",all.y=T)
> dim(df)
[1] 123  14

No.54
> table(df$m4b22t==df$m4b21c5)
TRUE
 123



#######################################
# Revenue from agricultural services

No.48 = 59
> table(d$tongthu_09==d$m4b3t)
TRUE
9399


# 19 muc4b32 Agricultural services
> df<-lss2010[[18]]
> dim(df)
```

```
[1] 200  12
> sum(duplicated(df$ID))
[1] 27
> df<-CollapseBy(df,10,9)
> dim(df)
[1] 173   2
> df<-merge(d[,c("ID","m4b3t")],df,by="ID",all.y=T)
> dim(df)
[1] 173   3
> head(df)
                ID m4b3t m4b31c5
1 ID01016003821013 11340   11340
2 ID01275098951614 63243   63243
3 ID01275099460313  7591    7591
4 ID01282104921013  3793    3793
5 ID04047014890114  6192    6192
6 ID04051016691413 12840   12840

No.59
> table(abs(df$m4b3t-df$m4b31c5)<2)
TRUE
 173



##########################################################
# Revenue from forestry

No.49 = 63
> table(d$tongthu_10==d$m4b4t)
TRUE
9399


# 20 muc4b41 forestry
> df<-lss2010[[20]]
> dim(df)
[1] 3504   16
> hhforestry<-CollapseBy(df,14,12)
> dim(hhforestry)
[1] 2110    2
> head(hhforestry)
                ID m4b41c3f
1 ID01275049390619     1175
2 ID02026007300213     2076
3 ID02026007300214     3552
4 ID02026007300215     2407
5 ID02026007390513     3811
6 ID02026007390514     3854
```

```
> df<-merge(d[,c("ID","m4b4t")],hhforestry,by="ID",all.y=T)
> dim(df)
[1] 2110    3

No.63
> table(abs(df$m4b4t-df$m4b41c3f)<=2)
TRUE
2110


##########################################################
# Revenue from aquaulture

No.50 = 86
> table(d$tongthu_11==d$m4b5t)
TRUE
9399



# 22 muc4b51 aquaculture
> df<-lss2010[[22]]
> dim(df)
[1] 2671   13
> table(df$m4b51ma)
   3   11   12   13   14   21   22   23
   1 1073  225   35  152  716   91  378

# Confirmed that df does not include aquaculture code = 1 and 2.

> colnames(df)
 [1] "tinh"     "huyen"    "xa"       "diaban"   "hoso"     "m4b51ma"
 [7] "m4b51c3"  "m4b51c4a" "m4b51c4b" "m4b51c5"  "ID"       "wt"
[13] "eaid"
> hhaqua<-CollapseBy(df,11,10)
> dim(hhaqua)
[1] 1856    2
> head(hhaqua)
                ID m4b51c5
1 ID01016003970214     851
2 ID01016004182115    2675
3 ID01017004841115   18422
4 ID01269096040814    1807
5 ID01269096040815   13814
6 ID01271097060713    2170
> df<-merge(d[,c("ID","m4b5t")],hhaqua,by="ID",all.y=T)
> dim(df)
[1] 1856    3
> table(abs(df$m4b5t-df$m4b51c5)<2)
TRUE
```

```
1856
```

```
#####################################################
# Non-farm Business

No.51 = 90
> table(d$tongthu_12==d$m4ct)
TRUE
9399

# 24 muc4c1 business
> df<-lss2010[[24]]
> dim(df)
[1] 4007   26
> colnames(df)
 [1] "tinh"    "huyen"   "xa"      "diaban"  "hoso"    "m4c1ma"  "m4c1c2"
 [8] "m4c1c3"  "m4c1c4"  "m4c1c5"  "m4c1c6"  "m4c1c7"  "m4c1c8"  "m4c1c9"
[15] "m4c1c10" "m4c1c11" "m4c1c12" "m4c1c13" "m4c1c14" "m4c1c15" "m4c1c16"
[22] "m4c1c17" "m4c1c18" "ID"      "wt"      "eaid"
> hhbusiness<-CollapseBy(df,24,23)
> dim(hhbusiness)
[1] 3260    2
> df<-merge(d[,c("ID","m4ct")],hhbusiness,by="ID",all.y=T)
> dim(df)
[1] 3260    3

No.90
> table(abs(df$m4ct-df$m4c1c18)<2)
TRUE
3260
```

```
#####################################################
# Other revenue included in incomes

No.52 = 93
> table(d$tongthu_13==d$m4dtn)
TRUE
9399

# 26 muc4d
> df<-lss2010[[26]]
> dim(df)
[1] 9399   32
> colnames(df)
 [1] "tinh"     "huyen"    "xa"       "diaban"   "hoso"     "m4dc2_01"
 [7] "m4dc2_02" "m4dc2_03" "m4dc2_04" "m4dc2_05" "m4dc2_06" "m4dc2_07"
```

```
[13] "m4dc2_08" "m4dc2_09" "m4dc2_10" "m4dc2_11" "m4dc2_12" "m4dc2_13"
[19] "m4dc2_14" "m4dc2_15" "m4dc2_16" "m4dc2_17" "m4dc2_18" "m4dc2_19"
[25] "m4dc2_20" "m4dc2_21" "m4dc2_22" "m4dc2_23" "m4dc2_24" "ID"
[31] "wt"       "eaid"
```

Correspondences between variable names and other revenue codes

Code	Variable	
101	m4dc2_01	
1011	m4dc2_02	x
1012	m4dc2_03	x
1013	m4dc2_04	x
1014	m4dc2_05	x
102	m4dc2_06	
1021	m4dc2_07	x
1022	m4dc2_08	x
1023	m4dc2_09	x
1024	m4dc2_10	x
103	m4dc2_11	
104	m4dc2_12	
105	m4dc2_13	
106	m4dc2_14	
107	m4dc2_15	
108	m4dc2_16	
109	m4dc2_17	
110	m4dc2_18	
111	m4dc2_19	
112	m4dc2_20	

```
> df$total<-rowSums(df[,c(6,11,16:25)],na.rm=T)
```

No.93

```
> table(abs(df$total-d$m4dtn)<2)
TRUE
9399
```

##

 # Revenue from renting out houses and residential land

No.53 = m7c12 in 34 muc7

```
# 34 muc7 Housing
> df<-lss2010[[34]]
> dim(df)
[1] 9399   33
> table(d$ID==df$ID)
```

```
TRUE
9399
> df[is.na(df)]<-0
> table(d$tongthu_14==df$m7c12)
TRUE
9399
```

□ COST-related variables

```
##############################################
# Total cost

No.65 = 66:72
> table(abs(d$chisxkd_1-rowSums(d[,66:72]))<=2)
TRUE
9399

############################
# Expenditure on crops

No.66 = 118
> table(d$chisxkd_2==d$m4b1c)
TRUE
9399

# 14 muc4b16 cost of cultivation
> df<-lss2010[[14]]
> dim(df)
[1] 47482    16
> colnames(df)
 [1] "tinh"      "huyen"     "xa"        "diaban"    "hoso"      "m4b16ma"
 [7] "m4b16c2a"  "m4b16c2b"  "m4b16c2c"  "m4b16c2d"  "m4b16c2e"  "m4b16c2e1"
[13] "m4b16c2e2" "ID"        "wt"        "eaid"
> costcrop<-CollapseBy(df,14,11)
> dim(costcrop)
[1] 5733    2
> head(costcrop)
                ID m4b16c2e
1 ID01003000910613    11447
2 ID01004001480614     3893
3 ID01004001480615     2364
4 ID01016003821013     9340
5 ID01016003821014      955
6 ID01016003821015     2638
> df<-merge(d[,c("ID","m4b1c")],costcrop,by="ID",all.y=T)
> dim(df)
[1] 5733    3

No.118
> table(abs(df$m4b1c-df$m4b16c2e)<=4)
TRUE
5733
```

```
##################################
# Expenditure of livestock

No.67 = 55
> table(d$chisxkd_3==d$m4b21c)
TRUE
9399

# 17 muc4b22 costs of livestock
> df<-lss2010[[17]]
> dim(df)
[1] 8111   32
> table(df$m4b22ma)
   1    2    3    4    5    6    7    8    9   10   11
2167  528    4   42 3784 1008   31   30   16  394  107
> df<-subset(df,m4b22ma<=10)
> dim(df)
[1] 8004   32
> colnames(df)
 [1] "tinh"      "huyen"     "xa"        "diaban"    "hoso"      "m4b22ma"
 [7] "m4b22c7"   "m4b22c8"   "m4b22c9"   "m4b22c10a" "m4b22c10b" "m4b22c10c"
[13] "m4b22c10d" "m4b22c10e" "m4b22c10f" "m4b22c10g" "m4b22c10h" "m4b22c10i"
[19] "m4b22c10j" "m4b22c10k" "m4b22c11"  "m4b22c12"  "m4b22c13"  "m4b22c14"
[25] "m4b22c15"  "m4b22c16"  "m4b22c17"  "m4b22c18"  "m4b22c19"  "ID"
[31] "wt"        "eaid"
> costlive<-CollapseBy(df,30,29)
> dim(costlive)
[1] 4483    2
> df<-merge(d[,c("ID","m4b21c")],costlive,by="ID",all.y=T)
> dim(df)
[1] 4483    3


No.55
> table(abs(df$m4b21c-df$m4b22c19)<=1)
TRUE
4483


########################################
# Expenditure on hunting

No.68 = 56
> table(d$chisxkd_4==d$m4b22c)
TRUE
9399

# 17 muc4b22 costs of livestock/hunting
> df<-lss2010[[17]]
> dim(df)
```

```
[1] 8111   32
> df<-subset(df,m4b22ma==11)
> dim(df)
[1] 107  32
> sum(duplicated(df$ID))
[1] 0
```

No.56

```
> table(df$m4b22c==df$m4b22c19)
TRUE
 107
```

```
########################################
# Expenditure on agricultural services
```

No.69 = 60

```
> table(d$chisxkd_5==d$m4b3c)
TRUE
9399

# 19 muc4b32 cost of agricultural service activities
> df<-lss2010[[19]]
> dim(df)
[1] 199  30
> sum(duplicated(df$ID))
[1] 27
> costagserv<-CollapseBy(df,28,27)
> dim(costagserv)
[1] 172   2
> df<-merge(d[,c("ID","m4b3c")],costagserv,by="ID",all.y=T)
```

No.60

```
> table(abs(df$m4b3c-df$m4b32c17)<2)
TRUE
 172
```

```
########################################
# Expenditure on forestry
```

No.70 = 64

```
> table(d$chisxkd_6==d$m4b4c)
TRUE
9399

# 21 muc4b42 costs of forestry
> df<-lss2010[[21]]
```

```
> dim(df)
[1] 2119   33
> colnames(df)
 [1] "tinh"     "huyen"    "xa"       "diaban"   "hoso"
 [6] "m4b42ma"  "m4b42c1"  "m4b42c2"  "m4b42c3"  "m4b42c4a"
[11] "m4b42c4b" "m4b42c4c" "m4b42c4d" "m4b42c4e" "m4b42c4f"
[16] "m4b42c4g" "m4b42c4h" "m4b42c4i" "m4b42c4j" "m4b42c4k"
[21] "m4b42c5"  "m4b42c6"  "m4b42c7"  "m4b42c8"  "m4b42c9"
[26] "m4b42c10" "m4b42c11" "m4b42c12" "m4b42c13" "m4b42c14"
[31] "ID"       "wt"       "eaid"
> costforestry<-CollapseBy(df,31,30)
> dim(costforestry)
[1] 2069    2
> df<-merge(d[,c("ID","m4b4c")],costforestry,by="ID",all.y=T)
> dim(df)
[1] 2069    3

No.64
> table(abs(df$m4b4c-df$m4b42c14)<2)
TRUE
2069



#####################################
# Expenditure on aquaculture

No.71 = 87
> table(d$chisxkd_7==d$m4b5c)
TRUE
9399

# 23 muc4b52 costs of aquaculture
> df<-lss2010[[23]]
> dim(df)
[1] 2013   33
> colnames(df)
 [1] "tinh"     "huyen"    "xa"       "diaban"   "hoso"
 [6] "m4b52ma"  "m4b52c6"  "m4b52c7"  "m4b52c8"  "m4b52c9a"
[11] "m4b52c9b" "m4b52c9c" "m4b52c9d" "m4b52c9e" "m4b52c9f"
[16] "m4b52c9g" "m4b52c9h" "m4b52c9i" "m4b52c9j" "m4b52c9k"
[21] "m4b52c10" "m4b52c11" "m4b52c12" "m4b52c13" "m4b52c14"
[26] "m4b52c15" "m4b52c16" "m4b52c17" "m4b52c18" "m4b52c19"
[31] "ID"       "wt"       "eaid"
> costaqua<-CollapseBy(df,31,30)
> dim(costaqua)
[1] 1852    2
> df<-merge(d[,c("ID","m4b5c")],costaqua,by="ID",all.y=T)
> dim(df)
[1] 1852    3
```

No.87
```
> table(abs(df$m4b5c-df$m4b52c19)<=1)
TRUE
1852
```

##
Expenditure on non-farm business

No.72 = 92
```
> table(d$chisxkd_8==d$m4cc)
TRUE
9399

# 25 muc4c2 costs of business
> df<-lss2010[[25]]
> dim(df)
[1] 4007   35
> colnames(df)
 [1] "tinh"     "huyen"    "xa"       "diaban"   "hoso"
 [6] "m4c2ma"   "m4c2c19"  "m4c2c20"  "m4c2c21a" "m4c2c21b"
[11] "m4c2c21c" "m4c2c21d" "m4c2c21e" "m4c2c21f" "m4c2c21g"
[16] "m4c2c21h" "m4c2c21i" "m4c2c21j" "m4c2c21k" "m4c2c22"
[21] "m4c2stt"  "m4c2c23"  "m4c2c24"  "m4c2c25"  "m4c2c26"
[26] "m4c2c27"  "m4c2c28"  "m4c2c29"  "m4c2c30"  "m4c2c31"
[31] "m4c2c32"  "m4c2c33"  "ID"       "wt"       "eaid"
> costbusiness<-CollapseBy(df,33,32)
> dim(costbusiness)
[1] 3260    2
> df<-merge(d[,c("ID","m4cc")],costbusiness,by="ID",all.y=T)
> dim(df)
[1] 3260    3
```

No.92
```
> table(abs(df$m4cc-df$m4c2c33)<=1)
TRUE
3260
```

##
Total income

No.73 = 40 - 65
```
> table(d$thunhap==(d$tongthu_01-d$chisxkd_1))
TRUE
9399
```

- **Consistency check of CONSUMPTION-related variables in ttchung**

☐ **CONSUMPTION-related variables in ttchung**

37 ttchung

```
> d<-lss2010[[37]]
> dim(d)
[1] 9399  121


##############################################
# Education

No.75 = 18
> head(d[,c("ID","chikhac_1","m2act","m2atn","m2btn")])
               ID chikhac_1 m2act m2atn m2btn
1 ID1001000041213     24800 24800     0    NA
2 ID1001000041214         0     0     0    NA
3 ID1001000041215     10000 10000     0    NA
4 ID1001000072213     12500 12500     0    NA
5 ID1001000072215      7200  7200     0    NA
6 ID1001000072220      7800  7800    95    NA

> table(d$chikhac_1==d$m2act)
TRUE
9399
```

4 muc2 education

```
> df<-lss2010[[04]]
> dim(df)
[1] 36999    38
> colnames(df)
 [1] "tinh"   "huyen"  "xa"     "diaban" "hoso"   "matv"   "m2c1"   "m2c2a"
 [9] "m2c2b"  "m2c3"   "m2c4"   "m2c5"   "m2c6"   "m2c7"   "m2c8"   "m2c9"
[17] "m2c10a" "m2c10b" "m2c11a" "m2c11b" "m2c11c" "m2c11d" "m2c11e" "m2c11f"
[25] "m2c11g" "m2c11h" "m2c11i" "m2c11k" "m2c12"  "m2c13"  "m2c14"  "m2c15a"
[33] "m2c15b" "m2c16"  "ID"     "wt"     "eaid"   "PID"

No.18
> df[is.na(df)]<-0
> t<-aggregate(df$m2c11k+df$m2c14,list(df$ID),sum,na.rm=T)
> dim(t)
[1] 9399    2
> head(t)
          Group.1     x
1 ID1001000041213 24800
2 ID1001000041214     0
```

```
3 ID1001000041215 10000
4 ID1001000072213 12500
5 ID1001000072215  7200
6 ID1001000072220  7800
> colnames(t)<-c("ID","m2ct")
> table(t$m2ct==d$m2act)
TRUE
9399
>


##############################################
# Health

No.76 = 114
> head(d[,c("ID","chikhac_2","m3ct1","m3ct2","m3ct3","m3ct","m3tn")])
              ID chikhac_2 m3ct1 m3ct2 m3ct3 m3ct m3tn
1 ID1001000041213      1410  1300     0     0 1410    0
2 ID1001000041214       100     0     0     0  100    0
3 ID1001000041215       450   150     0     0  450    0
4 ID1001000072213       500     0     0   100  500    0
5 ID1001000072215       700   150     0    50  700    0
6 ID1001000072220      1200   650     0    50 1200    0

> table(d$chikhac_2==d$m3ct)
TRUE
9399
```

5 muc3a, 6 muc3b Health

```
# 5 muc3a healthcare
> df<-lss2010[[5]]
> dim(df)
[1] 19647    20
> colnames(df)
 [1] "tinh"   "huyen"  "xa"     "diaban" "hoso"   "matv"   "m3c2"   "m3c3a"
 [9] "m3c3b"  "m3c4"   "m3c5a"  "m3c5b"  "m3c6a"  "m3c6b"  "m3c7"   "m3c8"
[17] "ID"     "wt"     "eaid"   "PID"

# m3c5b: costs for health checks/ non-resident treatment
# m3c6b: costs for resident treatment


# Revised function CollapseBy
> CollapseBy<-function(df,hhid,cols,ID=NULL){
+ # Version 2_20161217
+ # To aggregate variables assigned by cols in data frame df at hhid level
+ # df: data frame
+ # hhid: household variable
```

```
+ # cols: variables to be aggregated
+ # HHID: household id codes to be matched, or
+ #       unique(df$hhid) if not specified
+
+ if(is.numeric(hhid)){ hhid<-colnames(df)[hhid] }
+ if(is.numeric(cols)){ cols<-colnames(df)[cols] }
+ if(!missing(ID)) { y<-data.frame(ID,row.names=NULL)
+ }else{ y<-data.frame(unique(df[,hhid]),row.names=NULL) }
+ colnames(y)<-hhid
+ for(j in cols){
+ t<-aggregate(df[,j],list(df[,hhid]),sum,na.rm=T)
+ colnames(t)<-c(hhid,j)
+ y<-merge(y,t,by=hhid,all.x=T)
+ }
+ y[is.na(y)]<-0
+ return (y)
+ }


> HHID<-d$ID
> length(HHID)
[1] 9399
> ta<-CollapseBy(df,"ID",c("m3c5b","m3c6b"),HHID)
> dim(ta)
[1] 9399    3
> ta$ta<-rowSums(ta[,2:3])
> head(ta[ta$m3c6b>0,])
                ID m3c5b m3c6b    ta
8  ID01001000161519   900  3000  3900
11 ID01001000221914  1280 13100 14380
15 ID01001000282019  8410  2000 10410
18 ID01001000342515  1500  5000  6500
32 ID01003000910614   100 14000 14100
33 ID01003000910615  2300  2500  4800
```

 # 6 muc3b healthcare

```
> df<-lss2010[[6]]
> dim(df)
[1] 36999    19
> colnames(df)
 [1] "tinh"   "huyen"  "xa"     "diaban" "hoso"   "matv"   "m3c9"   "m3c10a"
 [9] "m3c10b" "m3c11"  "m3c12a" "m3c12b" "m3c13"  "m3c14"  "m3c15"  "ID"
[17] "wt"     "eaid"   "PID"

# m3c11: health insurance
# m3c13: medicines
# m3c14: medical facilities
```

```
> tb<-CollapseBy(df,"ID",c("m3c11","m3c13","m3c14"),HHID)
> dim(tb)
[1] 9399    4
> head(tb)
                ID m3c11 m3c13 m3c14
1 ID01001000041213     0   100    10
2 ID01001000041214     0   100     0
3 ID01001000041215     0   200   100
4 ID01001000072213   100   400     0
5 ID01001000072215    50   500     0
6 ID01001000072220    50   500     0
> tb$tb<-rowSums(tb[,2:4])
> head(tb)
                ID m3c11 m3c13 m3c14  tb
1 ID01001000041213     0   100    10 110
2 ID01001000041214     0   100     0 100
3 ID01001000041215     0   200   100 300
4 ID01001000072213   100   400     0 500
5 ID01001000072215    50   500     0 550
6 ID01001000072220    50   500     0 550
```

No.114

```
> table(abs(d$m3ct-(ta$ta+tb$tb))<1)
TRUE
9399
```

Remarks:

No.114

m3ct = ta + tb
= sum of m3c5b and m3c6b in muc3a
+ sum of m3c11, m3c13 and m3c14 in muc3b

```
##############################################
```

Food during holidays

No.77 food during holidays = 94

```
> table(d$chikhac_3==d$m5a1ct,useNA="ifany")
TRUE
9399
```

No.94 = 95 (in cash) + 96 (in-kind)

```
> table(abs(rowSums(d[,c("m5a1c4","m5a1c5")])-d$m5a1ct)<1,useNA="ifany")
TRUE
9399
```

27 muc5a1 food during holidays

```
> df<-lss2010[[27]]
```

```
> dim(df)
[1] 136854     13
> head(df)
  tinh huyen xa diaban hoso m5a1ma m5a1c2a m5a1c2b m5a1c3a m5a1c3b
1    1     1  4     12   13    110       3     180       0      NA
2    1     1  4     12   13    144       4     200       0      NA
3    1     1  4     12   13    140       4     300       0      NA
4    1     1  4     12   13    151      NA     100      NA     100
5    1     1  4     12   13    139       1      20       0      NA
6    1     1  4     12   13    146      10     100       0      NA
                ID   wt        eaid
1 ID1001000041213 3977 10010000412
2 ID1001000041213 3977 10010000412
3 ID1001000041213 3977 10010000412
4 ID1001000041213 3977 10010000412
5 ID1001000041213 3977 10010000412
6 ID1001000041213 3977 10010000412

> dd<-CollapseBy(df,"ID",c("m5a1c2b","m5a1c3b"),HHID)
> dim(dd)
[1] 9399    3
> head(dd)
                ID m5a1c2b m5a1c3b
1 ID01001000041213    3616     400
2 ID01001000041214    2216       0
3 ID01001000041215    3461       0
4 ID01001000072213    6217       0
5 ID01001000072215    6111       0
6 ID01001000072220    5568       0

No.95
> table(abs(d$m5a1c4-dd$m5a1c2b)<1)
TRUE
9399


No.96
> table(abs(d$m5a1c5-dd$m5a1c3b)<1)
TRUE
9399



#####################################
# Daily food

No.78 daily food = 97
> table(d$chikhac_4==d$m5a2ct)
TRUE
9399
```

```
No.97 = 98:100
> table(abs(d$m5a2ct-rowSums(d[,c("m5a2c6","m5a2c7","m5a2c8")]))<1)
TRUE
9399
```

28 muc5a2 daily food

```
> df<-lss2010[[28]]
> dim(df)
[1] 236630     17
> head(df)
  tinh huyen xa diaban hoso m5a2ma m5a2c2a m5a2c2b m5a2c3a m5a2c3b m5a2c4a
1    1     1  4     12   13     137       NA       50       NA       50       NA
2    1     1  4     12   13     117      2.0       64      2.0       64        0
3    1     1  4     12   13     108     10.0       80     10.0       80        0
4    1     1  4     12   13     132      4.0       50      4.0       50        0
5    1     1  4     12   13     107      2.5       60      2.5       60        0
6    1     1  4     12   13     150      0.1       13      0.1       13        0
  m5a2c4b m5a2c5a m5a2c5b              ID   wt        eaid
1       0      NA       0 ID1001000041213 3977 10010000412
2      NA       0      NA ID1001000041213 3977 10010000412
3      NA       0      NA ID1001000041213 3977 10010000412
4      NA       0      NA ID1001000041213 3977 10010000412
5      NA       0      NA ID1001000041213 3977 10010000412
6      NA       0      NA ID1001000041213 3977 10010000412t

> dd<-CollapseBy(df,"ID",c("m5a2c2b","m5a2c3b","m5a2c4b","m5a2c5b"),HHID)
> dim(dd)
[1] 9399    5
> head(dd)
                ID m5a2c2b m5a2c3b m5a2c4b m5a2c5b
1 ID01001000041213    4911    4911       0       0
2 ID01001000041214    2103    2103       0       0
3 ID01001000041215    3121    3121       0       0
4 ID01001000072213    3481    3481       0       0
5 ID01001000072215    5979    5979       0       0
6 ID01001000072220    6120    6120       0       0

No.97
> table(abs(d$m5a2ct-dd$m5a2c2b)<1)
TRUE
9399

No.98
> table(abs(d$m5a2c6-dd$m5a2c3b)<1)
TRUE
9399
```

```
No.99
> table(abs(d$m5a2c7-dd$m5a2c4b)<1)
TRUE
9399

No.100
> table(abs(d$m5a2c8-dd$m5a2c5b)<1)
TRUE
9399




##################################
# Daily non-food

No.79 daily non-food = 101
> table(d$chikhac_5==d$m5b1ct)
TRUE
9399

No.101 = 102:104
> table(abs(d$m5b1ct-rowSums(d[,c("m5b1c6","m5b1c7","m5b1c8")]))<1)
TRUE
9399
```

29 muc5b1 daily non-food

```
> df<-lss2010[[29]]
> dim(df)
[1] 111034     13
> head(df)
  tinh huyen xa diaban hoso m5b1ma m5b1c2 m5b1c3 m5b1c4 m5b1c5              ID
1    1     1  4     12   13    228    500    500      0      0 ID1001000041213
2    1     1  4     12   13    217     60     60      0      0 ID1001000041213
3    1     1  4     12   13    216     30     30      0      0 ID1001000041213
4    1     1  4     12   13    204   1000   1000      0      0 ID1001000041213
5    1     1  4     12   13    218     30     30      0      0 ID1001000041213
6    1     1  4     12   13    219    100    100      0      0 ID1001000041213
    wt        eaid
1 3977 10010000412
2 3977 10010000412
3 3977 10010000412
4 3977 10010000412
5 3977 10010000412
6 3977 10010000412

> dd<-CollapseBy(df,"ID",7:10,HHID)
> dim(dd)
```

```
[1] 9399    5
> head(dd)
                ID m5b1c2 m5b1c3 m5b1c4 m5b1c5
1 ID01001000041213   2560   2560      0      0
2 ID01001000041214   1090   1090      0      0
3 ID01001000041215   2000   2000      0      0
4 ID01001000072213   2308   2308      0      0
5 ID01001000072215   3650   3650      0      0
6 ID01001000072220   2348   2348      0      0
```

No.101

```
> table(abs(d$m5b1ct-dd$m5b1c2)<1)
TRUE
9399
```

No.102

```
> table(abs(d$m5b1c6-dd$m5b1c3)<1)
TRUE
9399
```

No.103

```
> table(abs(d$m5b1c7-dd$m5b1c4)<1)
TRUE
9399
```

No.104

```
> table(abs(d$m5b1c8-dd$m5b1c5)<1)
TRUE
9399
```

```
############################
# Yearly non-food
```

No.80 yearly non-food = 105

```
> table(d$chikhac_6==d$m5b2ct)
TRUE
9399
```

No.105 = 106:107

```
> table(abs(d$m5b2ct-rowSums(d[,c("m5b2c4","m5b2c5")]))<1)
TRUE
9399
```

30 muc5b2 yearly non-food

```
> df<-lss2010[[30]]
> dim(df)
[1] 119120     11
> head(df)
  tinh huyen xa diaban hoso m5b2ma m5b2c2 m5b2c3              ID   wt        eaid
1    1     1  4     12   13    327  10560      0 ID1001000041213 3977 10010000412
2    1     1  4     12   13    312    150      0 ID1001000041213 3977 10010000412
3    1     1  4     12   13    317    300      0 ID1001000041213 3977 10010000412
4    1     1  4     12   13    320    600      0 ID1001000041213 3977 10010000412
5    1     1  4     12   13    313     50      0 ID1001000041213 3977 10010000412
6    1     1  4     12   13    326     30      0 ID1001000041213 3977 10010000412

> dd<-CollapseBy(df,"ID",c("m5b2c2","m5b2c3"),HHID)
> dim(dd)
[1] 9399    3
> head(dd)
                ID m5b2c2 m5b2c3
1 ID01001000041213  33460      0
2 ID01001000041214  33230      0
3 ID01001000041215  32050      0
4 ID01001000072213  17938      0
5 ID01001000072215  37440      0
6 ID01001000072220  18730      0
```

No.106

```
> table(abs(d$m5b2c4-dd$m5b2c2)<1)
TRUE
9399
```

No.107

```
> table(abs(d$m5b2c5-dd$m5b2c3)<1)
TRUE
9399
```

```
##############################################
# Other expenditure considered as consumption

No.81 other expenditure = 108
> table(d$chikhac_7==d$m5b3ct)
TRUE
9399
```

31 muc5b3 other expenditure

```
> df<-lss2010[[31]]
```

```
> dim(df)
[1] 9399   17
> head(df)
  tinh huyen xa diaban hoso m5b3c2_1 m5b3c2_2 m5b3c2_3 m5b3c2_4 m5b3c2_5 m5b3c2_6
1    1     1  4     12   13       50      600      400        0        0     2000
2    1     1  4     12   14       50      500        0        0        0        0
3    1     1  4     12   15        0      600      200        0        0     1000
4    1     1  7     22   13        0      200        0        0        0        0
5    1     1  7     22   15        0        0        0      300        0     8000
6    1     1  7     22   20        0        0        0        0        0    10000
  m5b3c2_7 m5b3c2_8 m5b3c2_9              ID   wt        eaid
1     2000     5000        0 ID1001000041213 3977 10010000412
2     5000     3000        0 ID1001000041214 3977 10010000412
3        0     2000        0 ID1001000041215 3977 10010000412
4        0     2000        0 ID1001000072213 4805 10010000722
5        0     4000        0 ID1001000072215 4805 10010000722
6        0     3000        0 ID1001000072220 4805 10010000722
```

Note: Variables of m5b3c2_1 to m5b3c2_9 correspond to item 400 to 408.

No.108

```
> df$m5b3c2t<-rowSums(df[,6:14],na.rm=T)
> table(abs(df$m5b3c2t-d$m5b3ct)<1)
TRUE
9399
```

```
##################################################
# Durables
```

No.82 durables = 109

```
> table(d$chikhac_8==d$m6c7)
TRUE
9399
```

33 muc6b durables

```
> df<-lss2010[[33]]
> dim(df)
[1] 91597    14
> head(df)
  tinh huyen xa diaban hoso m6c2 m6c3 m6c4t m6c4n m6c5 m6c6             ID   wt
1    1     1  4     12   13   24    1     0  2004    NA 1000 ID1001000041213 3977
2    1     1  4     12   13    2    1     0  2005    NA 5000 ID1001000041213 3977
3    1     1  4     12   13   15    2     0  2008    NA 8000 ID1001000041213 3977
4    1     1  4     12   13   14    1     0  2007    NA  500 ID1001000041213 3977
5    1     1  4     12   13   23    2     0  2006    NA 5000 ID1001000041213 3977
```

```
6    1     1  4     12    13    12     3      0  2006    NA 2000 ID1001000041213 3977
         eaid
1 10010000412
2 10010000412
3 10010000412
4 10010000412
5 10010000412
6 10010000412

> sum(!is.na(df$m6c5)&df$m6c5>0)
[1] 9683
No.109
> t<-aggregate(df$m6c5,list(df$ID),sum,na.rm=T)
> dim(t)
[1] 9222    2
> head(t)
          Group.1     x
1 ID1001000041213     0
2 ID1001000041214     0
3 ID1001000041215     0
4 ID1001000072213 38000
5 ID1001000072215     0
6 ID1001000072220     0
> colnames(t)<-c("ID","m6c5")
> d<-merge(d,t,by="ID",all.x=T)
> table(abs(d$m6c7-d$m6c5)<1,useNA="ifany")
TRUE <NA>
9222  177



################################################
# Housing

No.83 Recurrent expenditures on housing, electricity, water and daily life

34 muc7 housing

> df<-lss2010[[34]]
> dim(df)
[1] 9399   33
> colnames(df)
 [1] "tinh"   "huyen"  "xa"     "diaban" "hoso"   "m7c1"   "m7c2"   "m7c3"
 [9] "m7c4"   "m7c5"   "m7c6"   "m7c7"   "m7c8"   "m7c9"   "m7c10"  "m7c11"
[17] "m7c12"  "m7c13"  "m7c14"  "m7c15a" "m7c15b" "m7c16"  "m7c17"  "m7c18"
[25] "m7c19"  "m7c19k" "m7c20"  "m7c21"  "m7c22"  "m7c23"  "ID"     "wt"
[33] "eaid"
> df[is.na(df)]<-0

No.83
```

```
> table(abs(d$chikhac_9-rowSums(df[,c("m7c7","m7c13","m7c16","m7c20","m7c22")]))<1)
TRUE
9399
```

7. Household income

- Definition of household income

The household income is defined as in the next table of TTCHUNG.

No	Variable name	Description	Operational definition	Data file	Confirmed from data
40	tongthu_01	**Total of household REVENUE**	= sum of tongthu_02 to tongthu_14 (41-53)		Yes
41	tongthu_02	**Income from subsidies,scholarship**	=m2atn (19)		Yes
42	tongthu_03	**Income from health subsidies**	=m3tn (115)		Yes
43	tongthu_04	**Income from wage**	=m4atn (27)		Yes
44	tongthu_05	**revenue from crops**	=m4b0tn (33)		Yes
45	tongthu_06	**Revenue from livestock**	=m4b1t (117)		Yes
46	tongthu_07	**Revenue from Agricultural Services**	=m4b21t (30)		Yes
47	tongthu_08	**Revenue from hunting, trapping**	=m4b22t (54)		Yes
48	tongthu_09	**Revenue from forestry**	=m4b3t (59)		Yes
49	tongthu_10	**Revenue from aquaculture**	=m4b4t (63)		Yes
50	tongthu_11	**Revenue from non-farm business**	=m4b5t (86)		Yes
51	tongthu_12	**Other income**	=m4ct (90)		Yes
52	tongthu_13	**Other money received, not considered as income**	=m4dtn (93)		Yes
53	tongthu_14	**Income from house and land renting out**	=m7c12	muc7	Yes
65	chisxkd_1	**Expenditure on business (TOTAL COST)**	= sum of chisxkd_2 to chisxkd_8		Yes
66	chisxkd_2	**Expenditure on crops**	=m4b1c (118)		Yes
67	chisxkd_3	**Expenditure on livestock**	=m4b21c (55)		Yes
68	chisxkd_4	**Expenditure on agricultural services**	=m4b22c (56)		Yes
69	chisxkd_5	**Expenditure on hunting, trapping..**	=m4b3c (60)		Yes
70	chisxkd_6	**Expenditure on forestry**	=m4b4c (64)		Yes
71	chisxkd_7	**Expenditure on aquaculture**	=m4b5c (87)		Yes
72	chisxkd_8	**Expenditure on non-farm business**	=m4cc (92)		Yes
73	thunhap	**(Yearly) Income**	= total revenue – total cost = tongthu_01 (40) – chisxkd_1 (65)		Yes
74	thubq	(Yearly) Income per capita			

Remarks on definition:

1) In-kind income is included.

2) Imputed rent is not estimated.

- ✓ It is difficult to estimate imputed rent from market data because the share of households paying rent is small.

```
> d<-lss2010[[34]]    # Housing
# m7c6: Does your household pay rents? (in cash or kind)
> nrow(subset(d,m7c6==1))/nrow(d)
[1] 0.02585381
```

- ✓ The share of sample households paying house rent is 2.6%.

- Mean monthly household income

```
# Total income

No.73 = 40 - 65
> d<-lss2010[[37]]
> table(d$thunhap==(d$tongthu_01-d$chisxkd_1))
TRUE
9399


# Generated monthly household income

> d$minc<-round(d$thunhap/12)
> round(weighted.mean(d$minc,d$wt))
[1] 6027

# Appended minc to ttchung
> ttchung<-d
```

- **Mean value by component items of household income**

```
> df<-ttchung[,c(40:53,65:74,122)]
> colnames(df)
 [1] "tongthu_01" "tongthu_02" "tongthu_03" "tongthu_04" "tongthu_05"
 [6] "tongthu_06" "tongthu_07" "tongthu_08" "tongthu_09" "tongthu_10"
[11] "tongthu_11" "tongthu_12" "tongthu_13" "tongthu_14" "chisxkd_1"
[16] "chisxkd_2"  "chisxkd_3"  "chisxkd_4"  "chisxkd_5"  "chisxkd_6"
[21] "chisxkd_7"  "chisxkd_8"  "thunhap"    "thubq"      "minc"
> t<-round(apply(df,2,function(x) weighted.mean(x,d$wt)))
> data.frame(variable=names(t),value=t,row.names=NULL,
+ label=c(var.names[37][[1]][c(40:53,65:74)],"Monthly household income"))
```

	variable	value	label
1	tongthu_01	110421	Total of household revenue
2	tongthu_02	115	Income from subsidies,scholarship
3	tongthu_03	623	Income from health subsidies
4	tongthu_04	30608	Income from wage
5	tongthu_05	184	Revenue from renting out agricultural and forestry land and water surface
6	tongthu_06	15087	Revenue from crop
7	tongthu_07	10188	Revenue from husbandry

8	tongthu_08	32	Revenue from hunting, trapping and domestication
9	tongthu_09	508	Revenue from agricultural services
10	tongthu_10	560	Revenue from forestry
11	tongthu_11	4253	Revenue from aquaculture
12	tongthu_12	38391	Other income
13	tongthu_13	9141	Other revenues included in incomes
14	tongthu_14	731	Revenues from renting out house(s) and residential land
15	chisxkd_1	38101	Expenditure on business
16	chisxkd_2	6017	Expenditure on crops
17	chisxkd_3	6955	Expenditure on livestock
18	chisxkd_4	3	Expenditure on hunting, trapping..
19	chisxkd_5	267	Expenditure on agricultural services
20	chisxkd_6	82	Expenditure on forestry
21	chisxkd_7	2677	Expenditure on aquaculture
22	chisxkd_8	22099	Expenditure on non-farm business
23	thunhap	72320	Total Income
24	thubq	1676	income per capita per month
25	minc	6027	Monthly household income

- **Mean monthly income by region**

Appended the variables of reg6 and reg8 in the data frame hhexpe10 to ttchung, that is, lss2010[[37]].

```
> df<-lss2010[[1]]
> d$reg6<-df$reg6
> d$reg8<-df$reg8
> ttchung<-d
```

mean monthly income by six regions and urban/rural

```
> t<-tapply(d$minc*d$wt,list(d$reg6,d$ttnt),sum)
> colnames(t)<-c("Urban","Rural")
> region.name<-c("Red River Delta","Midlands and Northern Mountains",
+ "Northern and Coastal Central","Central Highlands",
```

```
+ "Southeastern","Mekong Delta")
> rownames(t)<-region.name
> num<-addmargins(t)
> den<-addmargins(tapply(d$wt,list(d$reg6,d$ttnt),sum))
> (ret<-round(num/den))
                                Urban Rural   Sum
Red River Delta                 10434  4760  6426
Midlands and Northern Mountains  5947  3381  3872
Northern and Coastal Central     6736  3717  4462
Central Highlands                6348  4094  4769
Southeastern                    11806  8008 10172
Mekong Delta                     7298  4847  5408
Sum                              9202  4632  6027
```

8. Household expenditure

- Definition of components of household expenditure

No	Variable name	Description	Operational definition	Data file	Reference period
75	chikhac_1	**Expenditure on education**	=m2act (18)		12M
76	chikhac_2	**Expenditure on health**	=m3ct (114)		12M
77	chikhac_3	**Expenditure on holiday food**	=m5a1ct (94)		12M
78	chikhac_4	**Expenditure on daily food**	=m5a2ct (97)		1M
79	chikhac_5	**Expenditure on daily non-food**	=m5b1ct (101)		1M
80	chikhac_6	**Expenditure on yearly non-food**	=m5b2ct (105)		12M
81	chikhac_7	**Expenditure on other**	=m5b3ct (108)		12M
82	chikhac_8	**Expenditure on durables**	=m6c7 (109)		12M
83	chikhac_9	**Expenditure on housing**	= sum (m7c7 + m7c13 + m7c16 + m7c20 + m7c22)	muc7	12M

- Generated household expenditure variables

Note: The reference period for the expenditure on holiday food is 15 days. Therefore, the expenditure on daily food should be estimated for the period of 365 minus 15 days.

37 ttchung

```
> d<-lss2010[[37]]
> dim(d)
[1] 9399  121

# Generated household consumption variables

> exp<-d[,c(119,120,75:83)]
> dim(exp)
[1] 9399   11
> head(exp)
                ID   wt chikhac_1 chikhac_2 chikhac_3 chikhac_4
1 ID01001000041213 3977      24800       1410       4016       4911
2 ID01001000041214 3977          0        100       2216       2103
3 ID01001000041215 3977      10000        450       3461       3121
4 ID01001000072213 4805      12500        500       6217       3481
5 ID01001000072215 4805       7200        700       6111       5979
6 ID01001000072220 4805       7800       1200       5568       6120
  chikhac_5 chikhac_6 chikhac_7 chikhac_8 chikhac_9
1      2560      33460      10050          0      15676
```

```
2       1090      33230       8550          0       9372
3       2000      32050       3800          0       6604
4       2308      17938       2200      38000       6588
5       3650      37440      12300          0       6984
6       2348      18730      13000          0       6540

# Converted to annual
> exp$chikhac_4<-round(exp$chikhac_4*12*(365-15)/365)
> exp$chikhac_5<-round(exp$chikhac_5*12)

> head(exp)
                ID   wt chikhac_1 chikhac_2 chikhac_3 chikhac_4
1 ID01001000041213 3977      24800       1410       4016      56510
2 ID01001000041214 3977          0        100       2216      24199
3 ID01001000041215 3977      10000        450       3461      35913
4 ID01001000072213 4805      12500        500       6217      40055
5 ID01001000072215 4805       7200        700       6111      68799
6 ID01001000072220 4805       7800       1200       5568      70422
  chikhac_5 chikhac_6 chikhac_7 chikhac_8 chikhac_9
1     30720     33460     10050          0     15676
2     13080     33230      8550          0      9372
3     24000     32050      3800          0      6604
4     27696     17938      2200      38000      6588
5     43800     37440     12300          0      6984
6     28176     18730     13000          0      6540

# Annual total household expenditure
> exp$yexp<-rowSums(exp[,3:11])

# Monthly total household expenditure
> exp$mexp<-round(exp$yexp/12)

> head(exp)
                ID   wt chikhac_1 chikhac_2 chikhac_3 chikhac_4
1 ID01001000041213 3977      24800       1410       4016      56510
2 ID01001000041214 3977          0        100       2216      24199
3 ID01001000041215 3977      10000        450       3461      35913
4 ID01001000072213 4805      12500        500       6217      40055
5 ID01001000072215 4805       7200        700       6111      68799
6 ID01001000072220 4805       7800       1200       5568      70422
  chikhac_5 chikhac_6 chikhac_7 chikhac_8 chikhac_9   yexp  mexp
1     30720     33460     10050          0     15676 176642 14720
2     13080     33230      8550          0      9372  90747  7562
3     24000     32050      3800          0      6604 116278  9690
4     27696     17938      2200      38000      6588 151694 12641
5     43800     37440     12300          0      6984 183334 15278
6     28176     18730     13000          0      6540 151436 12620

> round(weighted.mean(exp$yexp,exp$wt))
[1] 57788
```

```
> round(weighted.mean(exp$mexp,exp$wt))
[1] 4816


# Appended household size to exp.
> exp$hhsz<-d$tsnguoi

# Monthly total household expenditure per capita
> round(sum(exp$mexp*exp$wt)/sum(exp$hhsz*exp$wt))
[1] 1244
```

- Appended yexp and mexp to ttchung

```
> ttchung$yexp<-exp$yexp
> ttchung$mexp<-exp$mexp
> ttchung$reg6<-lss2010[[1]]$reg6
> ttchung$reg8<-lss2010[[1]]$reg8
> d<-ttchung
> dim(d)
[1] 9399  126
> lss2010[[37]]<-d
```

- Mean value by items of household expenditure

```
> df<-exp[,3:13]
> colnames(df)
 [1] "chikhac_1" "chikhac_2" "chikhac_3" "chikhac_4" "chikhac_5" "chikhac_6"
 [7] "chikhac_7" "chikhac_8" "chikhac_9" "yexp"      "mexp"
> t<-apply(df,2,function(x) round(weighted.mean(x,exp$wt)))
> data.frame(variable=names(t),value=t,row.names=NULL,
+ label=c(var.names[37][[1]][75:83],"Yearly household expenditure",
+ "Monthly household expenditure"))
    variable value                                                    label
1  chikhac_1  3257                                  Expenditure on education
2  chikhac_2  2948                                    Expenditure on health
3  chikhac_3  2035          Expenditure on foods and drinks during holidays
4  chikhac_4 25132                    Daily expenditure on foods and drinks
5  chikhac_5  8124                           Daily expenditure on non-food
6  chikhac_6  5027                              Yearly Non-food expenditure
```

```
7  chikhac_7  3446                                  Other expenditure considered as consumption
8  chikhac_8  5439                               Expenditures on durables over the past 12 month
9  chikhac_9  2381 Recurrent expenditures on housing, electricity, water,and daily life waste
10      yexp 57788                                                    Yearly household expenditure
11      mexp  4816                                                   Monthly household expenditure
```

- Mean monthly household expenditure by six regions and urban/rural

```
> t<-tapply(d$mexp*d$wt,list(d$reg6,d$ttnt),sum)
> colnames(t)<-c("Urban","Rural")
> rownames(t)<-region.name
> num<-addmargins(t)
> den<-addmargins(tapply(d$wt,list(d$reg6,d$ttnt),sum))
> (ret<-round(num/den))
                                Urban Rural  Sum
Red River Delta                  8856  4078 5481
Midlands and Northern Mountains  5450  3202 3633
Northern and Coastal Central     6265  3529 4204
Central Highlands                5795  3664 4302
Southeastern                     7502  4737 6312
Mekong Delta                     5533  3865 4246
Sum                              7078  3822 4816
```

Remarks:
Household expenditure vs household consumption

According to the Users' Manual of VHLSS 2006, the definition of consumption expenditure is the household expenditure minus chikhac_08; expenses counted in household expenditure, but not counted in consumption expenditure, as follows:

Fee, administrative and legal service for life,
Contributions to various funds,
Amount paid in replacement of compulsory public labor,
All kind of taxes,
Wedding of a household member,
Funeral and death anniversaries of household members,
Entertainment,
Gifts, donation, support,
Other expenses,
in which: cost for persons who used to be household member to study or be medically treated overseas.

These items correspond to chikhac_7: other costs as expenditures in VHLSS 2010.

Remarks:

Terms related to household expenditure

Terms used in the survey report 2010	Monthly per capita in 2010	Corresponding variables of ttchung in 2010	Terms used in this manual
Total consumption expenditure	1,211 (1000 VDN)	chikhac_1 to chikhac_9	**Total household expenditure**
Consumption expenditure for living	1,139	chikhac_1 to chikhac_6, chikhac_8 and chikha_9	**Consumption expenditure**
Eating, drinking & smoking	602	chikhac_3 and chikhac_4	Eating, drinking & smoking
Non-eating, drinking & smoking	537	chikhac_1, chikhac_2, chikhac_5, chikhac_6, chikhac_8 and chikhac_9	Non-eating, drinking & smoking
Other consumption expenditure	72	chikhac_7	Non-consumption expenditure

VHLSS 2010

9. Micro data to be provided

Strategy

1. Resampling

The data files which were provided by NSO will be resampled as follows;

1.1 To append household identifier ID and weight wt to all data files.

1.2 To append personal identifier PID to muc1a, muc2, muc3a, muc3b and muc4a.

1.3 To delete hhexpe10, because it is used for office use.

1.4 To select 80% of ID by systematic sampling method.

1.5 To select records which ID belongs to the above selected ID from the data files.

2. The weight wt in all files will be adjusted by dividing by 0.8.

3. Resampled data files will be provided in CSV and R format.

Resampling

```
# Selected 80% of ID
> ID<-lss2010[[1]]$ID
> length(ID)
[1] 9399
> Int<-5
> (St<-sample(1:5,1))
[1] 4
> ID.selected<-ID[(1:length(ID))%%Int!=(St-1)]
> length(ID.selected)/length(ID)
[1] 0.7999787
> ID.selected<-ID.selected[order(ID.selected)]
> head(ID.selected)
[1] "ID01001000041213" "ID01001000041214" "ID01001000072213" "ID01001000072215"
[5] "ID01001000072220" "ID01001000161514"
```

```
# Resampled at the rate of 80%
# lss2010[[1]] to lss2010[[37]]

> Rnames.80<-paste(Rnames[-38],".80",sep="")
> Rnames.80
 [1] "hhexpe10.80"  "muc1a.80"     "muc1b.80"     "muc2.80"      "muc3a.80"
 [6] "muc3b.80"     "muc4a.80"     "muc4b0.80"    "muc4b11.80"   "muc4b12.80"
[11] "muc4b13.80"   "muc4b14.80"   "muc4b15.80"   "muc4b16.80"   "muc4b17.80"
[16] "muc4b21.80"   "muc4b22.80"   "muc4b31.80"   "muc4b32.80"   "muc4b41.80"
[21] "muc4b42.80"   "muc4b51.80"   "muc4b52.80"   "muc4c1.80"    "muc4c2.80"
[26] "muc4d.80"     "muc5a1.80"    "muc5a2.80"    "muc5b1.80"    "muc5b2.80"
[31] "muc5b3.80"    "muc6.80"      "muc6b.80"     "muc7.80"      "muc8.80"
[36] "muc8vayno.80" "ttchung.80"

> lss.80<-list()
> for(j in 1:37){
+ d<-lss2010[[j]]
+ lss.80[[j]]<-subset(d,is.element(d$ID,ID.selected))
+ }
> length(lss.80)
[1] 37

> for(j in 1:37){
+ cat(format(Rnames.80[j],width=12),": ",
+ format(nrow(lss.80[[j]]),width=6),",",
+ format(ncol(lss.80[[j]]),width=3),"¥n")
+ }
hhexpe10.80  :    7519 ,  56
muc1a.80     :   29567 ,  22
muc1b.80     :     974 ,  20
muc2.80      :   29567 ,  38
muc3a.80     :   15808 ,  20
muc3b.80     :   29567 ,  19
muc4a.80     :   29567 ,  57
muc4b0.80    :    9293 ,  12
muc4b11.80   :   10956 ,  15
```

```
muc4b12.80    :   10454 ,  14
muc4b13.80    :    2428 ,  15
muc4b14.80    :    5811 ,  15
muc4b15.80    :    5338 ,  13
muc4b16.80    :   38048 ,  16
muc4b17.80    :   12135 ,  14
muc4b21.80    :   10364 ,  13
muc4b22.80    :    6475 ,  32
muc4b31.80    :     152 ,  12
muc4b32.80    :     152 ,  30
muc4b41.80    :    2820 ,  16
muc4b42.80    :    1696 ,  33
muc4b51.80    :    2156 ,  13
muc4b52.80    :    1625 ,  33
muc4c1.80     :    3152 ,  26
muc4c2.80     :    3152 ,  35
muc4d.80      :    7519 ,  32
muc5a1.80     :  109506 ,  13
muc5a2.80     :  189252 ,  17
muc5b1.80     :   88725 ,  13
muc5b2.80     :   95314 ,  11
muc5b3.80     :    7519 ,  17
muc6.80       :    7519 ,  45
muc6b.80      :   73237 ,  14
muc7.80       :    7519 ,  33
muc8.80       :    7519 ,  56
muc8vayno.80  :    1088 ,  15
ttchung.80    :    7519 , 126

# Adjusted weight
> for(j in 1:37){
+ d<-lss.80[[j]]
+ d$WT<-d$wt/0.8
+ lss.80[[j]]<-d
+ }
```

```
> sum(lss.80[[1]]$WT)
[1] 22275260
> sum(lss2010[[1]]$wt)
[1] 22278084

# Dropped hhexpe10
> lss.80[[1]]<-data.frame()

> save(lss.80,file="Resampled_80%.RData")

# Converted to CSV
> CSVnames<-gsub("¥¥.","_",Rnames.80)
> CSVnames<-paste(CSVnames,".csv",sep="")
> CSVnames
 [1] "hhexpe10_80.csv"  "muc1a_80.csv"     "muc1b_80.csv"     "muc2_80.csv"
 [5] "muc3a_80.csv"     "muc3b_80.csv"     "muc4a_80.csv"     "muc4b0_80.csv"
 [9] "muc4b11_80.csv"   "muc4b12_80.csv"   "muc4b13_80.csv"   "muc4b14_80.csv"
[13] "muc4b15_80.csv"   "muc4b16_80.csv"   "muc4b17_80.csv"   "muc4b21_80.csv"
[17] "muc4b22_80.csv"   "muc4b31_80.csv"   "muc4b32_80.csv"   "muc4b41_80.csv"
[21] "muc4b42_80.csv"   "muc4b51_80.csv"   "muc4b52_80.csv"   "muc4c1_80.csv"
[25] "muc4c2_80.csv"    "muc4d_80.csv"     "muc5a1_80.csv"    "muc5a2_80.csv"
[29] "muc5b1_80.csv"    "muc5b2_80.csv"    "muc5b3_80.csv"    "muc6_80.csv"
[33] "muc6b_80.csv"     "muc7_80.csv"      "muc8_80.csv"      "muc8vayno_80.csv"
[37] "ttchung_80.csv"


> for(j in 1:37){
+ cmd<-paste("write.csv(lss.80[[",j,"]],'",CSVnames[j],"',row.names=F)",sep="")
+ eval(parse(text=cmd))
+ }

# Resampled data set in csv format
> list.files()
 [1] "hhexpe10_80.csv"  "muc1a_80.csv"     "muc1b_80.csv"     "muc2_80.csv"
 [5] "muc3a_80.csv"     "muc3b_80.csv"     "muc4a_80.csv"     "muc4b0_80.csv"
 [9] "muc4b11_80.csv"   "muc4b12_80.csv"   "muc4b13_80.csv"   "muc4b14_80.csv"
```

```
[13] "muc4b15_80.csv"   "muc4b16_80.csv"   "muc4b17_80.csv"   "muc4b21_80.csv"
[17] "muc4b22_80.csv"   "muc4b31_80.csv"   "muc4b32_80.csv"   "muc4b41_80.csv"
[21] "muc4b42_80.csv"   "muc4b51_80.csv"   "muc4b52_80.csv"   "muc4c1_80.csv"
[25] "muc4c2_80.csv"    "muc4d_80.csv"     "muc5a1_80.csv"    "muc5a2_80.csv"
[29] "muc5b1_80.csv"    "muc5b2_80.csv"    "muc5b3_80.csv"    "muc6_80.csv"
[33] "muc6b_80.csv"     "muc7_80.csv"      "muc8_80.csv"      "muc8vayno_80.csv"
[37] "ttchung_80.csv"
```

Note: "hhexpe10_80.csv" is an empty file.

Attachments

1. The questionnaire

2. Data dictionary

- ✓ The data file “hhexpe10” is not included in the resampled data set. However, the variables of “reg6” and “reg8” are appended to the data file “ttchung”.

- ✓ The weight file “weight10” is not included in the resampled data set. However, the weight variable is appended to all data files.

- ✓ The identifier variables of “eaid” and “ID” are appended to all data files, and “PID” to individual files.

- ✓ The variables of “minc”, “yexp” and “mexp” estimated by the author are appended to the data file “ttchung”, for reference.

- ✓ The data dictionary of the below data files correspond to those of the second column.

Data file name	File names used in data dictionary	Remarks
muc2	muc2a1, muc2_QX_cau9_11, muc2_QX_cau12_16	The third character “a” in variable names should be dropped. Ex. m2ac1 → m2c1
muc4a	muc4a1, muc4a2, muc4a3, muc4a4, muc4a5	
muc4b22	muc4b22a, muc4b22b	
muc4b32	muc4b32a, muc4b32b	
muc4b42	muc4b42a, muc4b42b	

3. Province map

Provided information is kept confidential

General Statistics Office

VHLSS 2010

Questionnaire form No. 1B-PVH/KSMS10

Form No.

Household questionnaire on incomes and expenditures

Province/ city..... | | |

Rural district/ urban district / (provincial) town..... | | | |

Rural commune/ urban ward/ (district) township..... | | | | | |

Enumeration area..... | | |

Area: ..... (Urban:.....1; rural:.....2)..... | |

Full name of household head (in block capital letters)..... Household No. | | |

Ethnicity of household head..... | | |

Address.....

Landline phone number (INCLUDE PROVINCE CODE):.....Mob

Interpreter employed? (yes:.....1; no:.....2)..... | |

Enumerator's full name .....Code | | |

Full name of team leader.....Code | | |

Date month year 2010
Team leader
(Signature)

Date month year 2010
Enumerator
(Signature)

Participation in VHLSS is for the sake of national interests and household benefits.

Information obtained from households are kept confidential and not used for any purpose other than as database for the State to study and develop socio-economic policies, in order to stabilise and improve living standards of the people, including of e

General Statistics Office

Ethnicity codes

kinh	01	kh¬ mó	29
tµy	02	co	30
th¸i	03	tµ - «i	31
hoa (H¸n)	04	ch¬ - ro	32
kh¬ me	05	kh¸ng	33
m-ên g	06	xinh - mun	34
nïng	07	hµ nh×	35
h' m«ng (MÌo)	08	chu - ru	36
dao	09	lµo	37
gia-rai	10	la chÝ	38
ng¸i	11	la ha	39
ª-®ª	12	Phï l¸	40
ba-na	13	la hñ	41
x¬-®¨ng	14	lù	42
s¸n chay (Cao lan - S¸n chØ)	15	l« l«	43
c¬ ho	16	Chøt	44
Ch¨m (Chµm)	17	M¶ng	45
s¸n d×u	18	pµ thÌn	46
hrª	19	c¬ lao	47
mn«ng	20	cèng	48
ra-glai	21	bè y	49
xtiªng	22	si la	50
bru - V©n KiÒu	23	pu pÐo	51
thæ	24	br©u	52
gi¸y	25	¥ ®u	53
c¬ tu	26	r¬ - m¨m	54
giÌ - triªng	27	Foreign	55
m¹	28	Unidentified	56

Conversion of lunar and solar calendars

Tý (Rat)	1900	1912	1924	1936	1948	1960	1972	1984	1996	2008
Söu (Buffalo)	1901	1913	1925	1937	1949	1961	1973	1985	1997	2009
DÇn (Tiger)	1902	1914	1926	1938	1950	1962	1974	1986	1998	2010
M·o (Cat)	1903	1915	1927	1939	1951	1963	1975	1987	1999	
Th×n (Dragon)	1904	1916	1928	1940	1952	1964	1976	1988	2000	
Tþ (Snake)	1905	1917	1929	1941	1953	1965	1977	1989	2001	
Ngä (Horse)	1906	1918	1930	1942	1954	1966	1978	1990	2002	
Mïi (Goat)	1907	1919	1931	1943	1955	1967	1979	1991	2003	
Th©n (Monkey)	1908	1920	1932	1944	1956	1968	1980	1992	2004	
DËu (Rooster)	1909	1921	1933	1945	1957	1969	1981	1993	2005	
TuÊt (Dog)	1910	1922	1934	1946	1958	1970	1982	1994	2006	
Hîi (Pig)	1911	1923	1935	1947	1959	1971	1983	1995	2007	

Years ending with	0	of celestial stem	Canh
- # -	1	- # -	T©n
- # -	2	- # -	Nh©m
- # -	3	- # -	Quý
- # -	4	- # -	Gi¸p
- # -	5	- # -	Êt
- # -	6	- # -	BÝnh
- # -	7	- # -	§inh
- # -	8	- # -	MËu
- # -	9	- # -	Kû

Centrally administered provinces/cities

Seq	Code	Names of administrative units
I	**1**	**Red River Delta**
1	01	Hµ Néi City
2	26	VÜnh Phóc Province
3	27	B¾c Ninh Province
4	22	Qu¶ng Ninh Province
5	30	H¶i D-¬ng Province
6	31	H¶i Phßng City
7	33	H-ng Yªn Province
8	34	Th¸i B×nh Province
9	35	Hµ Nam Province
10	36	Nam §Þnh Province
11	37	Ninh B×nh Province
II	**2**	**Midlands and Northern Mountainous Areas**
12	02	Hµ Giang Province
13	04	Cao B»ng Province
14	06	B¾c K¹n Province
15	08	Tuyªn Quang Province
16	10	Lµo Cai Province
17	15	Yªn B¸i Province
18	19	Th¸i Nguyªn Province
19	20	L¹ng S¬n Province
20	24	B¾c Giang Province
21	25	Phó Thä Province
22	11	§iÖn Biªn Province
23	12	Lai Ch©u Province
24	14	S¬n La Province
25	17	Hßa B×nh Province

Seq	Code	Names of administrative units
III	**3**	**Northern and Coastal Central Region**
26	38	Thanh Hãa Province
27	40	NghÖ An Province
28	42	Hµ TÜnh Province
29	44	Qu¶ng B×nh Province
30	45	Qu¶ng TrÞ Province
31	46	Thõa Thiªn - HuÕ Province
32	48	§µ N½ng City
33	49	Qu¶ng Nam Province
34	51	Qu¶ng Ng·i Province
35	52	B×nh §Þnh Province
36	54	Phó Yªn Province
37	56	Kh¸nh Hßa Province
38	58	Ninh ThuËn Province
39	60	B×nh ThuËn Province
IV	**4**	**T©y Nguyªn (Central Highlands)**
40	62	Kon Tum Province
41	64	Gia Lai Province
42	66	§¾k L¾k Province
43	67	§¾k N«ng Province
44	68	L©m §ång Province
V	**5**	**Southeastern Area**
45	70	B×nh Ph-íc Province
46	72	T©y Ninh Province
47	74	B×nh D-¬ng Province
48	75	§ång Nai Province
49	77	Bµ RÞa - Vòng TÇu Province
50	79	Hå ChÝ Minh City

Seq	Code	Names of administrative units
VI	**6**	**Mekong Delta**
51	80	Long An Province
52	82	TiÒn Giang Province
53	83	BÕn Tre Province
54	84	Trµ Vinh Province
55	86	VÜnh Long Province
56	87	§ång Th¸p Province
57	89	An Giang Province
58	91	Kiªn Giang Province
59	92	CÇn Th¬ Province
60	93	HËu Giang Province
61	94	Sãc Tr¨ng Province
62	95	B¹c Liªu Province
63	96	Cµ Mau Province

999 Foreign

Section 1A. A list of household members

Member code	**1** Pls tell full names of each household members, starting from the head Household members are those who share accommodation and meals from 6 months or more over the last 12 months, and share a pool of incomes and (From (month)……/2009 to month ……/2010) Full names are written in capital block letters in the order of a nuclear family (Enumerators should pay attention to special cases)	**2** Gender of ..[name].. MALE….1 FEMALE..2	**3** The relationship of [name] with the household head? Household head…… 1 Wife/husband…… 2 Child…… 3 Father/mother…… 4 Paternal/maternal grandfather/grandmother.. 5 Paternal/maternal grandchild …… 6 Other relationships…… 7	**4** Month and year of birth of ...[name]... According to solar calendar Month of birth unknown WRITE UNKNOWN Write 2 digits (Month) Write 4 digits (Year)	**5** Age of [name]? Age rounded until month of interview (aged less than 13 >> question 7) Number of years	**6** Marital status of [name]? Single… 1 Married.. 2 Widowed.. 3 Divorced.. 4 Separated..... 5	**7** For how many months has ..[name].. stayed in the household over the last 12 months? Accumulated months (from 6 months or more >> Q 9) Number of months	**8** Why [name] has not lived in the household for more than 6 months? Student studies in the country…… 1 Cadre studies in the country…… 2 Medical treatment in the country/overseas…… 3 Newborn, new comer…… 4 Household head working away.. 5 Others…… 6	**9** Where has [name] registered household status? In resident area in commune/ward ..1 >> next person In other places in the province/city…2 >> next person In other province/city ..3 Others……..…..4 Never having registered household status ……5 (>>11)	**10** In which province has [name] registered household status? Province name Province code	**11** How long has [name] lived in this province /city? No. of years No. of months
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Section 1b. A list of domestic helps and migrant labourers

1. Does your household have (a) domestic help(s) who has/have shared meals and accommodation with the household for 6 months or more over the last 12 months?
or does your household hav anyone who has migrated, including export workers, for more than 6 months, to earn livelihood for the household?

Yes..... 1
No..... 2 (**>>** Section 2)

Code	**2** Pls tell full names of those people?	**3** Gender of [name]	**4** [Name] is a domestic help or a household member working away?	**5** Age of [name]?	**6** Marital status of [name]?	**7** The highest qualification has [name] obtained?	**8** For how many months has [name] stayed in the household over the last 12 months?	**9** Where has [name] registered household status ?	**10** In which province has [name] registered household status?		**11** How long has [name] lived in this province/city?	
	Write full names in capital block letters	Male....1 Female.2	Domestic help…… 1 Household member working away …. 2	Age rounded until month of interview (aged less than 13 >> question 7) Number of years	Single…… 1 Married…… 2 Widowed…. 3 Divorced…… 4 Separated.... 5	No qualification..... 0 Primary school..... 1 Lower secondary school..... 2 Higher secondary school..... 3 Elementary vocational school…… 4 Middle-level vocational school…… 5 Professional vocational school..... 6 Vocational college..... 7 College..... 8 University..... 9 MA/MSc..... 10 PhD..... 11 Others (specify_____). 12 General education and college-level upwards / Professional training	Sum of accumulated months Number of months	In resident area in commune/ward.. 1 **>>** next person In other places in province/city… 2 **>>** next person In other province/city. 3 Others…… 4 Never having registered household status …5 (>>11)	Province name	Province code	Number of years	Number of months
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												

The next sections do not apply to the people in this list.

Grade conversion of general education systems

The general education system for conversion		Corresponding levels of general education (SE)								
		The system under the French rule	From 1945 to 1954			Supplementary education (SE) system	The education system in the North			Current education system nationwide
			Free zone		Temporarily occupied zone		Before 1981	From Qu¶ng B×nh northwards		
Level	Grade		1945-1950	1950-1954				1981-1986	1986-1989	
Primary	1	Líp 5 ®ång Êu (Cours enfantin)			Líp n¨m tiÓu häc		Vì lßng	Grade 1 (GE)	Grade 1 (GE)	Grade 1 (GE)
	2	Líp 4 (Cours prÐparatoire)	Líp t-	Grade 1	Líp t- tiÓu häc	Grade 1 (SE)	Grade 1 (GE)	Grade 2 (GE)	Grade 2 (GE)	Grade 2 (GE)
	3	Líp 3 (Cours elementaire) §Ëu s¬ häc yÕu l-îc	Líp ba	Grade 2	Líp ba tiÓu häc	Grade 2 (SE)	Grade 2 (GE)	Grade 3 (GE)	Grade 3 (GE)	Grade 3 (GE)
	4	Líp nh× n¨m thø nhÊt (Moyen1) Líp nh× n¨m thø hai (Moyen2)	Líp nh×	Grade 3	Líp nh× tiÓu häc	Grade 3 (SE)	Grade 3 (GE)	Grade 4 (GE)	Grade 4 (GE)	Grade 4 (GE)
	5	Líp nhÊt (SupÐrieur) §Ëu tiÓu häc (Certificat)	Líp nhÊt	Grade 4	Líp nhÊt tiÓu häc	Grade 4 (SE)	Grade 4 (GE)	Grade 5 (GE)	Grade 5 (GE)	Grade 5 (GE)
Lower secondary	6	§Ö nhÊt ni^{a}n trung häc (PremiÌre annÐe)	§Ö nhÊt ni^{a}n		§Ö thÊt trung häc	Grade 5 (SE)			Grade 6 (GE)	Grade 6 (GE)
	7	§Ö nhÞ ni^{a}n trung häc (DeuxiÌme annÐe)	§Ö nhÞ ni^{a}n	Grade 5	§Ö lôc trung häc	Grade 6 (SE)	Grade 5 (GE)	Grade 6 (GE)	Grade 7 (GE)	Grade 7 (GE)
	8	§Ö tam ni^{a}n trung häc (TroisiÌme annÐe)	§Ö tam ni^{a}n	Grade 6	§Ö ngò trung häc	Grade 7 (SE)	Grade 6 (GE)	Grade 7 (GE)	Grade 8 (GE)	Grade 8 (GE)
	9	§Ö tø ni^{a}n trung häc (QuatriÌme annÐe - Dipl«me)	§Ö tø ni^{a}n	Grade 7	§Ö tø trung häc	Grade 7B (SE)	Grade 7 (GE)			Grade 9 (GE)
Higher secondary	10	§Ö nhÊt ni^{a}n	§Ö nhÊt ni^{a}n chuy^{a}n khoa	Grade 8	§Ö tam	Grade 8 (SE)	Grade 8 (GE)	Grade 10 (GE)	Grade 10 (GE)	Grade 10 (GE)
	11	§Ö nhÞ ni^{a}n, tó tµi phÇn thø nhÊt (BaccalaurÐat premiÌre partie)	§Ö nhÞ ni^{a}n chuy^{a}n khoa	Grade 9	§Ö nhÞ Tó tµi I	Grade 9 (SE) Grade 10A (SE)	Grade 9 (GE)	Grade 11 (GE)	Grade 11 (GE)	Grade 11 (GE)
	12	§Ö tam ni^{a}n, thi tó tµi toµn phÇn (BaccalaurÐat deuxiÌme partie)	§Ö tam ni^{a}n chuy^{a}n khoa		§Ö nhÊt Tó tµi II	Grade 10B (SE)	Grade 10 (GE)	Grade 12 (GE)	Grade 12 (GE)	Grade 12 (GE)

Section 2. Education

Pls tell some information on education of household members.
Questions apply to all household members.

Member code	1 Which grade has [name] completed? Grade conversion into the 12-grade system Not yet completing grade 1, write 0 Never going to school, write 00 and >>14 Grade	2 The highest qualification has [name] obtained? No qualification 0 primary 1 lower secondary 2 higher secondary 3 elementary vocational school 4 middle-level vocational school 5 professional school 6 vocational college 7 college 8 university 9 MA/MSc 10 PhD 11 Others (specify 12 General education and college-level upwards Vocational training	3 Which type of school has [name] attended? Public 1 Community-established 2 Private 3 Semi-public 4 Others (Specify) 5	4 Does [name] go to school now? Yes 1 **(>>6)** On summer vacation 2 **(>>6)** No 3	5 Has [name] attended school over the past 12 months? Yes 1 No 2 **(>>14)**	6 At which level of education is [name]? Nursery, kindergarten 0 **(>>8)** Primary 1 Lower secondary 2 Higher secondary 3 Elementary vocational school 4 **(>>8)** Middle-level vocational school 5 **(>>8)** Professional school 6 **(>>8)** Vocational college 7 **(>>8)** College 8 **(>>8)** University 9 **(>>8)** MA/MSc 10 **(>>8)** PhD 11 **(>>8)** Others (specify) 12 **(>>8)**	7 Which grade is [name] attending? Write the number of grade that he/she is attending Grade	8 Which school does [name] attend? Public 1 Community-established .2 Private 3 Others (Specify) 4
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Section 2. Education *(cont'd)*

Member code	9 Has [name] enjoyed reduction of or exemption from tuition fees or contributions to education? Yes..... 1 No..... 2 **(>>11)**	10 Reasons for reduction/exemption? Poor households..... 1 Ethnic minorities..... 2 Households of fallen combatants, war invalids, sick soldiers, or with revolutionary merits ... 4 Deep, remote, especially difficult areas..... 5 families in difficult circumstances..... 6 Primary school students..... 7 School doesn't collect tuition fees 8 Others (specify_____) 9 Tuition fees	Contributions	11 Expenditures on [name]'s education over the past 12 months for compulsory subjects in school? Try to illicit breakdown information; in case of no expenditures, write 0; if unknown or not remembered clearly, write KB; if a total and some details are remembered only, write the total and fill in relevant breakdown columns; Write kb in columns for which information is not remembered. 1000 ®ång **a** Tuition fees?	**b** Charge for following a relevant reference system?	**c** Contributions to school, class (construction fund, ...)?	**d** Parent fund class fund?	**e** Uniforms and costumes stipulated?	**f** Textbooks, reference books?	**g** Other study instruments? (paper, pens, bags, notebooks,...)?	**h** Coaching sessions for compulsory subjects in school?	**i** Other educatio expenditures? (exam fees, travel, rent, student body insurance,...)?	**k** **Total (a +b +...+i)**
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

2CT. Sum of 11k and 14

Section 2. Education *(End)*

Member code	12 Funds received from organisations that provide aid in education over the past 12 months? (food, accommodation, travel, textbooks, uniforms,…) If none, write 0 1000 ®ång	13 Values of scholarships and rewards received over the last 12 months? If none, write 0 1000 ®ång	14 Expenditures for other education and training over the past 12 months? (foreign language certificates, shorthand typing, hairdressing, makeup,...) If none write 0 1000 ®ång	15 The question applies to members aged 5 or less. Which of the following toys does [name] play with at home? Yes…… 1 No…… 2		16 How many books/cartoon stories does your household have for children? The question applies to households with members aged 17 or less. If none, write 0; if more than 10 are available, write 10 only. Quantity
				a Toys bought in shops	b Self-made toys	
1						
2						x
3						x
4						x
5						x
6						x
7						x
8						x
9						x
10						x
11						x
12						x
13						x
14						x
15						x

2tn. Sum of 12 and 13:

Section 3. Healthcare

1. Has anyone in your household visited medical establishments or had home visits by physicians for check-ups and treatment over the last 12 months?
(including health and pregnancy checks, abortion, insertion of intrauterine device, birth delivery... in case of no sickness/diseases/injuries)

Yes..... 1
No..... 2 **(>>9)**

Member code	**2** Names of users of medical services over the last 12 months?	**3** Which medical establishments has [name] visited? (including inviting physicians home) Village/hamlet clinics..... 1 Commune/ward clinics..... 2 Regional general clinics..... 3 Urban/rural district hospitals..... 4 Provincial/city hospitals..... 5 Central hospitals..... 6 Other state-run hospitals..... 7 Private hospitals..... 8 Other hospitals..... 9 Private practice ..... 10 Traditional herbal physicians..... 11 Individual medical services ..... 12 Other medical establishments..... 13		**4** Reasons for [name] to visit medical establishments? Vaccination..... 1 Pregnancy checks, insertion of intrauterine devices, abortion, birth delivery.. 2 Health checks and consultancy ..... 3 Medical treatment..... 4	**5** Number of visits and costs for health checks/non-resident treatment of [name] over the past 12 months (costs include fees for check-ups, treatment, medicines, allowances for physicians, travel, purchase of facilities,... relating to visits for check-up/treatment) (If none, write 0)		**6** Number and costs of visits for resident treatment of [name] over the past 12 months? Costs include hospital fees and others (allowances for physicians, charges for on-demand services, purchase of additional medicines, facilities, travel for caring,...) relating to the visits for check-ups/treatment) (If none, write 0)		**7** Did the household afford the medical check/treatment for [name]? Yes, it did ... .1 (>>the next visit/person) It had some but not enough.. ....2 No..... 3	**8** If it did have some but not enough or didn't afford, did you have to sell products, assets, or borrow, or withdraw savings/shares/contributions to informal savings funds, or collect debts to pay costs of the medical check/treatment? If yes, how much? Write 0 if none
		Sequence number	Medical establishment code		Number of visits	Cost 1000 ®ång	Number of visits	Cost 1000 ®ång		1000 ®ång

Section 3. Healthcare *(end)*

Pls tell some information on health insurance cards or free healthcare booklets/cards/certificates of household members.
Questions apply to all household members

Member code	**9** Over the past 12 months, has [name] had a health insurance card or a free healthcare booklet/card/certificate? Yes……1 No.....2 **(>>13)**	**10** Which one does [name] have? booklet/card for children aged 6 or less . . . . . 1**(>>12)** health insurance card for the poor . . . . . 2**(>>12)** health insurance card for the near-poor . . . . . 3**(>>12)** free healthcare booklet/card/certificate…… 4**(>>12)** health insurance card for policy beneficiaries…… 5**(>>12)** other compulsory state-run health insurance card…. 6**(>>12)** other compulsory non-state health insurance card .. 7**(>>12)** Voluntary health insurance card for students …… 8 Other voluntary health insurance card …… 9 Others…… 10		**11** How much has [name] spent on health insurance over the past 12 months? (if none, write 0) 1000 ®ång	**12** Has [name] used the health insurance cards or free healthcare booklets/cards/certificates during visits for check-ups and treatment over the past 12 months? Yes……1 No.....2		**13** How much has your household spent on purchasing medicines without check-ups (prescriptions) for self-treatment or reserves over the past 12 months? (including expenditures on medicines and others, such as travel, vehicle- (if none, write 0) 1000 ®ång	**14** How much has your household spent on purchasing medical facilities over the last 12 months? For instance, sthethoscopes, blood pressure monitors, hearing aids, phlegm absorbers, medicine cabinet, clinical thermometers, cotton, bandage, compresses... (if none, write 0) 1000 ®ång	**15** How much in cash and kind has your household received over the past 12 months as aid for members who are sick/injured/ contracts a disease? (if none, write 0) 1000 ®ång
		the first	the second		Out-service	In-service			
1									
2							x	x	x
3							x	x	x
4							x	x	x
5							x	x	x
6							x	x	x
7							x	x	x
8							x	x	x
9							x	x	x
10							x	x	x
11							x	x	x
12							x	x	x
13							x	x	x
14							x	x	x
15							x	x	x

3ct3. Sum for Q11 | **3ct. Healthcare expenditures (3ct1 + 3ct2 + 3ct3 + Q13 + Q14)** | **3tn. Sum for Q15**

A list of occupations

(1) Leaders/managers from sectors and organisations, at different levels

11 Agencies of the Communist Party of Vietnam at central and local levels (full-time posts)

12 The National Assembly and Office of the State President

13 The Government

14 People's courts and people's prosecutorates

15 Local people's councils and people's committees (including locally run specialized divisions, excluding legal affairs divisions and mass organizations)

16 Mass organizations; Vietnam Fatherland Front; Labour Confederation; Women's Union; Farmers' Union; Youth Union; Veterans' Association;

17 Private organisations; humanitarian organizations; organizations for other particular benefits;

18 Major organisations (groups, general corporations and the like)

19 Small organisations (companies, businesses, and enterprises, small schools)

(2) High-level experts in the following areas:

21 Natural sciences and technology

22 Healthcare

23 Education and training

24 Business and management

25 IT and communication

26 Legal, cultural and social affairs

(3) Average-level experts in the following areas

31 Technicians in science and technology

32 Technicians in healthcare

33 Business and management

34 Legal, cultural and social affairs

35 Technicians in IT and communication

36 Average-level teachers

(4) Office staff

41 General officers and desk-based officers

42 Customer service staff

43 Data and input enumerators

44 Other office assistants

(5) Service and sales staff

51 Personal service staff

52 Sales staff

53 Personal care staff

54 Security service staff

(6) Skilled labourers in agriculture, forestry, and fisheries

61 Labourers with market-demanded skills in agriculture

62 Labourers with market-demanded skills in forestry, fisheries and hunting

63 Labourers in agriculture, fisheries, hunting and collection of farm produce for self-subsidy

(7) Manual labourers and related occupations

71 Construction-related workers (except electricians)

72 Metal smiths, mechanics and other workers related

73 Handcrafters, and printing-related workers

74 Electricians and electronics workers

75 Workers in food-processing, woodwork, garment making, and other handicrafts, and other workers related

(8) Machine assembling and operating workers

81 Operators of fixed machines and equipment

82 Machine assembling workers

83 Vehicle drivers and operators of moving equipment

(9) Low-skilled labourers

91 Cleaners and domestic helps

92 Low-skilled labourers in agriculture, forestry and fisheries

93 Workers in mining, construction, industry, and transport

94 Assistants in food preparation

95 Street-based and sales-related labourers

96 Waste collectors and other low-skilled labourers

(0) Members of the armed forces

01 Officers

02 Non-officers

03 Other members of the armed forces

Section 4. Incomes

Part 4A. Employment and salaries and wages

These questions concern all household members aged 6 or more.

Member code	1 Over the past 12 months, have you… a taken waged/salaried employment? Waged/ salaried employment Yes.....1 No.....2	b been involved in production or services regarding production, husbandry, forestry and aquaculture for the household? Self–employment in agriculture, forestry, aquaculture Yes.....1 No.....2	c been involved in production, business or services of the household? Self–engagement in production, business, services outside agriculture, forestry, aquaculture Yes.....1 No.....2	2 having job? (Yes - code 1 in Question 1) Yes.....1 No.....2 **(>>27)**	The most time-consuming (main) employment over the last 12 months: 3 Which job has been the most time-consuming of …[name]… over the last 12 months? a. For how many days has …[name] … taken this job over the last 12 Number of days	Job description	Occupation code	4 Names of employer (if any) and description of main tasks and products of employer where … [name]…has/had taken that job? Names of employer	Description of employer' main tasks/products	Industry code	5 Has … [name]… taken that job over the past 30 days? Yes.....1 No.....2	6 For how many days has … [name] taken this job these days (or over the last 30 days) ? Day(s)	7 On average, for how many hours a day has … [name] taken this job during these working days? Hour(s)

A list of industries

AGRICULTURE, FORESTRY AND AQUACULTURE

01 Agriculture and related services (crop production: 0110, husbandry: 0140, and agricultural services: 0160)

02 Forestry and related services

03 Aquaculture production and exploitation

MINING AND QUARRYING

05 Exploitation of hard coal and lignite

06 Exploitation of crude oil and natural gas

07 Exploitation of metal ores

08 Other mining and quarrying

09 Mining supporting services

PROCESSING AND MANUFACTURING INDUSTRIES

10 Foodstuff production and processing

11 Beverages production

12 Production of cigarette products

13 Textiles

14 Costume production

15 Production of leather and related products

16 Wood-processing and making of wood and bamboo products (except beds, wardrobes, desks, chairs); making products from straw and plaiting materials

17 Producing paper and paper-based products

18 Printing and reproduction of recorded media

19 Production of coke coal and refined oil products

20 Production of chemicals and chemical products

21 Production of medicines, pharmaceutical chemicals and materials

22 Manufacturing of rubber and plastic products

23 Manufacturing of products from other non-metallic minerals

24 Production of metals

25 Manufacturing of products from cast metal (except machines and equipment)

26 Manufacturing of electronic products, PCs and optical products

27 Manufacturing of electrical equipment

28 Manufacturing of unclassified machines and equipment

29 Manufacturing of motorized vehicles and truck trailers

30 Manufacturing of other transport vehicles

31 Manufacturing of beds, cabinets, desks and chairs

32 Other processing and manufacturing industries

33 Repair, maintenance, and installation of machines and equipment

PRODUCTION AND DISTRIBUTION OF ELECTRICITY, GAS, HOT WATER, STEAM AND AIR-CONDITIONERS

35 Production and distribution of electricity, gas, hot water, steam and air conditioners

WATER SUPPLY; MANAGEMENT AND TREATMENT OF SEWERAGE AND WASTE

36 Exploitation, treatment, and supply of water

37 Water drainage and treatment of waste water

38 Waste collection, treatment and disposal activities; recycling of waste

39 Treatment of pollution and other activities of waste management

CONSTRUCTION

41 Construction of houses of various kinds

42 Construction of technical civil works

43 Special-use construction activities

WHOLESALE, RETAIL, AND REPAIR OF AUTOMOBILES, MOTORBIKES, SCOOTERS AND OTHER MOTORIZED VEHICLES

45 Sales and repairs of automobiles, motorbikes, scooters, and other motorized vehicles

46 Wholesale (except automobiles, motorbikes, scooters, and other motorized vehicles)

47 Retail (except automobiles, motorbikes, scooters, and other motorized vehicles)

TRANSPORT, WAREHOUSE

49 Transport by railways, roads, and pipelines

50 Waterway transport

51 Airway transport

52 Warehouse and supporting activities for transport

53 Postal and delivery services

SERVICES OF ACCOMMODATION, FOOD AND BEVERAGES

55 Accommodation services

56 Food and beverages services

INFORMATION AND COMMUNICATION

58 Publication activities

59 Cinematographic activities, production of TV programs, recording and musical publication

60 Broadcasting activities

61 Telecommunications

62 Computer programming, consulting services and other activities relating to computers

63 Information services

A LIST OF INDUSTRIES (end)

FINANCE, BANKING, AND INSURANCE

64 Financial services, except insurances and social insurance

65 Insurances, re-insurance, and social insurance, except compulsory social assurance

66 Other financial activities

BUSINESS IN REAL ESTATES

68 Business in real estates

PROFESSIONALISM, SCIENCE AND TECHNOLOGY

69 Legal, accounting and auditing activities

70 Activities of head offices; management consultancy

71 Architecture; technical check and analysis

72 Scientific research and development

73 Advertising and market research

74 Other professional, scientific and technological activities

75 Veterinary activities

ADMINISTRATION AND SUPPORTING SERVICES

77 Leasing of machinery and equipment (without operators) and of personal and household utensils; and leasing of intangible non-financial assets

78 Labor and employment services

79 Travel agency, tour operator and other supporting services relating to tour promotion and organization

80 Investigation for safety reasons

81 Services of cleaning houses, works, and public spaces

82 Office administration and support, and other business-supporting activities

ACTIVITIES OF THE COMMUNIST PARTY AND SOCIO-POLITICAL ORGANIZATIONS, STATE MANAGEMENT, PUBLIC SECURITY AND DEFENSE; COMPULSORY SOCIAL ASSURANCE

84 Activities of the Communist Party and socio-political organisations, state management, public security and defense; compulsory social assurance

EDUCATION AND TRAINING

85 Education and training

HEALTHCARE AND SOCIAL ASSISTANCE

86 Healthcare

87 Concentrated care and nursing

88 Non-concentrated social assistance

ARTS, RECREATION AND ENTERTAINMENT

90 Creative, arts and entertainment activities

91 Library, archive, museum and other cultural activities

92 Lottery, betting and gambling

93 Sports, recreation and entertainment

OTHER SERVICES

94 Activities of other associations and organizations

95 Repair of computers and personal and household utensils

96 Other personal services

HOUSEHOLD EMPLOYMENT GENERATED BY HOUSEHOLDS; HOUSEHOLD SELF-PRODUCTION AND SELF-SERVICES

97 Household employment generated by households;

98 Household self-production and self-services;

ACTIVITIES OF INTERNATIONAL ORGANIZATIONS AND BODIES

99 Activities of international organizations and bodies

Section 4A. Employment, salaries, and wages *(cont'd)*

member code	The most time-consuming (main) job over the last 12 months?									
	8 For which organizations/individuals has [name] worked?		**9** Has [name] received salaries, wages for this job?	**10** How much in cash and kind has [name] received from this job over the past 30 days (or over the last 30 days) ?	**11** How much in salaries/wages, inc that in kind, has [name] received from this job over the past 12 months?	**12** Over the past 12 months, how much in cash and kind, apart from salaries/wages from this job, has [name] received from the following: if none, write 0		**13** In this job, has [name] been entitled to		
	a. Economic types? Farming, forestry, aquaculture households/individuals . 1(>>9) Independent production and business households…… 2(>>9) Collective…… 3(>>9) Private…… 4(>>9) State-run…… 5 Foreign-invested…… 6(>>9)	b. Is [name] a public employee public or civil servant? Yes.....1 No.....2	Yes…… 1 No…… 2 (>>14)	thousand §ång	thousand §ång	**a** Festive occasions, (1/5, 2/9, 22/12, Lunar TÕt …) thousand §ång	**b** Others (bonuses, uniforms, lunch, allowances for busines trips, sickness, labor accidents, pregnancy ...) thousand §ång	**a** Signing a payroll book? Yes.....1 No....2	**b** Paid leave / holidays? Yes.....1 No....2	**c** Social insurance? Yes.....1 No....2

Section 4A. Employment, salaries/wages *(cont'd)*

		The second most time-consuming (supplementary) employment over the last 12 months								
m e m b e r c o d e	**14** Has [name] taken any other jobs ov the last 12 months? Yes.....1 No ....2**(>>27)**	**15** What is the second most time-consuming job (after the main one) taken by [name] over the past 12 months?			**16** Names of employer (if any) and description of main tasks and products of employer where …[name]…has performed that job?			**17** Has…[name] … performed this job over the past 30 days? Yes.....1 No.....2	**18** During these days (or during the last 30 days), for how many days has …[name] … performed this job? Day(s)	**19** During these working days, on an average day, for how many hours has [name] performed this job? Hour(s)
		a. For how many days has [name] performed this job over the past 12 months? Number of days	Job description	Occupation code	Name of employer	Description of main tasks/products of employer	Industry code			

Section 4A. Employment, salaries, and wages (cont'd)

Member code	The second most time-consuming (supplementary) job over the last 12 months							
	20 For which organizations/individuals has [name] worked?	**21** Has [name] received salaries, wages for this job?	**22** How much in cash and kind has [name] received from this job over the past 30 days (or over the last 30 days) ?	**23** How much in salaries/wages, including that in kind, has [name] received from this job over the last 12 months? months?	**24** Over the last 12 months, how much in cash and kind, apart from salaries/wages from this job, has [name] received from the following: If none, write 0		**25** Apart from the foregoing jobs, has [name] taken any other salaried/waged jobs?	**26** How much money has [name] received from these jobs? (from the third job onwards)
					a Festive occasions (1/5, 2/9, 22/12, Lunar New Year	**b** Others (bonuses, uniforms, lunch, allowances for business trips, sickness, labor accidents, pregnancy ...)		
	Farming, forestry, aquaculture household 1 Independent production and business ho 2 Collective…… 3 Private…… 4 State-run…… 5 Foreign-invested…… 6	Yes…… 1 No…… 2 (>>25)	Thousand §ång	Thousand §ång	Thousand §ång	Thousand §ång	Yes.....1 No ..2**(>>27)**	Thousand ®ång

4ATN3. Sum of Q23 | 4ATN4. Sum of Q24a 7 24b | 4ATN5. Sum of Q26

Section 4A. Employment and salaries/wages *(end)*

These questions apply to respondents aged 15 or more

member code	Pensions, unemployment allowances, and one-off severance pays					
	27 Has [name] received unemployment benefits, one-off severance pays, pensions, allowance for loss of working capacity over the past 12 months? Yes……..1 No……..2 (>>Next respondent)	**28** Which allowances/benefits is [name] entitled to and how much has he/she received over the past 12 months? if none, write 0				
		a. Unemployment allowance thousand ®ång	b. One-off severance pay thousand ®ång	c. standard pension at a stipulated age thousand ®ång	d. Premature pension thousand ®ång	e. Allowance for loss of working capacity thousand ®ång

4ATN6. Sum (28a+28b+28c+28d+28e)

4ATN. Incomes from salaries, wages, pensions and allowances (4ATN1+4ATN2+4ATN3+4ATN4+4ATN5+4ATN6)

Age	Names of household members	Member code
		1
		2
		3
		4
		5
		6
		7
		8
		9
		10
		11
		12
		13
		14
		15

4B. Farm, forestry and aquaculture activities

4B0. Farm land, forestry land and aquaculture water surface

1. Has your family used or managed farm land, forestry land or aquaculture surface water over the last 12 months? Yes……1

(regardless of rented and rented-out land over the last 12 months and including gardens and ponds adjacent to residential lanc No…… 2 (>> 4B1) ☐

Now, I would like to ask you about all types of land that members of your family use or manage.

Order	**2** Which of the following types of lands does your family use or manage? Question 2 applies to all types of land before moving to Questions 3 - 5	Cross off if yes: X	**3** How much area of land does your family use or manage? M2	**4** How much has been paid in cash and in kind for land rental or procurement over the last 12 months? If NONE, WRITE 0 1000 VND	**5** The revenues in cash or in kind from renting out land over the last 12 months? IF NONE, WRITE 0 1000 VND
1	Annual crop land				
2	Perennial crop land				
3	Forestry land				
4	Water surface				
5	Gardens, ponds adjacent to residential land				
6	Shifting-cultivation farmland				
7	Others (specify:_____)				

4BOTN. Sum of Q5 ☐

4B. Farm, forestry and aquaculture activities

4B1. Cultivation

1a. Has your family harvested any products from cultivation over the last 12 months? Yes…… 1 (>>Question 2) ☐
No……2

1b. Are there any impacts of natural disasters, diseases, etc. which have caused loss in production? Yes..... 1 (>> 4b1.6) ☐
No..... 2 (>> 4B2)

4B1.1. Rice

order	**2** Which types of rice have your family harvested over the last 12 months? IF DETAILS ARE FILLED OUT FROM ROWS 1 - 4, THERE IS NO NEED FOR A TOTAL ON ROW 5; IF IT IS IMPOSSIBLE TO WORK OUT DETAILS, JUST FILL IN A TOTAL ON ROW 5	Cross off if it is the case: X	**3** What is the cultivated area of […] over the last 12 months? M2	**4** How much […] have your family harvested over the last 12 months? KG	**5** How much of […] harvested has been lost to pests, rot and any other reasons? KG	**6** How much of […] harvested have you put to sale or barter over the last 12 months? All the times of selling the harvest output in the last 12 months. If none is sold or bartered, fill in 0 and >>8 KG	**7** What are the proceeds from sales or barter of […] over the last 12 months? thousand VND	**8** What is the value of the output harvested over the last 12 months? thousand VND
1	Winter-Spring plain rice?							
2	Summer-Autumn plain rice?							
3	Autumn-Winter plain rice?							
4	Upland plain rice?							
5	Annual total of plain rice?							
6	Annual total of sticky rice?							
7	Annual total of specialty rice?							

4B11T. Sum of Q8 ☐

4B1.2. Staple food crops, non-staple food crops, and other annual crops

Order	2 Which of the following crops has your family harvested over the last 12 months? Ask Question 2 before moving onto Question 3 cross off if any	X	3 On how much area have you grown […]? M^2	4 How much […] have you harvested over the last 12 months? KG	5 How much of […] harvested have you put to sale or barter over the last 12 months? All times of selling or bartering outputs harvested over the last 12 months are counted. If none is sold or bartered fill in 0 and >>7 KG	6 The total revenues from sale or barter of […] over the last 12 months? thousand VND	7 What is the value of the output harvested over the last 12 months thousand VND
8	Maize (corn)						
9	Sweet potato						
10	Cassava/manioc						
11	Other staple food crops						
12	Potato						
13	Morning glory vegetable						
14	Kohlrabi						
15	Cabbage, cauliflower						
16	Cruciferous vegetables						
17	Edible beans						
18	Tomato						
19	Seasoning herb			x	x		
20	Other edible vegetables, fruits and roots			x	x		
21	Other annual crops (green, black and red bean, flowers			x	x		

4B12T. Sum of Q7

4B1.3. Annual and perennial industrial crops

Order	2 Which of the following crops has your family harvested over the last 12 months? Ask Question 2 before moving onto Question 3 cross off if any		3 The cultivated areas or the number of seedlings […] that your household has looked after or grown for the product? code m2:……1 unit…… 2		4 How much […] have you harvested over the last 12 months? KG	5 How much of […] harvested have you put to sale or barter over the last 12 months? (All times of selling or bartering outputs harvested over the last 12 months are counted) If none is sold or bartered, fill in 0 and >>7 KG	6 The total revenues from sales or barter of […] over the last 12 months? thousand VND	7 What is the value of the output harvested over the last 12 months? thousand VND
		X	Quantity	code				
22	Soya bean/soybean			1				
23	Peanut/groundnut			1				
24	Sesame			1				
25	Sugarcane			1				
26	Tobacco, rustic tobacco			1				
27	Cotton			1				
28	Jute, ramie (China grass)			1				
29	Sedge			1				
30	Other industrial annuals			1	x	x		
31	Tea							
32	Coffee							
33	Rubber							
34	Pepper							
35	Coconut							
36	Mulberry			1				
37	Cashew							
38	Other industrial perennials				x	x		

4B13T. Sum of Q7

4B1.4. Fruit trees

Order	2 Which of the following crops has your family harvested over the last 12 months? Ask Question 2 before moving onto Question 3 cross off if any		3 What is the output from the acreage or quantity of […] your family tend to or cultivate? code m2:…… 1 unit::…… 2		4 How much […] have you harvested over the last 12 months?	5 How much of […] harvested have you put to sale or barter over the last 12 months? (All times of selling or bartering the outputs harvested over the last 12 months are counted) If none is sold or bartered, fill in 0 and >>7	6 The total revenues from sales or barter of […] over the last 12 months?	7 What is the value of the output harvested over the last 12 months
		X	quantity	code	KG	KG	thousand VND	thousand VND
39	Citrus							
40	Pineapple							
41	Banana							
42	Mango, horse mango							
43	Indian jujube							
44	Grape							
45	Plum							
46	Papaya							
47	Longan, lychee, rambutan							
48	Sapodilla							
49	Sugar-apple, soursop							
50	Jackfruit, durian							
51	Mangosteen							
52	Other fruit trees				x	x		
53	Other perennials				x	x		
54	Seedlings				x	x		

4B14T. Sum of Q7

4B1.5. Revenues from harvested by-products

Order	1 Has your family used or sold […] over the last 12 months Ask Question 1 before moving onto Question 2 Cross off if any	X	2 What are the revenues fro sales of […] over the last 12 months? thousand VND	3 How much value of […] have been used as animal fe by your family over the last 12 months? thousand VND	4 How much value of […] have been used for other purpo by your family over the last 12 months? thousand VND	5 What is the total value of by-products harvested over the last 12 months? (2 + 3 + 4) thousand VND
1	Rice straw					
2	Sweet potato leaf and stem					
3	Maize or cassava stem					
4	Bean stem					
5	Sugarcane bud and leaf					
6	Jute and ramie stems			x		
7	Mulberry stem			x		
8	Firewood (from agricultural crops)			x		
9	Other by-products					
10	Collected products					

4B15T. Sum of Q5

4B1T. Total revenues from crop production (4B11T+4B12T+4B13T+4B14T+4B15T)

4B1.6. Costs of cultivation

order	1. On which of the following items has your family spent for the products harvested over the last 12 months? (including purchase, barter, self-subsidy, and gift, etc.; not including collected items not counted in incomes)	cross off if any	2. How much has your family spent on the following crops? If none, fill in 0; if details are not remembered, fill in KB and the total cost in the 'Total' column						
			a. Rice	b. Staple food and other non-staple food crops	c. Industrial crops	d. Fruit trees and other trees except forest trees	e. Total (a + b + c + d)	of which	
								e1. State subsidy	e2. Other assistance
	Ask Question 1 before moving onto Question 2	x	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND
1	Seeds								
2	Seedlings								
3	Chemical fertilizers (nitrate, phosphate, potash, NPK, etc...)								
4	Organic fertilizer (self-supplied)								
5	Organic fertilizer (outsourced)								
6	Pesticide								
7	Herbicide								
8	Small tools, cheap and undurable objects (sickle, scythe, hoe, shovel, etc)								
9	Energy, fuel		X	X	X	X	X	X	X
9.1	Electricity								
9.2	Coal								
9.3	Coal briquette								
9.4	Petrol								
9.5	Kerosene								
9.6	Mazut oil								
9.7	Diesel oil								
9.8	LPG								
9.9	Natural gas								
9.10	Firewood								
9.11	Other energy and fuels								
10	Small repairs, maintenance								
11	Fixed asset depreciation								
12	Land rental and procurement								
13	Hire of assets, machines, vehicles and mechanical work; hire of transport								
14	Hire of ploughing cattle								
15	Paying outsourced labour								
16	Inner-field irrigation								
17	Payment of interest on loans taken out for production								
18	Other costs (charges, post, advertisement, marketing, production insurance, plant protection fund, field improvement fund, agri-extension fund, administration management fund, feed for ploughing cattle, etc)								

Total costs of crop production (Sum of Q2e)

4b1.7 Quantity of fertilizer used by the household for plants

Order	**1.** Types of fertilizer	**2.** Paddy rice plants KG	**3.** Other food crops KG	**4.** Industrial crops KG	**5.** Fruit trees and other types of trees, except forest trees KG	**6. Total (2 + 3 + 4 + 5)** KG
1	Nitrogenous fertilizer					
2	Phosphorous fertilizer					
3	Kali					
4	NPK					
5	Other fertilizers					

Calculation of animal feed values

(Enumerators calculate these before filling in column 8 of Section 4B2.2 Costs of husbandry)

Animals	1 Values of feed self-subsidized by the household thousand ®ång	2 Values of purchased feed thousand ®ång	**3** Total (1 + 2) thousand ®ång
1. Pig(s)			
2. Buffalo(es), cow(s)			
3. Horse(s)			
4. Goat(s), sheep			
5.Chicken			
6. Duck(s), goose/geese			
7. Other poultry			
8. Bees			
9. Silk worms			
10. Others (specify)			

4B2. ANIMAL HUSBANDRY AND HUNTING, TRAPPING, DOMESTICATION OF BIRDS AND ANIMALS

1a. Has your family raised or possessed animals, poultry and livestock; or harvested from hunting, trapping and domestication of birds and animals over the past 12 months?

YES..... 1 (>> QUESTION 2) ☐
NO..... 2

1b. Have natural disasters and epidemics... damaged production?

YES..... 1 (>> 4b2.2) ☐
NO..... 2 (>> 4B3)

4B2.1. Revenues from husbandry, hunting, trapping and domestication of birds and animals

order	2 Which of the following products has your family obtained? CROSS OFF IF ANY. Ask question 2 before moving onto question 3	x	unit	3 How much of [.....] has your family obtained over the last 12 months? quantity	4 How much of which have your sold, bartered, paid as wages or given away over the last 12 months? a. Quantity If none fill in 0 and >>5	4 b. Value thousand vnd	5 What is the value of the output obtained over the last 12 months? thousand vnd
1	Pork		kg				
2	Beef and water buffalo meat		kg				
3	Horsemeat		kg				
4	Goat meat, sheep meat (lamb, hogget, mutton)		kg				
5	Chicken		kg				
6	Duck, Muscovy duck and goose meat		kg				
7	Other poultry meat		kg				
8	Piglet		head				
9	Calf and water buffalo calf		head				
10	Other young animals and poultry		x	x	x		
11	Other raised animals (bear, deer, rabbit, dog, etc)		x	x	x		
12	Poultry egg (chicken, duck, etc)		egg				
13	Fresh milk		liter				
14	Silk cocoon		kg				
15	Honey of kept bees		kg				
16	Other animal products (not slaughtered)		x	x	x		
17	Other outputs from husbandry		x	x	x		
18	Animal by-product		x	x	x		
19	Products from hunting, trapping, and domestication of birds and animals		x	x	x		

4B21T. Sum of Q5, from rows 1 to 18 (revenue from livestocks) ☐

4B22T. Sum of Q5, row 19 (revenue from hunting) ☐

4B2.2 COSTS OF HUSBANDRY, HUNTING, TRAPPING AND DOMESTICATION OF BIRDS AND ANIMALS

Pls tell us about costs of husbandry for products you have obtained over the last 12 months (including self-subsidy, sales, barter, and gift).

If none, fill in 0; if details are not remembered, fill in KB; if only a total and some details are remembered, , fill in the total and available details in relevant columns and KB for those with no information.

ORDER		7 Young animals, poultry, and livestock	8 Feed Start filling in from the 'total' column in calculation table	9 Medicines for animals and poultry	10. Energy and fuel										
					a Electricity	b Coal	c Coal briquette	d Petrol	e Kerosene	f Mazut oil	g Diesel oil	h LPG	i Natural gas	j Firewood	k Others
		thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND	thousand VND
1	Pig/swine														
2	Cattle, water buffalo														
3	Horse														
4	Goat, sheep														
5	Chicken														
6	Duck, Muscovy duck, goose														
7	Other poultry														
8	Honey bee														
9	Silkworm														
10	Other products of husbandry (specify)														
11	Products from hunting, trapping and domestication	x													

4B2.2 COSTS OF HUSBANDRY, HUNTING, TRAPPING AND DOMESTICATION OF BIRDS AND ANIMALS (END)

Order		11 Water	12 Depreciation of fixed assets	13 Land rental and procurement	14 Hiring of machines, vehicles, slaughter, and transport	15 Pay for outsourced labor	16 Payment of interest on loans for husbandry	17 Business tax	18 Other costs (cheap, non-durables, charges, post, advertising, marketing, production insurance, etc)	19 **Total** **(7 +…+ 18)**
		Thousand VND	Thousand VND	Thousand VND	Thousand VND	Thousand VND	Thousand VND	housand VN	Thousand VND	Thousand VND
1	Pig/swine									
2	Cattle, water buffalo									
3	Horse									
4	Goat, sheep									
5	Chicken									
6	Duck, Muscovy duck, goose									
7	Other poultry									
8	Honey bee									
9	Silkworm									
10	Other products of husbandry (specify)									
11	Products from hunting, trapping and domestication									

4B21C. Sum of Q19, from rows 1 to 10 (cost of husbandry) ____

4B22C. Sum of Q19, row 11 (cost of hunting) ____

4b3. Agricultural services

1a. Has any member of your family owned machines, equipment and tools for agricultural services over the last 12 months? YES..... 1(>>question 2) ☐

(such as for ploughing, soil preparation, irrigation, pest prevention and control, rice threshing, semi-processing, and other services such as artificial insemination and castration of animals and poultry, etc) No..... 2

1b. Have natural disasters and epidemics… damaged production? Yes..... 1 (>> 4b3.2) ☐

No..... 2 (>> 4B4)

4b3.1. Revenues from agricultural service activities

order	**2.** Which of the following activities have brought your family revenues? CROSS OFF IF ANY. Ask question 2 before moving onto question 3.	x	**3.** How many months of activities over the last 12 months? Number of months	**4.** How much have you earned per month on average? thousand VND	**5. Total revenues (3 x 4)** thousand VND
1	Ploughing and soil preparation				
2	Irrigation				
3	Pest prevention and control				
4	Rice threshing, semi-processing				
5	Other services (artificial insemination, castration, etc)				

4B3T. Sum of Q5 (revenue from agricultural services) ☐

4b3.2. Costs of agricultural service activities

Pls tell the costs you have incurred for agricultural service activities over the last 12 months? (If none, fill in 0; if details are not remembered, fill in KB)

Order	**6.** On which of the following activities has your family spent? CROSS OFF IF ANY. Ask question 6 before moving onto question 7 (x)	**7.** Cost of materials	**8.** Small tools, cheap non-durables	**9.** Energy, fuel									
				a Electricity	**b** Coal	**c** Coal briquette	**d** Petrol	**e** Kerosene	**f** Mazut oil	**g** Diesel oil	**h** LPG	**i** Natural gas	**j** Fuelwood	**k** Others
		1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND
1	Ploughing and soil preparation													
2	Irrigation													
3	Pest prevention and control													
4	Rice threshing, semi-processing													
5	Other services (artificial insemination, castration, etc)													

Order	**6.** On which of the following activities has your family spent? CROSS OFF IF ANY. Ask question 6 before moving onto question 7 (x)	**10.** Small repairs, maintenance	11. Fixed asset depreciation	**12.** Renting of workshop floor, machines, vehicles, assets, and means of transport	**13.** Pay for outsourced labor	**14.** Payment of interests on loans for agricultural service activities	**15.** Business tax	**16.** Other costs (charges, post, advertising, marketing, production, insurance, feed for breeding male swine etc)	**17. Total cost (7 + ….+ 16)**
		1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND	1,000 VND
1	Ploughing and soil preparation								
2	Irrigation								
3	Pest prevention and control								
4	Rice threshing, semi-processing								
5	Other services (artificial insemination, castration, etc)								

4B3C. Sum of Q17 (cost of agricultural services) ____

4b4. Forestry

1a. Over the past 12 months, has your household earned revenues from planting/management/protection/attending of forests, breeding forest trees, collecting products from forests, harvesting forest trees (bamboos, wood, firewood,…including those in home gardens); or forestry services?

Yes..... 1 (>>Question 2) ☐
No..... 2

1b. Have natural disasters, epidemics, … damaged production?

Yes..... 1 (>> section 4b4) ☐
No..... 2 (>>section 4B5)

4b4.1. Forestry revenues

Code	**2.** From which of the following products/activities has your household earned revenues? Question 2 applies to all trees before moving to question 3	Mark with x if yes	**3.** Values of outputs/revenues from activities over the past 12 months? Try to illicit information for columns as much as possible; in case of no revenues, fill in 0; if unknown or not remembered, fill in KB; if unknown or not remembered clearly, fill in KB; If only a total and some details are remembered, fill in the total and details of the relevant columns; fill in KB for columns whose information is not remembered. thousand ®ång						**4.** Out of which, how much is for sales or exchange? In case of no sales or exchange, fill in 0 thousand ®ång
			a. Production forest land allocated to household	**b.** Production forest land not yet allocated to household	**c.** Protection forest land allocated to household	**d.** Protection forest land not yet allocated to household	**e.** Other forest land	**f. Total (a+b+c+d+e)**	
1	Vernicia montana, camellia sasanqua tree								
2	Cinnamon tree								
3	Anise								
4	Pine tree								
5	Shellac tree								
6	Wood tree								
7	Bamboo								
8	Palm tree								
9	Water coconut tree								
10	Other forest trees (Specify_____)								
11	Firewood								
12	Planting, looking after, improvement of forests?								
13	Breeds of forest trees and products collected from forests?								
14	Other forestry services (forest protection, forestry management,...)								

4B4T. Sum of Q3f (revenue from forestry) ☐

4b4.2. Costs of forestry activities and services

Pls tell about costs of products gained over the past 12 months (including costs incurred by self-subsidy, purchase, exchange, being given,...)

Unit: thousand ®ång

If none, write 0; If details are not remembered, write KB and fill in the total in column 14	1. Seeds, seedlings	2. Fertilizers of various kinds	3. Small instrument cheap, low-quality goods	4. Energy, fuel										
				a. Electricity	b. Coal	c. Coal briquette	d. Petrol	e. Kerosene	f. Mazut (oil)	g. Diesel (oil)	h. LPG	i. Natural gas	j. Fire-wood	k. Others
1. Forestry activities														
2. Forestry services	x	x												

If none, write 0; If details are not remembered, write KB and fill in the total in column 14	**5.** Small repair, maintenance	6.Depreciation of fixed assets	**7.** Rent and use of procured land	8. Rent of assets and machines, rented means of	9. Rent of ploughing cattle	10. Costs of outsourced labor	11. Payment of loan interests	12. Business tax	13. Other costs	**14. Total costs (1 + ... + 13)**
1. Forestry activities										
2. Forestry services										

4B4C. Sum of Q14 (cost of forestry)

4b5. Aquaculture

1a. Over the past 12 months, has any one from your household kept, bred fish, shrimps or other aquatic products; caught aquatic products from lakes, ponds, rivers, springs and seas; or earned revenues from aquaculture services?

Yes..... 1 (>>Q 2) ☐
No..... 2

1b. Have natural disasters, epidemics, … damaged production?

Yes..... 1 (>> section 4b5.2) ☐
No..... 2 (>>section 4c)

4b5.1. Revenues from aquaculture

Order	**2.** From which of the following products has your household earned revenues? Question 2 applies to all products before moving to question 3	Mark with x if yes: x	**3.** Total catch over the past 12 months? kg	**4.** Sales, exchange, payment for labor, donation over the past 12 months? a. Quantity If none, fill in 0 **>>5** kg	b. Value thousand ®ång	**5.** Total values of products gained over the past 12 months thousand ®ång
1	**Aquacultural production**	x	x	x	x	x
1.1	Fish					
1.2	Shrimps					
1.3	Breeding fish, shrimps		x	x		
1.4	Other aquaculture (specify_____)		x	x		
2	**Aquacultural catch**	x	x	x	x	x
2.1	Fish					
2.2	Shrimps					
2.3	Other aquaculture (specify_____)		x	x		
3	**Aquacultural services**		x	x		

4B5T. Sum of Q5 (revenue from aquaculture) ☐

4b5.2. Costs of aquaculture-related activities

Pls tell about costs of aquaculture production for products gained over the past 12 months (including costs incurred by self-subsidy, purchase, exchange, being given,...)

Try to illicit information for columns as much as possible; in case of no information, fill in 0; if unknown or not remembered, fill in KB;

If only a total and some details are remembered, fill in the total and details of the relevant columns; fill in KB for columns whose information is not remembered.

		6. Breeds o aquaculture	**7.** Feed	**8.** Small instruments, cheap, low-quality goods	**9**. Energy, fuel											10. Salt, ice water
					a. Electricity	b. Coal	c. Coal briquette	d. Petrol	e. Kerosene	f. Mazut (oil)	g. Diesel (oil)	h. LPG	i. Natural gas	j. Fuel-wood	k. Others	
		thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd
1	Aquaculture production															
2	Aquaculture catch															
3	Aquaculture services															

		11. Small repair, maintenanc	**12** Depreciatio of fixed assets	**13.** Rent and use of procured land	**14.** Rent of assets and machines rented means of transport	**15.** Costs of outsourced labor	**16.** Interest payment for loans for aquaculture-related activities	**17** Business tax	**18.** Other costs (preventive/treatment medicines, charges, post, ads, marketing,	**19. Total costs (7 + ... + 18)**
		thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd	thousand vnd
1	Aquaculture production									
2	Aquaculture catch									
3	Aquaculture services									

4b5c. Sum for Q19 (costs of aquaculture)

4c. Domains of production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products

Pls tell some information on activities of production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products

1. Has your household had any activities of your own production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products over the past 12 months?

Yes..... 1
No..... 2 **(>>part 4d)**

4c1. Revenues from production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products

Order of sectoral activities	**2.** Pls tell details of these activities If the household has more than 4 activities, the fourth activity onwards is included in line 1 Description of sectoral activities	Sectoral code	**3.** Number of months of activity over the past 12 months? Number of months	4. Do you or household members possess this entire activity? Yes.....1**(>>6)** No...2	**5.** How many households including yours possess this activity? Number of households	**6.** Percentage of income your household has received from this activity? Write 100 if code 1 is a response to question 4 %	**7.** Has this activity registered for business? (In case of commercial activity **>>9**) Yes, by type of enterprise..... 1 Yes, by type of individual household business ... 2 No..... 3	**8.** Are products of this activity for sale, exchange, or service supply? Yes.....1 No....2 **(>>13)**
1								
2								
3								
4								

Order of sectoral activities	**9.** Among activities over the past 12 months, what is an average revenue per month of this activity? Thousand ®ång	**10.** Revenue over the past 12 months? **(c3 x c9)** (In case of commercial activity **>>15)** Thousand ®ång	11.Has your household exchanged products of this activity for other goods and services over the past 12 months? Yes.....1 No.....2 **(>>13)**	**12.** Values of exchanges over the past 12 months? Thousand ®ång	**13.** Have any products of this activity been used or consumed by the household over the past 12 months? Yes.....1 No..2 **(>>15)**	**14.** Values of products used or consumed by the household over the past 12 months? Thousand ®ång	**15.** Have any by-products of this activity been used or sold by the household over the past 12 months? Yes.....1 No...2 **(>>17)**	**16.** Values of products used or sold by the household over the past 12 months? Thousand ®ång	**17. Total revenues (c10+c12+c14+c16)** Thousand ®ång	**18. Total revenues divided by household(s) ((c10 x c6):100) + (C12 + C14 + C16)** Thousand ®ång
1										
2										
3										
4										

Note: A revenue of commercial activity does not include the value of commodity capital.

4c2. Costs of production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products

Pls tell costs of your household's activities of production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products over the past 12 months (including expenditures from self-subsidy, purchase, exchange, gift,...).

Only costs of products sold, exchanged, supplied for service, used or consumed are counted.

Order of sectoral activities	**19** Main and minor materials	**20** Small, cheap, undurable tools	**21.** Energy, fuel											**22**. Water
			a. Electricity	b. Coal	c. Coal briquette	d. Petrol	e. Kerosene	f. Mazut (oil)	g. Diesel (oil)	h. LPG	i. Natural gas	j. Firewood	k.Others	
	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång
1														
2														
3														
4														

Order of sectoral activities	**23** Minor repair, maintenance	**24** Depreciation of fixed assets	**25** Rent of land, workshops, shops, machines and other means of production	**26** Transport (rents and charges)	**27** Costs of labour (salaries, wages; social insurance; health insurance; trade unions expenses;.	**28** Loan interests	**29** Taxes, fees and charges regarded as taxes	**30** Costs of treatment of sewage and solid waste	**31** Other costs (post, travel, advertisement, marketing, purchase of designs, survey for design, production insurance,...)	**32** Total costs **(C19+...+C31)**	**33** Total costs divided by household(s) **(C32 x C6):100**
	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång	Thousand ®ång
1											
2											
3											
4											

Note: A revenue of commercial activity does not include the value of commodity capital.

4CCT. Total cost of activities (sum of Q32) ____

4CC. Total revenue from activities divided by households (sum of Q33) ____

4d. Other revenues included in incomes

Pls give some information on other household revenues

code	**1.** Has anyone in your household, over the past 12 months, received cash or kind from the following sources? Question 1 applies to all revenues before moving to question 2	Mark x if any	**2.** Values received over the past 12 months? Thousand ®ång
101	Cash and kind sent as a gift or aid for domestic use by non-members of the household from overseas		
	Out of the total:		
1011	- Cash and kind (value) for domestic use sent as a gift or aid by relatives residing and working overseas temporarily.....		
1012	- Gift of housing.....		
1013	- Gift of automobile(s) for domestic use		
1014	- Other gifts of assets for domestic use.....		
102	Cash and kind (value) for domestic use sent as a gift or aid by non-members of the household from within the country		
	Out of the total:		
1021	- Cash and kind (value) for domestic use sent as a gift or aid by relatives who work as seasonal laborers in the country…		
1022	- Gift of housing.....		
1023	- Gift of automobile(s) for domestic use		
1024	- Other gifts of assets for domestic use.....		

code	**1.** Has anyone in your household, over the past 12 months, received cash or kind from the following sources? Question 1 applies to all revenues before moving to question 2	Mark x if any	**2.** Values received over the past 12 months? Thousand ®ång
103	Wedding cash gifts after deducting expenses of guests' food and drinks		
104	Funeral cash tributes after deducting expenses of guests' food and drinks		
105	Social benefits for war invalids, families of fallen combatants, and individuals/families with revolutionary merits		
106	Social benefits for beneficiary households of social policies		
107	Assistance to overcome natural disasters and fire		
108	From types of insurance (excluding social, health and life insurance)		
109	Interests of savings deposits, stocks, shares, lending, contributed capital		
110	Revenues from renting out workshop floors, machines, assets and facilities not included in sections of sectoral production and business (except housing, farming and forest land, and water surface for aquaculture production)		
111	Revenues as donations from organizations, humanitarian aid, associations and units of production and business …		
112	Others (Specify_____)		

4DTN. Sum of Q2 items (other revenues)

Weight conversion of some food and foodstuff and other consumer goods

A. Food

1kilo of paddy rice ~ 0.7 kilo of rice

1kilo of broken-rice powder ~ 0.7 kilo of rice

3 kilos of sweet potato/fresh cassava

~ 1 kilo of dried sliced sweet potato/cassava

B. Foodstuff

1 kilo of fresh lard ~ 0.7 kilo of liquid lard

1kg of live-weight chicken ~ 0.85 kg of dead-weight chicken

1 kg of live-weight pork ~ 0.7 kg of dead-weight pork ~ 0.6 kg of pork with fat removed

1 kg of live-weight beef ~ 0.4 kg of dead-weight beef

1 kg of live-weight buffalo meat ~ 0.3 kg of dead-weight buffalo meat

3 kilos of fresh shrimps, fish ~ 1 kilo of dried shrimps, fish

1 kg of sugar molasses ~ 0.5 kg of refined sugar

250 grams of milk powder ~ 1 can of condensed milk (395 - 400g)

5 kilos of fresh tea buds ~ 1kilo of dried tea buds

4.6 kilos of fresh coffee nuts ~ 1kilo of dried coffee nuts

~ 0.7 kilo of coffee powder (roasted and ground)

Section 5. Expenditures

5A. Expenditures on food and drinks

5A1. Expenditures on food and drinks on festive occasions

Now pls tell about expenditures on festive occasions, such as the Lunar New Year, Christmas, Independence Day, the fifteenth day of the first and seventh lunar months, Mid-aut
(special festive occasions of ethnic minorities, such as chol chnam thmay of the Kh'mer people, . . .)

Code	1 Which of the following items has your household consumed on fest occasions over the past 12 montl Mark with x if yes Question 1 applies to all items before moving to questions 2-3		Unit of measurement	2 Purchase or exchang A Quantity […] ? If none, write 0 and >> 3	2 Purchase or exchang B Value? thousand ®ång	3 Self-subsidy, gift, donation A Quantity? If none, write 0 and >>next item	3 Self-subsidy, gift, donation B Value? >> next item thousand ®ång
101	Fragrant plain rice, specialty rice?		Kg				
102	Sticky rice?		Kg				
110	Pork (with fat removed)?		Kg				
111	Beef?		Kg				
112	Buffalo meat?		Kg				
113	Chicken meat?		Kg				
114	Duck and other poultry meat?		Kg				
115	Other types of meat? (goats, dogs, sheep, wild animals, birds,...)		X	X		X	
116	Processed meat? (boiled pork pies, fried pork pies, roasted pork, sausages,...)		X	X		X	
118	Fresh shrimp, fish?		Kg				
120	Other aqua-products and seafood? (crabs, snails,...)		X	X		X	
121	Eggs of chickens, ducks, Muscovy ducks, and geese?		Egg				
124	Beans of various kinds?		Kg				

Code	1 Which of the following items has your household consumed on festive occasions over the past 12 months? Mark with x if yes Question 1 applies to all items before moving to questions 2-3		Unit of measurement	2 Purchase or exchang A Quantity […] ? If none, write 0 and >> 3	2 Purchase or exchang B Value? thousand ®ång	3 Self-subsidy, gift, donatio A Quantity? If none, write 0 and >>next item	3 Self-subsidy, gift, donatio B Value? >> next item thousand ®ång
134	Fruits?		X	X		X	
139	Sugar, molasses?		Kg				
140	Confectionery?		Kg				
144	Alcohol of various kinds?		Litre				
145	Beer of various kinds?		Litre				
146	Bottled, canned, boxed beverages?		Liter				
148	Coffee?		Kg				
150	Dried tea?		Kg				
151	Cigarettes, tobacco for water pipes		X	X		X	
153	Outdoors meals and drinks?		X	X		X	
154	Other meals and drinks? (Other food and foodstuff, additives, seasonings, ...)		X	X		X	

5A1CT. Sum (Q4 + Q5)	4. Sum of Q2B (Codes 101 to 154)	5. Sum of Q 3B (Codes 101 to 1

5a2. Recurrent expenditures on food and drinks

Code	1 Apart from festive occasions, parties, engagement parties, weddings, funerals and major death anniversaries over the past 30 days, which of the following items has your household consumed: Question 1 applies to all categories of items/items before moving to questions 2-5	Mark with x if yes	Units of measurement	2 How much has your household consumed over the past 30 days?		Breakdown 3. Consumed quantity of purchase or exchange		4. Consumed quantity of self-subsidy		5. Consumed quantity of gift, donation, present	
		X		A. Quantity	B. Value thousand ®ång	A. In case of no quantity, write 0 >>4	B. Value thousand ®ång	A. In case of no quantity, write 0 >>5	B. Value thousand ®ång	A. In case of no quantity, write 0 >>next	B. Value thousand ®ång
101	Plain rice? (including fragrant and specialty rice)		Kg								
102	Sticky rice?		Kg								
103	Maize? (in seed equivalent)		Kg								
104	Cassava? (in fresh-type equivalent)		Kg								
105	Potato of various kinds? (in fresh-type equivalent)		Kg								
106	Wheat grains, bread, wheat powder?		Kg								
107	Flour noodle, instant rice noodle/porridge?		Kg								
108	Fresh rice noodle, dried rice noodle?		Kg								
109	Vermicelli?		Kg								
110	Pork? (in equivalent of the pork type with removed fat)		Kg								
111	Beef?		Kg								
112	Buffalo meat?		Kg								
113	Chicken meat?		Kg								
114	Duck and other poultry meat?		Kg								
115	Other types of meat? (goats, dogs, sheep, wild animals, birds,...)		X	X		X		X		X	
116	Processed meat (boiled pork pies, fried pork pies, roasted pork, sausages,...)		X	X		X		X		X	
117	Lard, cooking oil?		Kg								
118	Fresh shrimp, fish?		Kg								
119	Dried and processed shrimps, fish?		Kg								
120	Other aquatic products and seafood? (crabs, snails,...)		X	X		X		X		X	
121	Eggs of chickens, ducks, Muscovy ducks, geese?		Egg								
122	Tofu?		Kg								
123	Peanuts, sesame?		Kg								

5a2. Recurrent expenditures on food and drinks (cont'd)

Code	1 Apart from festive occasions, parties, engagement parties, weddings, funerals and major death anniversaries over the past 30 days, which of the following items has your household consumed: Mark with x if yes Question 1 applies to all categories of items/items before moving to questions 2-5	X	Units of measurement	2 How much has your household consumed over the past 30 days?		Breakdown 3. Consumed quantity of purchase or exchange		4. Consumed quantity of self-subsidy		5. Consumed quantity of gift, donation, present	
				Quantity	Value thousand ®ång	A. In case of no quantity, write 0 >>4	B. Value thousand ®ång	A. In case of no quantity, write 0 >>5	B. Value thousand ®ång	A. In case of no quantity, write 0 >>next	B. Value thousand ®ång
124	Beans of various kinds?		Kg								
125	Fresh peas of various kinds?		Kg								
126	Morning glory vegetables?		Kg								
127	Kohlrabi?		Kg								
128	Cabbage?		Kg								
129	Tomato?		Kg								
130	Other vegetables? (gourd, winter melon, cucumber, cabbage, squash...)		X	X		X		X		X	
131	Orange?		Kg								
132	Banana?		Kg								
133	Mango?		Kg								
134	Other fruits? (rambutan melon, papaya, guava, litchi, grapes,...)		X	X		X		X		X	
135	Fish sauce?		Liter								
136	Salt?		Kg								
137	MSG?		X	X		X		X		X	
138	Glutamate?		X	X		X		X		X	
139	Sugar, molasses?		Kg								
140	Confectionery?		Kg								
141	Condensed milk, milk powder?		Kg								
142	Ice cream, yoghurt?		X	X		X		X		X	
143	Fresh milk?		Liter								
144	Alcohol of various kinds?		Liter								
145	Beer of various kinds?		Liter								

5a2. Recurrent expenditures on food and drinks (end)

Code	1 Apart from festive occasions, parties, engagement parties, weddings, funerals and major death anniversaries over the past 30 days, which of the following items has your household consumed: Question 1 applies to all categories of items/items before moving to questions 2-5 Mark with x if yes: X	Units of measurement	2 How much has your household consumed over the past 30 days?		Breakdown					
					3. Consumed quantity of purchase or exchange		4. Consumed quantity of self-subsidy		5. Consumed quantity of gift, donation, present	
			Quantity	Value thousand ®ång	A. In case of no quantity, write 0 >>4	B. Value thousand ®ång	A. In case of no quantity, write 0 >>5	B. Value thousand ®ång	A. In case of no quantity, write 0 >>next	B. Value thousand ®ång
146	Bottled, canned, boxed beverages? (pure water, carbonated drinks, juice, fruit smoothies, pep drinks,...)	Litre								
147	Instant coffee?	X	X		X		X		X	
148	Coffee powder?	Kg								
149	Instant tea powder?	X	X		X		X		X	
150	Other dried tea?	Kg								
151	Cigarettes, waterpipe tobacco?	X	X		X		X		X	
152	Betel leaves, areca nuts, lime, betel pieces?	X	X		X		X		X	
153	Outdoors meals and drinks? (breakfast, lunch, dinner)?	X	X		X		X		X	
154	Other food and drinks? (other processed food and foodstuff, additives, seasonings, ...)	X	X		X		X		X	

5a2ct. Sum for question 2b (codes 101-154) ____

6.Sum for Q3b (codes 101-154) ____

7.Sum for Q4b (codes 101-154) ____

8.Sum for Q5b (codes 101-154) ____

5b. Expenditures on non-food items and other expenditures

5b1. Daily expenditures

Code	1 Which of the following items has your household consumed over the past 30 days? Question 1 applies to all items before moving to questions 2-5	Mark with x if yes	2 How much has your household consumed over the past 30 days?	Breakdown 3. Consumed quantity of purchase or exchange	4. Consumed quantity of self-subsidy	5. Consumed quantity of gift, donation, present
		X	thousand ®ång	thousand ®ång	thousand ®ång	thousand ®ång
201	Pocket money for children?					
202	Coal?					
203	Coal briquette?					
204	Petroleum?					
205	Kerosene?					
206	Mazut oil?					
207	Diesel oil?					
208	LPG?					
209	Natural gas?					
210	Firewood, husk, sawdust?					
211	Farm by-products? (straw, sugar cane leaves, maize/jute/hemp/seagrass stems,…)					
212	Other types of fuel?					
213	Deposit fees for vehicles? (bicycle, scooter, automobiles)					
214	Matches, candles, fire stones, lighters?					

Code	1 Which of the following categories of items /items/expenditures has your household consumed over the past 30 days? Trong 3 Question 1 applies to all items before moving to questions 2-5	Mark with x if yes	2 How much has your household consumed over the past 30 days?	Breakdown 3. Consumed quantity of purchase or exchange	4. Consumed quantity of self-subsidy	5. Consumed quantity of gift, donation, present
		X	thousand ®ång	thousand ®ång	thousand ®ång	thousand ®ång
215	Soap/ detergent, softening solution?					
216	Dish washing liquid, floor-cleaning liquid?					
217	Shampoo, conditioner?					
218	Bath soap, shower gel?					
219	Skin-nourishing cream, powder and lipsticks, perfume, hair gel,..?					
220	Tooth paste and brush?					
221	Toilet paper, razor?					
222	Books, newspapers, magazines for adults?					
223	Books, newspapers for children?					
224	Fresh flowers?(excluding worship flowers)					
225	Lottery tickets?					
226	Regular worship activities?					
227	Hair cut, hair dressing					
228	Other daily expenditures?					

5b1ct. Sum for Q2 (codes 201-228)	**6.** Sum for Q3 (codes 201-228)	**7.**Sum for Q4 (codes 201-228)	**8.**Sum for Q5 (codes 201-228)

5b2. Annual consumption

Code	1 Which of the following items has your household consumed over the past 12 months? Question 1 applies to all items before moving to questions 2-3	Mark with x if yes	2 Consumed value of purchase or exchange If none write 0 thousand ®ång	3 Consumed quantity of self-subsidy, gift, donation, present If none write 0 thousand ®ång
301	Fabrics?			
302	Garment? (including underwear)			
303	Anti-mosquito nets and cotton gauze?			
304	Kerchiefs, turbans, scarfs of various kinds?			
305	Mats, blankets, bed sheets, pillows, curtains, table-cloth?			
306	Other garment accessories? (needle, thread, socks,...)			
307	Fees of tailoring, washing and ironing?			
308	Shoes, slippers, wooden underfoot?			
309	Plastics, conical hats, hats, umbrellas of various kinds?			
310	Electrical appliances: light bulbs, electrical cords, plugs, fuses,...?			
311	Ceramics and glassware: bowls, plates, teapots, cups,...?			
312	Pots, saucepans, frying-pans, barrels, buckets?			
313	Thermos, inner thermos?			
314	Bags?			
315	Torches, batteries for lighting, TVs, radio?			
316	Hammock, cradles, cots, prams?			
317	Other expenditures on household utensils? (not including durables) (Specify_____)			

Code	1 Which of the following items has your household consumed over the past 12 months? Question 1 applies to all items before moving to questions 2-3	Mark with x if yes	2 Consumed value of purchase or exchange If none write 0 thousand ®ång	3 Consumed quantity of self-subsidy, gift, donation, present If none write 0 thousand ®ång
318	Inner tubes, tires, and spare parts of bicycles?			
319	Inner tubes, tires, and spare parts of scooters, automobiles?			
320	Maintenance and repair of household utensils?			
321	Travel expenditure? (including fees for boats, ferries, and others)			
322	Paintings, photos, ornamental plants?			
323	Sports facilities?			
324	Adult toys?			
325	Child toys?			
326	Envelops, postal stamps, postal fees?			
327	Fees of phone subscription, calls, and repairs			
328	Internet (costs of installation, subscription, access)			
329	Expenditures on plastic (cosmetic) surgeries, gym exercises?			
330	Entertainment (cinemas, music, video, sports)?			
331	Domestic holidays?			
332	Overseas holidays?			
333	Watches, eyewear, jewellery?			
334	Expenditures on other cultural activities?			
335	Hiring domestic helps?			
336	Other annual expenditures? (Specify_____)			

5b2ct. Sum (question 4 + question 5)	**4.** Sum for Q 2 (codes 301-336)	**5.** Sum for Q 3 (codes 301-336)

5b3. Other costs as expenditures

Code	1 On which of the following items has your household spent money over the past 12 months? Question 1 applies to all items before moving to question 2	Mark with x if yes	2 Expenditures […] over the past 12 months? thousand ®ång
400	Fees and charges on administrative and legal services for daily-life requirements (certificates of marriage, birth, and death, notary services…)		
401	Fund contributions? (funds in aid of natural calamity victims, for charitable activities, poverty reduction, study encouragement,...)		
402	Cash contributions in lieu of public labor and other obligations?		
403	Taxes of various kinds (except production taxes), e.g. PIT, and taxes for transfer of use rights of houses and residential land?		
404	Engagement and wedding parties of the household (after deducting expenditures on guests' food and drinks)?		
405	Funerals and death anniversaries of the household (after deducting expenditures on guests' food and drinks)?		
406	Organization of parties and entertaining activities? (birthdays, opening ceremonies, guest reception,...)		
407	Gift, donation, assistance, tributes, contributions to death anniversaries… to other households? (in cash and kind)		
499	Including: expenditures on former household members' study or medical treatment overseas		
408	Other expenditures?(damages for other people, non-student body insurance, traffic insurance, housing and assets insurance,...)		
	5b3ct . Sum for question 2 (codes 400 - 408)		

Section 6. Durables

1. Pls tell which of the following durables does your household have?

Code	Names of durables	Mark with x if yes
1	Automobile(s)	
2	Motorbike(s)	
3	Bicycle(s)	
4	Ship(s), boat(s), junk(s), outer part with a motor	
5	Ship(s), boat(s), junk(s), outer part without a motor	
6	Other means of travel	
7	Pumping machine(s)	
8	Electricity generator(s)	
9	Printer(s)	
10	Fax machine(s)	
11	Landline telephone(s)	
12	Mobile telephone(s)	
13	Sewing machine(s)	
14	Video player(s), DVD player(s), digital player(s), satellite antenna	
15	Color TV(s)	
16	Black and white TV(s)	
17	Music rack of various kinds	
18	Radio/radio-cassette player(s)	
19	Disk player(s)	

Code	Names of durables	Mark with x if yes
20	Computer(s)	
21	Camera(s), video recorder(s)	
22	Refrigerator(s)	
23	Air conditioner(s)	
24	Washing machine(s), (clothes-) drying machine(s)	
25	Electric fan(s)	
26	(Bath) water heater(s)	
27	Gas cooker(s), magnetic cooker(s)	
28	Electric cooker(s), electric rice cooker(s), pressure cooker(s)	
29	Trolleys of various kinds	
30	Cupboard(s), cabinet(s), wardrobe(s) (of various kinds)	
31	Bed(s)	
32	Desk(s), chair(s), long bench(es), dressing table(s)	
33	Vacuum cleaner(s), dehumidifier(s), water filter(s)	
34	Microwave oven(s), baking oven(s)	
35	Juice extractor(s), citrus juicer(s)	
36	Piano(s), keyboard(s)	
37	Others (Specify_____)	

6. Durables (*cont'd*)

Number line	**2** Names of durables your household has purchased or received or self-produced over the past 10 years		**3** Quantity? Enumerators fill in this column only in case of many durables of the same kind, value, and moment of purchase	**4** When did your household purchase or receive or self-produce it? In 2009 - 2010, fill in both month and year; otherwise, only year is filled in. Fill in all 4 digits for year		**5** Value at purchase reception, self-production? Only ask about durables bought, received, self-produced over the past 12 months.	**6** Remaining value in current price?
		Code		Month	Year	Thousand ®ång	Thousand ®ång
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							

6. Durables (*end*)

Number line	2 Names of durables your household has purchased or received or self-produced over the past 10 years	Code	3 Quantity? Enumerators fill in this column only in case of many durables of the same kind, value, and moment of purchase	4 When did your household purchase or receive or self-produce it? In 2009 - 2010, fill in both month and year; otherwise, only year is filled in. Fill in all 4 digits for year: Month	Year	5 Value at purchas reception, self-production? Only ask about durables bought, received, self-produced over the past 12 months. Thousand ®ång	6 Remaining value in current price? Thousand ®ång
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							

7. Sum for question 5

If none, write 0

thousand ®ång

Section 7. Housing

Pls tell some information on your household's accommodation.

1. In how many houses/flats does your household actually live? Number of houses/flats
In case of no house, write 0 **>> 14**

2. Total residential area? (all houses where the household lives are counted) m2
Bedrooms, dining rooms, living rooms, study rooms, play rooms are incl
Bathrooms, toilets, kitchens, warehouses, business areas are not included.
An attic is considered 50%.

Questions 3-5 apply to the main house.

3. Which is the main material as poles (or pillars, or carrying walls) of the house where your household lives now?

(Enumerators should concurrently observe it)

Reinforcement concrete 1
Bricks/stones..... 2
Iron/steel/good wood..... 3
Poor-quality wood/bamboo..... 4
Others (specify_____)..... 5

4. Which is the main material as roofing of the house where your household lives now?

(Enumerators should concurrently observe it)

Reinforcement concrete..... 1
Tiles (cement, terracotta)..... 2
Roof slabs (cement, metal)..... 3
Leave/straw/rolled roofing..... 4
Others (specify_____)..... 5

5. Which is the main material as walls or surroundings of the house where your household lives now?

(Enumerators should concurrently observe it)

Reinforcement concrete..... 1
Bricks/stones..... 2
Wood/metal..... 3
Calcareous soil/straw..... 4
Bamboo partitions/hardboards..... 5
Others (specify_____)..... 6

6. Does your household pay rents? (in cash or kind)

Yes..... 1
No..... 2**(>>9)**

7. How much have you spent on rents over the past 12 months?
(both in cash and values of kind) thousand ®ång

8. What is the duration of the existing rental contract?
(including a verbal contract) Number of months

9. If the whole accommodation were now put on sale, how much do you think it would be worth? thousand ®ång

10. Apart from your current living place, does your household have any other residential land lots or houses?

Yes..... 1
No..... 2**(>>13)**

11. Does your household receive rents from those residential land lots or houses?

Yes..... 1
No..... 2**(>>13)**

12. How much has your household received from leasing residential land and houses over the past 12 months? thousand
[in cash and kind (value)] ®ång

13. Expenditures on house repair and maintenance over the past 12 months?
(including painting but not major improvement and upgrade)
If none, write 0 thousand ®ång

Section 7. Housing *(end)*

14. Which is the main drinking water supply of your household?

- tap water reaching the house 1
- public tap water. 2
- drilled well 3
- protected dug well 4
- unprotected dug well 5
- protected stream water 6
- unprotected stream water 7
- Bought water (in bottles, jars, or small vehicles…) 8
- rain water 9
- Others (specify:_____) 10

15. Do you treat drinking water by:

a. boiling? Yes..... 1 / No..... 2

b. a filter or chemicals? Yes..... 1 / No..... 2

16. How much money has your household spent on water for drinking and other daily activities over the past 12 months (excluding bottled purified water counted in the section on expenditures on food and drinks)? thousand ®ång

If none, write 0

17. Which toilets does your household use?

- septic/semi-septic tank..... 1
- suilabh..... 2
- double septic tank..... 3
- fishing bridge..... 4
- Others..... 5
- None..... 6

18. Which is the main lighting in your household?

- National-grid electricity..... 1
- Battery or generator or small-scale-hyrdo electricity 2
- Gas, oil lamps of various kinds 3
- Others (specify: _____).. 4

19. For the last month, how much money has your household spent on electricity for daily consumption and how many KWs has your household consumed for daily activities?

thousand ®ång KW

20. How much money has your household spent on electricity for daily activities over the past 12 months?

thousand ®ång

21. How has your household treated daily-life waste over the past 12 months?

- Somebody else collects it 1
- Dumping into ponds, lakes, rivers, streams..... 2
- Dumping in a nearby site 3
- Landfill burial 4
- Burning..... 5
- Others (specify_____)..... 6

22. How much money has your household on collection of daily-life waste over the past 12 months?

If none, write 0 thousand ®ång

23. Total expenditures on housing, electricity, water, waste (c7 + c13 + c16 + c20 + c22)

Section 8. Participation in Aid Schemes

Enumerators interview all households.

1. Have the local authorities classified your household as 'poor' in the commune/ward in the following years?

Yes..... 1
No..... 2

Year	2006	2007	2008	2009	2010

2. In 2009 - 2010, has your household benefitted from the project/policy [….]?

Yes..... 1
No..... 2
Don't know 3

	2009	2010
a. Support in purchasing health insurance cards.....		
b. Reduction of and exemption from costs of medical checks/treatment for the poor.....		
c. Reduction of and exemption from tuition fees for the poor.....		
d. Policy-based scholarships.....		
e. Vocational training for the poor and low-income earners (Ask about number of months if this line is included)		
f. Support in housing and residential land for poor households.....		
g. Support in cleaning/improving daily-life water supplies for poor households.....		
h. Providing productive land for poor ethnic minorities households(Ask about areas, if this line is included)		
i. Extension services in agriculture, forestry and fisheries.....		
j. Support in migrating abroad for employment.....		
k. Food aid.....		
l. Subsidized petroleum/kerosene for fishing boat(s)/vessel(s).....		
m. Preferential credit for the poor.....		
n. Support in machinery, production inputs (fertiliser, breed animals, seedlings,...).....		
o. Others (kerosene,...).....		

a. Number of months of vocational training provided in 2009 - 2010? ____ month(s)

b. The total area that your household has been provided in 2009 - 2010? ____ m2

Section 8. Participation in Aid Schemes (cont'd)

3. Has anyone in your household, in 2010, borrowed from or remained indebted to preferential credit schemes for the poor?

Yes..... 1
No..... 2 (>>Question 9)

Order	**4.** Which preferential credit scheme has your household borrowed from / remained indebted to? (Each loan is written in a line) Social Policy Bank..... 1 Employment Support Fund..... 2 Poverty Reduction Fund..... 3 Socio-political organisations..... 4 Others (specify_____ 5	5. Value [...] of this loan? thousand VND	**6.** The interest rate of this loan? In case of no interest, write 0 and >>Q7 **Time unit** month..... 1 quarter..... 2 6 months..... 3 year..... 4 Interest rates % Time unit	**7.** Does your household have to pay any costs to get this loan? If none, write 0 thousand VND	**8.** The (outstanding) balance of this loan? (including principal and interest)? If none, write 0 thousand VND
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Section 8. Participation in Aid Schemes (end)

9. Have the living conditions in your household improved, compared with 5 years ago (2006)?

Yes, substantially..... 1 **(>>11)**
Yes, slightly..... 2 **(>>11)**
The same as before..... 3
Worsened..... 4
Don't know..... 9 **(>>11)**

10. Pls tell why it is 'the same as before'/'worsened' ??

Increased production costs in agriculture, forestry and fisheries..... 1
Low selling prices of agricultural, forestry and fisheries products 2
Cattle and poultry suffer from epidemics or death 3
Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production 4
Household member(s) is sick or dies 5
High prices of food, foodstuff, and other consumer goods 6
Low incomes..... 7
Job loss or underemployment 8
Conflicts or other problems among family members/friends/neighbors 9
Decreased arable land/water surface for aquaculture production 10
Unfortunate events (house on fire, stealth, traffic accident)..... 11
Other reasons (specify_____ 12

Record in the order of importance

The first	The second	The third

11. Has consumption of food and foodstuff by your household [....] been sufficient to meet needs over the last 30 days?

Insufficient 1
Sufficient 2
More than sufficient 3
No comment/ no applicable 4

Food	Foodstuff

Sufficient' means having met your household's minimum consumption needs.

12. Has consumption of electricity, water, and housing by your household [....] been sufficient to meet needs over the last 30 days?

Insufficient 1
Sufficient 2
More than sufficient 3
No comment/ no applicable 4

Electricity	Water	Housing

13. Has consumption of clothing and footwear by your household [....] been sufficient to meet needs over the last 30 days?

Insufficient 1
Sufficient 2
More than sufficient 3
No comment/ no applicable 4

Some computing indicators from results of household interviews

Indicators and data sources	Code	Data location in household questionnaire	Page	Indicator value (1000 ®ång)
I. Total revenue [Codes 2 + ... +14]	**1**			
Value of aid, scholarships, rewards from education	2	Data from cell 2TN, section 2	11	
Value of aid in healthcare	3	Data from cell 3TN section 3	15	
Revenues from salaries/wages of household members	4	Data from cell 4ATN, part 4A	27	
Revenues from renting out agricultural and forestry land and water surface for aquaculture production	5	Data from cell 4B0TN, part 4B0	29	
Revenues from crop production	6	Data from cell 4B1T, part 4B1.5	35	
Revenues from husbandry	7	Data from cell 4B21T, part 4B2.1	38	
Revenues from hunting and domestication of birds and animals	8	Data from cell 4B22T, part 4B2.1	38	
Revenues from agricultural services	9	Data from cell 4B3T, part 4B3.1	42	
Revenues from forestry	10	Data from cell 4B4T, part 4B4.1	44	
Revenues from aquaculture	11	Data from cell 4B5T, part 4B5.1	46	
Revenues from production, business and services outside agriculture, forestry, aquaculture; processin	12	Data from cell 4CT, part 4C1	48	
Other revenues included in incomes	13	Data from cell 4DTN, part 4D	50	
Revenues from renting out house(s) and residential land	14	Data from Question 12, section 7	62	

Some computing indicators from results of household interviews *(cont'd)*

	Code	Data location in household questionnaire	Page	Indicator value (1000 ®ång)
II. Costs of production and business [Codes 16 + … + 22]	15			
Costs of crop production	16	Data from cell 4B1C, part 4B1.6	36	
Costs of husbandry	17	Data from cell 4B21C, part 4B2.2	41	
Costs of hunting, trapping, and domestication of birds and animals	18	Data from cell 4B22C, part 4B2.2	41	
Costs of agricultural services	19	Data from cell 4B3C, part 4B3.2	43	
Costs of forestry	20	Data from cell 4B4C, part 4B4.2	45	
Costs of aquaculture	21	Data from cell 4B5C, part 4B5.2	47	
Costs of production, business and services outside agriculture, forestry, aquaculture; processing...	22	Data from cell 4CC, part 4C2	49	

Indicators and data sources in Table 'Some computing indicators from results of household interviews'	Indicator value (1000 ®ång)
III. Incomes [Codes 2 + 3 + 4 + 5 + (6 -16) + (7 - 17) + (8 - 18) + (9 - 19) + (10 - 20) + (11 - 21) + (12 - 22) + 13 + 14]	
IV. Average/per capita/monthly incomes [Indicator number III/ (number of household members x 12)]	

Some computing indicators from results of household interviews (end)

Indicators and data sources	Code	Data location in household questionnaire	Page	Indicator value (1000 ®ång)
V. Consumption and other expenditures				
Education expenditures	23	Data from cell 2CT, section 2	9	
Healthcare expenditures	24	Data from cell 3CT, section 3	15	
Food and drink consumption on festive occasions	25	Data from cell 5A1CT, part 5A1	52	
Regular food and drink consumption	26	Data from cell 5A2CT, part 5A2	55	
Daily consumption of non-food items	27	Data from cell 5B1CT, part 5B1	56	
Annual consumption of non-food items	28	Data from cell 5B2CT, part 5B2	57	
Other consumption included in expenditures	29	Data from cell 5B3CT, part 5B3	58	
Expenditures on durables over the past 12 months	30	Data from cell of question 7, section 6	61	
Recurrent expenditures on housing, electricity, water, and daily-life waste	31	Data from cell of question 23, section 7	63	

Explanatory documents for the VHLSS 2010

Name of the dataset muc1a variables 20

No	Variable name in	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m1ac1	Family name of household members	All		String
8	m1ac1a	Surname name of household members	All		String
9	m1ac2	Sex	All	1	Yes
				2	No
10	m1ac3	Relationship with HH member	All	1-7	Numeric
				1	Head
				2	Spouse
				3	Children
				4	Parents
				5	Grandfather/Grandmother
				6	Grandchild
				7	Other relation
11	m1ac4a	Month of birth of	All	1-12	Month
12	m1ac4b	Year of birth of	All	1908-2010	Year
13	m1ac5	Age	All	0-102	Years old
14	m1ac6	Marital status	All	1-5	
				1	Single
				2	Married
				3	Widowed
				4	Divorced
				5	Separated
15	m1ac7	Number of months staying in the household	All	0-12	Month
16	m1ac8	Reasons for leaving	All	1-6	Student studies
				1	Student studies in the country
				2	Carde studies in the country
				3	country/overseas
				4	New born, new comer
				5	Household head working away
				6	Others
17	m1ac9	Place registered for residency	All	1-5	
				1	In resident area in the commune/ward
				2	In other places in the province/city
				3	In other province/city
				4	Others
				5	Never having registered household status
18	m1ac10	Province permanent residence in	All	1-99	Numeric
19	m1ac11n	Number of years staying in province	All	-1-62	Numeric
20	m1ac11t	Number of months staying in province	All	0-11	Numeric

Explanatory documents for the VHLSS 2010

Name of the data MUC1B variables 18

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	4-973	Numeric
3	xa	Commune	All	124-32248	Numeric
4	diaban	Enumerator area	All	1-73	Numeric
5	hoso	Household code	All	13-20	Numeric
6	m1bma	Member code	All	31-35	Numeric
7	m1bc2	Name	All	Name	String
8	m1bc3	Gender	All	1-2	Numeric
				1	Male
				2	Female
9	m1bc4	Domestic help or household member working away	All	1-2	Numeric
				1	Domestic help
				2	Household member working away
10	m1bc5	Age	All	6-75	Years old
11	m1bc6	Marital status	All	1-5	
				1	Single
				2	Married
				3	Widowed
				4	Divorced
				5	Separated
12	m1bc7a	Highest qualification obtained	All	0-12	Numeric
				0	No qualification
				1	Primary school
				2	Lower secondary school
				3	Higher secondary school
				4	Elementary vocational school
				5	Middle-level vocational school
				6	Professional vocational school
				7	Vocational college
				8	College
				9	University
				10	MA/MSc
				11	PhD
				12	Others
13	m1bc7b	Professional training	All	0-7	Numeric
14	m1bc8	Number of months staying in household	All	0-12	Numeric
15	m1bc9	Places to register	All	1-5	Numeric
				1	In resident area in the commune/ward
				2	In other places in the province/city
				3	In other province/city
				4	Others
				5	Never having registered household status
16	m1bc10	Province permanent residence in	All	1-99	Numeric
17	m1bc11n	Number of years staying in province	All	-1-40	Numeric
18	m1bc11t	Number of months staying in province	All	0-11	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc2a1 variables 15

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m2ac1	Educational level completed	All		String
8	m2ac2a	Grade has completed	All	0-12	Numeric
				0	No qualification
				1	primary
				2	lower secondary
				3	higher secondary
				4	elementary vocational school
				5	middle-level vocational school
				6	professional school
				7	vocational college
				8	college
				9	university
				10	MA/MSc
				11	PhD
				12	Others
9	m2ac2b	Vocational training	All	0-7	Numeric
10	m2ac3	Types of school	All	1-5	
				1	Public
				2	Community-established
				3	Private
				4	Semi-public
				5	Others (Specify)
11	m2ac4	Going to school now?	All	1-3	
				1	Yes
				2	On summer vacation
				3	No
12	m2ac5	Attended school over last 12 months	All	1-2	
				1	Yes
				2	No
13	m2ac6	Level of education	All	0-12	
				0	Nursery, kindergarten
				1	Primary
				2	Lower secondary
				3	Higher secondary
				4	Elementary vocational school
				5	Middle-level vocational school
				6	Professional school
				7	Vocational college
				8	College
				9	University

				10	MA/MSc
				11	PhD
				12	Others (specify)
14	m2ac7	Grade is attending	All	1-12	Numeric
15	m2ac8	School attending	All	1-4	Numeric
				1	Public
				2	Community-established 2
				3	Private
				4	Others (Specify)

Explanatory documents for the VHLSS 2010

Name of the dataset muc2_QX_cau9_11 variables 19

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m2ac9	Tuition reduction/exemption	All	1-2	Numeric
				1	Yes
				2	No
8	m2ac10a	Reasons for reduction	Member say "yes" in m2ac9	0-9	Numeric
				0	Undefined
				1	Poor households
				2	Ethnic minorities
				3	Households of fallen combatants war invalids, sick soldiers,
				4	or with revolutionary merits
				5	Deep, remote, especially difficult areas
				6	families in difficult circumstances
				7	Primary school students
				8	School doesn't collect tuition fees
				9	Others
9	m2ac10b	Reasons for exemption	Member say "yes" in m2ac9	0-9	Numeric
				0	Undefined
				1	Poor households
				2	Ethnic minorities
				3	Households of fallen combatants war invalids, sick soldiers,
				4	with revolutionary merits
				5	Deep, remote, especially difficult areas
				6	families in difficult circumstances
				7	Primary school students
				8	School doesn't collect tuition fees
				9	Others
10	m2ac11a	Tuition fees	Member say "yes" in m2ac9	-2-390000	Numeric
11	m2ac11b	Charge	Member say "yes" in m2ac9	-2-5000	Numeric
12	m2ac11c	Contributions to school, clas	Member say "yes" in m2ac9	-2-5000	Numeric
13	m2ac11d	Parent fund, class fund	Member say "yes" in m2ac9	-2-10000	Numeric
14	m2ac11e	Uniform and costumed stipulated	Member say "yes" in m2ac9	-2-8000	Numeric
15	m2ac11f	Texbooks, reference books	Member say "yes" in m2ac9	-2-5000	Numeric
16	m2ac11g	Expenditures on other study instruments	Member say "yes" in m2ac9	-2-13000	Numeric

17	m2ac11h	Coaching sessions for compulsory subjects in schools	Member say "yes" in m2ac9	-2-29000	Numeric
18	m2ac11i	Other educational expenditures	Member say "yes" in m2ac9	-2-25920	Numeric
19	m2ac11k	Total expenditures on education	Member say "yes" in m2ac9	0-390000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc2_QX_Cau12_16 variables 12

No	Variable nam	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m2ac12	Fund received from organization	Member say "yes" in m2ac9	0-46184	Numeric
8	m2ac13	Values of scholarship and rewards received	Member say "yes" in m2ac9	0-16684	Numeric
9	m2ac14	Expenditures for other education and training over the past 12 months? (foreign language certificates, shorthand typing, hairdressing, makeup,...)	Member say "yes" in m2ac9	0-32000	Numeric
10	m2ac15a	Toys bought in shops	Member aged less than 5	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
11	m2ac15b	Self-made toys	Member aged 5 or less	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
12	m2ac16	Books or cartoons	Member aged 17 or less	0-10	Numeric

Explanatory documents for the VHLSS 2010

Name of the datase muc3a variables 16

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m3c2	Name of users of medical services	All		String
8	m3c3a	Sequense number using medical services	Member using medical services	1-8	Numeric
9	m3c3b	Medical establishments visits	Member using medical services	1-13	Numeric
				1	Village/hamlet clinics
				2	Commune/ward clinics
				3	Regional general clinics
				4	Urban/rural district hospitals
				5	Provincial/city hospitals
				6	Central hospitals
				7	Other state-run hospitals
				8	Private hospitals
				9	Other hospitals
				10	Private practice
				11	Traditional herbal physicians
				12	Individual medical services
				13	Other medical establishments
10	m3c4	Reasons to visit medical establishments	Member using medical services	1-4	Numeric
				1	Vaccination
				2	Pregnancy checks, insertion of intrauterine devices, abortion, birth delivery
				3	Health checks and consultancy
				4	Medical treatment

11	m3c5a	Number of visits for health check	Member using medical services	0-80	Numeric
12	m3c5b	Costs of visit for health check	Member using medical services	0-168000	Numeric
13	m3c6a	Number of visits for resident treatment	Member using medical services	0-30	Numeric
14	m3c6b	Costs of visit for resident treatment	Member using medical services	0-236000	Numeric
15	m3c7	Household afford medical check/treatment	Member using medical services	1-3 1 2 3	Numeric Yes, it did It had some but not enough No
16	m3c8	Selling product to afford medical check	Member using medical services	0-90000	Numeric

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Name of the datas muc3b variables 15

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m3c9	Having health insurance card	All	1-2	Numeric
				1	Yes
				2	No
8	m3c10a	The first types of health insurance	Member having health insurance cards	1-10	Numeric
				1	booklet/card for children aged 6 or less
				2	health insurance card for the poor
				3	health insurance card for the near-poor
				4	free healthcare booklet/card/certificate
				5	health insurance card for policy beneficiaries
				6	other compulsory state-run health insurance card
				7	other compulsory non-state health insurance card
				8	Voluntary health insurance card for students
				9	Other voluntary health insurance card
				10	Others
9	m3c10b	The second types of health insurance	Member having health insurance cards	1-10	Numeric
				1	booklet/card for children aged 6 or less
				2	health insurance card for the poor

				3	health insurance card for the near-poor
				4	free healthcare booklet/card/certificate
				5	health insurance card for policy beneficiaries
				6	other compulsory state-run health insurance card
				7	other compulsory non-state health insurance card
				8	Voluntary health insurance card for students
				9	Other voluntary health insurance card
				10	Others
10	m3c11	Spent on health insurance	Member having health insurance cards	0-11600	Numeric
11	m3c12a	Using health insurance card for check-up out-service	Member having health insurance cards	1-2	Numeric
				1	Yes
				2	No
12	m3c12b	Using health insurance card for check-up in-service	Member having health insurance cards	1-2	Numeric
				1	Yes
				2	No
13	m3c13	Spending on purchasing medicines without health check-up	All	0-44000	Numeric
14	m3c14	Spending on purchasing medical facilities	All	0-10000	Numeric
15	m3c15	In cash or in kind received	All	0-142745	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4a1 variables 19

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	matv	ID code	All	1-15	Numeric
7	m4ac1a	Taken wage/salaried employment	All	1-2	Numeric
				1	Yes
				2	No
8	m4ac1b	Self-employment in agriculture, forestry, aquaculture	All	1-2	Numeric
				1	Yes
				2	No
9	m4ac1c	Self-engagement in production, business, services outside agriculture, forestry, aquaculture	All	1-2	Numeric
				1	Yes
				2	No
10	m4ac2	Having job?	All	1-2	Numeric
				1	Yes
				2	No
11	m4ac3a	Number of working days	Member having job	1-365	Numeric
12	m4ac3m	Job desciption	Member having job		String
13	m4ac3	Occupation code	Member having job	1-96	Numeric
14	m4ac4c	Name of employer	Member having job		String
15	m4ac4m	Job desciption	Member having job		String
16	m4ac4	Industry code	Member having job	2-160	Numeric
17	m4ac5	Taken job over last month?	Member having job	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
18	m4ac6	Number of working days	Member having job	-1-30	Numeric
19	m4ac7	Number of working hours	Member having job	-1-24	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4a2 variables 16

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	Member having job	1-96	Numeric
2	huyen	District	Member having job	1-973	Numeric
3	xa	Commune	Member having job	4-32248	Numeric
4	diaban	Enumerator area	Member having job	1-91	Numeric
5	hoso	Household code	Member having job	13-24	Numeric
6	matv	ID code	Member having job	1-15	Numeric
7	m4ac8a	Organization working	Member having job	1-6	Numeric
				1	Farming, forestry, aquaculture households/individuals
				2	Independent production and business households
				3	Collective
				4	Private
				5	State-run
				6	Foreign-invested
8	m4ac8b	Public employee/civil servant	Member having job	1-2	Numeric
				1	Yes
				2	No
9	m4ac9	Received salary/wages	Member having job	1-2	Numeric
				1	Yes
				2	No
10	m4ac10	In cash or in kind received	Member having job	-1-46784	Numeric
11	m4ac11	Salaries/wages including in cash or in kind	Member having job	99-561409	Numeric
12	m4ac12a	In cash or in kind received for festive occassions	Member having job	0-56141	Numeric
13	m4ac12b	Other bonuses	Member having job	0-132141	Numeric
14	m4ac13a	Signing a payroll book	Member having job	1-2	Numeric
				1	Yes
				2	No
15	m4ac13b	Paid leaves/holiday	Member having job	1-2	Numeric
				1	Yes
				2	No
16	m4ac13c	Social insurance	Member having job	1-2	

1	Yes
2	No

Explanatory documents for the VHLSS 2010

Name of the dataset muc4a3 variables 16

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	Member ha	1-96	Numeric
2	huyen	District	Member ha	1-973	Numeric
3	xa	Commune	Member ha	4-32248	Numeric
4	diaban	Enumerator area	Member ha	1-91	Numeric
5	hoso	Household code	Member ha	13-24	Numeric
6	matv	ID code	Member ha	1-15	Numeric
7	m4ac14	Taken other job	Member ha	1-2	
				1	Yes
				2	No
8	m4ac15a	Number of working days for second job	Member ha	1-365	Numeric
9	m4ac15m	Job desciption	Member having job		String
10	m4ac15	Occupation code	Member ha	2-96	Numeric
11	m4ac16c	Name of employer of second job	Member having job		String
12	m4ac16m	Job desciption	Member having job		String
13	m4ac16	Industry code	Member ha	2-160	Numeric
14	m4ac17	Peformed this work over 30 days?	Member ha	1-2	Numeric
				1	Yes
				2	No
15	m4ac18	Number of days performed this work	Member ha	-1-30	Numeric
16	m4ac19	Number of hours working	Member ha	-1-20	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4a4 variables 14

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	Member ha	1-96	Numeric
2	huyen	District	Member ha	1-973	Numeric
3	xa	Commune	Member ha	4-32248	Numeric
4	diaban	Enumerator area	Member ha	1-91	Numeric
5	hoso	Household code	Member ha	13-24	Numeric
6	matv	ID code	Member ha	1-15	Numeric
7	m4ac20	Organization working for the second job	Member ha	1-6	Numeric
				1	Farming, forestry, aquaculture households / individuals
				2	Independent production and business households
				3	Collective
				4	Private
				5	State-run
				6	Foreign-invested
8	m4ac21	Received salary/wages	Member ha	1-2	Numeric
				1	Yes
				2	No
9	m4ac22	In cash or in kind recei	Member ha	-1-15727	Numeric
10	m4ac23	Salaries/wages includir	Member ha	40-120832	Numeric
11	m4ac24a	In cash or in kind recei	Member ha	0-8055	Numeric
12	m4ac24b	Other bonuses	Member ha	0-23392	Numeric
13	m4ac25	Taken any salary/wage	Member ha	1-2	Numeric
				1	Yes
				2	No
14	m4ac26	Receive from this job	Member ha	0-24523	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4a5 variables 12

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	Member having job	1-96	Numeric
2	huyen	District	Member having job	1-973	Numeric
3	xa	Commune	Member having job	4-32248	Numeric
4	diaban	Enumerator area	Member having job	1-91	Numeric
5	hoso	Household code	Member having job	13-24	Numeric
6	matv	ID code	Member having job	1-15	Numeric
7	m4ac27	Received unemployment benefit?	Member having job	1-2	Numeric
				1	Yes
				2	No
8	m4ac28a	Unemployment allowance	Member having job	0-9357	Numeric
9	m4ac28b	One-off severance pay	Member having job	0-139785	Numeric
10	m4ac28c	standard pension at a stipulated age	Member having job	0-102861	Numeric
11	m4ac28d	Premature pension	Member having job	0-72082	Numeric
12	m4ac28e	Allowance for loss of working capacity	Member having job	0-35025	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b0 variables 9

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b0ma	Types of land	Household having farm land	1-7	Numeric
				1	Annual crop land
				2	Perennial crop land
				3	Forestry land
				4	Water surface
				5	Gardens, ponds adjacent to residential land
				6	Shifting-cultivation farmland
				7	Others
7	m4b0c3	Area of land	Household having farm land	4-2815072	Numeric
8	m4b0c4	Paid in cash or in kind for land rental	Household having farm land	0-80000	Numeric
9	m4b0c5	Revenue in cash or in kind from renting land out	Household having farm land	0-48938	Numeric

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Name of the dataset muc4b11 variables 12

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b11ma	Havested any product from cultivation	Household havesting any product from cultivation	1-7	Numeric
				1	Winter-Spring plain rice?
				2	Summer-Autumn plain rice?
				3	Autumn-Winter plain rice?
				4	Upland plain rice?
				5	Annual total of plain rice?
				6	Annual total of sticky rice?
				7	Annual total of specialty rice?
7	m4b11c3	Cultivated area	Household havesting any product from cultivation	40-161000	Numeric
8	m4b11c4	Havested quantity	Household havesting any product from cultivation	12-89770	Numeric
9	m4b11c5	Lost to pet, rat	Household havesting any product from cultivation	0-1000	Numeric
10	m4b11c6	Put to sale or barter	Household havesting any product from cultivation	0-87770	Numeric
11	m4b11c7	Proceeds from sales to barter	Household havesting any product from cultivation	0-383440	Numeric
12	m4b11c8	value of the output havested	Household havesting any product from cultivation	72-393319	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b12 variables 11

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b12ma	Crop code	Household having crop	8-21	Numeric
				8	Maize (corn)
				9	Sweet potato
				10	Cassava/manioc
				11	Other staple food crops
				12	Potato
				13	Morning glory vegetable
				14	Kohlrabi
				15	Cabbage, cauliflower
				16	Cruciferous vegetables
				17	Edible beans
				18	Tomato
				19	Seasoning herb
				20	Other edible vegetables, fruits and roots
				21	Other annual crops (green, black and red bean, flowers, decorative plants, plants for animal feed and manure, etc.)
7	m4b12c3	Area grown	Household having crop	-1-80000	Numeric
8	m4b12c4	Kg havested	Household having crop	1-114000	Numeric
9	m4b12c5	Put to sale or barter	Household having crop	0-114000	Numeric
10	m4b12c6	Total revenue from sale or barter	Household having crop	0-798447	Numeric
11	m4b12c7	Value of the output harvested	Household having crop	5-798447	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b13 variables 12

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b13ma	Crop code	All	22-38	Numeric
				22	Soya bean/soybean
				23	Peanut/groundnut
				24	Sesame
				25	Sugarcane
				26	Tobacco, rustic tobacco
				27	Cotton
				28	Jute, ramie (China grass)
				29	Sedge
				30	Other industrial annuals
				31	Tea
				32	Coffee
				33	Rubber
				34	Pepper
				35	Coconut
				36	Mulberry
				37	Cashew
				38	Other industrial perennials
7	m4b13c3a	Cultivated area	Household having crop	1-500000	Numeric
8	m4b13c3b	Code	Household having crop	1-2	Numeric
				1	M2
				2	Plant
9	m4b13c4	Kg havested	Household having crop	1-236250	Numeric
10	m4b13c5	Put to sale or barter	Household having crop	0-236250	Numeric
11	m4b13c6	Total revenue from sale or barter	Household having crop	0-3508317	Numeric
12	m4b13c7	Value of the output harvested	Household having crop	9-3508317	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b14 variables 12

No	Variable nam	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b14ma	Crop type	All	39-54	Numeric
				39	Citrus
				40	Pineapple
				41	Banana
				42	Mango, horse mango
				43	Indian jujube
				44	Grape
				45	Plum
				46	Papaya
				47	Longan, lychee, rambutan
				48	Sapodilla
				49	Sugar-apple, soursop
				50	Jackfruit, durian
				51	Mangosteen
				52	Other fruit trees
				53	Other perennials
				54	Seedlings
7	m4b14c3a	Output from the acreage	Household having fruit trees	1-50000	Numeric
8	m4b14c3b	Code	Household having fruit trees	1-2	Numeric
				1	M2
				2	Plant
9	m4b14c4	Kg havested	Household having fruit trees	1-62500	Numeric
10	m4b14c5	Put to sale or barter	Household having fruit trees	0-62300	Numeric
11	m4b14c6	Total revenue from sale or barter	Household having fruit trees	0-225000	Numeric
12	m4b14c7	Value of the output harvested	Household having fruit trees	5-225000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b15 variables 10

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b15ma	Havested code	All	1-10	Numeric
				1	Rice straw
				2	Sweet potato leaf and stem
				3	Maize or cassava stem
				4	Bean stem
				5	Sugarcane bud and leaf
				6	Jute and ramie stems
				7	Mulberry stem
				8	Firewood (from agricultural crops)
				9	Other by-products
				10	Collected products
7	m4b15c2	Revenues from sale	Household having havested products	0-9302	Numeric
8	m4b15c3	Value used as animal feed	Household having havested products	0-5528	Numeric
9	m4b15c4	Value used for other purposes	Household having havested products	0-10502	Numeric
10	m4b15c5	Total values of by-product havested	Household having havested products	4-10502	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b16 variables 13

No	Variable nam	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b16ma	Code	All	1-911	Numeric
				1	Seeds
				2	Seedlings
				3	Chemical fertilizers (nitrate, phosphate, potash, NPK, etc...)
				4	Organic fertilizer (self-supplied)
				5	Organic fertilizer (outsourced)
				6	Pesticide
				7	Herbicide
				8	Small tools, cheap and undurable objects (sickle, scythe, hoe, shovel, etc)
				9	Energy, fuel
				9.1	Electricity
				9.2	Coal
				9.3	Coal briquette
				9.4	Petrol
				9.5	Kerosene
				9.6	Mazut oil
				9.7	Diesel oil
				9.8	LPG
				9.9	Natural gas
				9.1	Firewood
				9.11	Other energy and fuels
				10	Small repairs, maintenance
				11	Fixed asset depreciation
				12	Land rental and procurement
				13	Hire of assets, machines, vehicles and mechanical work; hire of transport
				14	Hire of ploughing cattle
				15	Paying outsourced labour
				16	Inner-field irrigation
				17	Payment of interest on loans taken out for production

				18	Other costs (charges, post, advertisement, marketing, production insurance, plant protection fund, field improvement fund, agri-extension fund, administration management fund, feed for ploughing cattle, etc)
7	m4b16c2a	Spent on rice	Household having crop	-2-92447	Numeric
8	m4b16c2b	Spent on staple food, other non-staple food crops	Household having crop	-2-257497	Numeric
9	m4b16c2c	Spent on industrial crops	Household having crop	-2-752401	Numeric
10	m4b16c2d	Spent on fruit trees and other trees except forest trees	Household having crop	-2-40023	Numeric
11	m4b16c2e	Total (2a-2e)	Household having crop	2-752401	Numeric
12	m4b16c2e1	State subsidy	Household having crop	0-39566	Numeric
13	m4b16c2e2	Other assistance	Household having crop	0-3368	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b17 variables 11

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b17ma	Fertilizer code	All	1-5	Numeric
				1	Nitrogenous fertilizer
				2	Phosphorous fertilizer
				3	Kali
				4	NPK
				5	Other fertilizers
7	m4b17c2	Fertilizer using for paddy rice plant	Household having crops	-1-4650	Numeric
8	m4b17c3	Fertilizer using for other fruit crops	Household having crops	-1-30000	Numeric
9	m4b17c4	Fertilizer using for industrial crops	Household having crops	-1-15000	Numeric
10	m4b17c5	Fertilizer using for fruit trees, other trees except forest trees	Household having crops	-1-3600	Numeric
11	m4b17c6	Total of c2-c5	Household having crops	1-30000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b21 variables 10

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b21ma	Code	All	1-19	Numeric
				1	Pork
				2	Beef and water buffalo meat
				3	Horsemeat
				4	Goat meat, sheep meat (lamb, hogget, mutton)
				5	Chicken
				6	Duck, Muscovy duck and goose meat
				7	Other poultry meat
				8	Piglet
				9	Calf and water buffalo calf
				10	Other young animals and poultry
				11	Other raised animals (bear, deer, rabbit, dog, etc)
				12	Poultry egg (chicken, duck, etc)
				13	Fresh milk
				14	Silk cocoon
				15	Honey of kept bees
				16	Other animal products (not slaughtered)
				17	Other outputs from husbandry
				18	Animal by-product
				19	Products from hunting, trapping, and domestication of birds and animals
7	m4b21c3	Quantity obtained	Household having husbandary, hunting, trapping and domestication of bird and animals	0-3285000	Numeric
8	m4b21c4a	Quantity sold or barter	Household having husbandary, hunting, trapping and domestication of bird and animals	0-1319000	Numeric
9	m4b21c4b	Value sold or bartered,	Household having husbandary, hunting, trapping and domestication of bird and animals	0-2315764	Numeric
10	m4b21c5	Value of the output obt	Household having husbandary, hunting, trapping and domestication of bird and animals	0-9801013	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b22a variables 20

No	Variable name in	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b22ma	Cost code	All	1-11	Numeric
				1	Pig/swine
				2	Cattle, water buffalo
				3	Horse
				4	Goat, sheep
				5	Chicken
				6	Duck, Muscovy duck, goose
				7	Other poultry
				8	Honey bee
				9	Silkworm
				10	Other products of husbandry (specify)
				11	Products from hunting, trapping and domestication
7	m4b22c7	Cost for young animals,	Household having husbandary, hunting, trapping and domestication of bird and animals	0-3252154	Numeric
8	m4b22c8	Cost for feed	Household having husbandary, hunting, trapping and domestication of bird and animals	0-,1812846	Numeric
9	m4b22c9	Cost for medicine for ar	Household having husbandary, hunting, trapping and domestication of bird and animals	0-118800	Numeric
10	m4b22c10a	Cost for electricity	Household having husbandary, hunting, trapping and domestication of bird and animals	-2-201960	Numeric
11	m4b22c10b	Cost for coal	Household having husbandary, hunting, trapping and domestication of bird and animals	0-12289	Numeric
12	m4b22c10c	Cost for coal briquette	Household having husbandary, hunting, trapping and domestication of bird and animals	0-9500	Numeric
13	m4b22c10d	Cost for petrol	Household having husbandary, hunting, trapping and domestication of bird and animals	0-16653	Numeric
14	m4b22c10e	Cost for kerosene	Household having husbandary, hunting, trapping and domestication of bird and animals	0-208	Numeric

15	m4b22c10f	Cost for mazut oil	Household having husbandary, hunting, trapping and domestication of bird and animals	0-66	Numeric
16	m4b22c10g	Cost for diesel oil	Household having husbandary, hunting, trapping and domestication of bird and animals	0-22163	Numeric
17	m4b22c10h	Cost for LPG	Household having husbandary, hunting, trapping and domestication of bird and animals	0-4725	Numeric
18	m4b22c10i	Cost for natual gas	Household having husbandary, hunting, trapping and domestication of bird and animals	0-1210	Numeric
19	m4b22c10j	Cost for firewood	Household having husbandary, hunting, trapping and domestication of bird and animals	0-4764	Numeric
20	m4b22c10k	Other costs	Household having husbandary, hunting, trapping and domestication of bird and animals	-2-11816	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b22b variables 15

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b22ma	Cost code	All	1-11	Numeric
				1	Pig/swine
				2	Cattle, water buffalo
				3	Horse
				4	Goat, sheep
				5	Chicken
				6	Duck, Muscovy duck, goose
				7	Other poultry
				8	Honey bee
				9	Silkworm
				10	Other products of husbandry (specify)
				11	Products from hunting, trapping and domestication
7	m4b22c11	Cost for water	Household having husbandary, hunting, trapping and domestication of bird and animals	0-9449	Numeric
8	m4b22c12	Depreciation of fixed ass	Household having husbandary, hunting, trapping and domestication of bird and animals	0-38154	Numeric
9	m4b22c13	Land rental or procurem	Household having husbandary, hunting, trapping and domestication of bird and animals	0-1467182	Numeric
10	m4b22c14	Hiring of machines,vehic	Household having husbandary, hunting, trapping and domestication of bird and animals	-2-20598	Numeric
11	m4b22c15	Pay for outsourced labo	Household having husbandary, hunting, trapping and domestication of bird and animals	0-106180	Numeric
12	m4b22c16	Payment of interest for l	Household having husbandary, hunting, trapping and domestication of bird and animals	0-594001	Numeric
13	m4b22c17	Business tax	Household having husbandary, hunting, trapping and domestication of bird and animals	0-1453	Numeric
14	m4b22c18	Other costs	Household having husbandary, hunting, trapping and domestication of bird and animals	-2-23026	Numeric

15	m4b22c19	Total of c7-c18	Household having husbandary, hunting, trapping and domestication of bird and animals	5-6950799	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b31 variables 9

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b31ma	Code	All	1-5	Numeric
				1	Ploughing and soil preparation
				2	Irrigation
				3	Pest prevention and control
				4	Rice threshing, semi-processing
				5	Other services (artificial insemination, castration, etc)
7	m4b31c3	Number of months of having agriculture service activities	Household having agriculture service activities	0,5-12	Numeric
8	m4b31c4	Earned per month	Household having agriculture service activities	67-142660	Numeric
9	m4b31c5	Total revenues from agriculture service activities	Household having agriculture service activities	67-427981	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b32a variables 19

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b32ma	Code of agriculture services	All	1-5	Numeric
				1	Ploughing and soil preparation
				2	Irrigation
				3	Pest prevention and control
				4	Rice threshing, semi-processing
				5	Other services (artificial insemination, castration, etc)
7	m4b32c7	Cost of materials	Household having agriculture service activities	0-302258	Numeric
8	m4b32c8	Small tools, cheap non-durables	Household having agriculture service activities	0-24001	Numeric
9	m4b32c9a	Cost for electricity	Household having agriculture service activities	0-10016	Numeric
10	m4b32c9b	Cost for coal	Household having agriculture service activities	0	Numeric
11	m4b32c9c	Cost for coal briquette	Household having agriculture service activities	0-1645	Numeric
12	m4b32c9d	Cost for petrol	Household having agriculture service activities	0-39296	Numeric
13	m4b32c9e	Cost for kerosene	Household having agriculture service activities	0-90240	Numeric
14	m4b32c9f	Cost for mazut oil	Household having agriculture service activities	0-7707	Numeric
15	m4b32c9g	Cost for diesel oil	Household having agriculture service activities	0-83340	Numeric
16	m4b32c9h	Cost for LPG	Household having agriculture service activities	0-8568	Numeric
17	m4b32c9i	Cost for natual gas	Household having agriculture service activities	0	Numeric
18	m4b32c9j	Cost for firewood	Household having agriculture service activities	0-1800	Numeric
19	m4b32c9k	Other costs	Household having agriculture service activities	0-4320	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b32b variables 14

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b32ma	Code of agriculture services	All	1-5	Numeric
				1	Ploughing and soil preparation
				2	Irrigation
				3	Pest prevention and control
				4	Rice threshing, semi-processing
				5	Other services (artificial insemination, castration, etc)
7	m4b32c10	Small repair, maintena	Household having agriculture service activities	0-30529	Numeric
8	m4b32c11	Fixed asset depreciatic	Household having agriculture service activities	0-26250	Numeric
9	m4b32c12	Renting of workshop floor, machines, vehicles, assets, and means of transportation	Household having agriculture service activities	0-1800	Numeric
10	m4b32c13		Household having agriculture service activities	0-105000	Numeric
11	m4b32c14		Household having agriculture service activities	0-9360	Numeric
12	m4b32c15		Household having agriculture service activities	0-1000	Numeric
13	m4b32c16		Household having agriculture service activities	0-18000	Numeric
14	m4b32c17		Household having agriculture service activities	10-322355	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b41 variables 13

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b41ma	Activity code	All	1-14	Numeric
				1	Vernicia montana, camellia sasanqua tree
				2	Cinnamon tree
				3	Anise
				4	Pine tree
				5	Shellac tree
				6	Wood tree
				7	Bamboo
				8	Palm tree
				9	Water coconut tree
				10	Other forest trees
				11	Firewood
				12	Planting, looking after, improvement of forests?
				13	Breeds of forest trees and products collected from forests?
				14	Other forestry services (forest protection, forestry management,...)
7	m4b41c3a	Values of outputs/revenues from production forest land allowcated to household over the past 12 months	Household having activities relating to forest	0-60604	Numeric
8	m4b41c3b	Values of outputs/revenues from production forest land not yet allowcated to household over the past 12 months	Household having activities relating to forest	0-26664	Numeric
9	m4b41c3c	Values of outputs/revenues from protection forest land allowcated to household over the past 12 months	Household having activities relating to forest	0-16497	Numeric
10	m4b41c3d	Values of outputs/revenues from protection forest land not yet allowcated to household over the past 12 months	Household having activities relating to forest	0-62088	Numeric
11	m4b41c3e	Values of outputs/revenues from other forest land over the past 12 months	Household having activities relating to forest	0-67000	Numeric
12	m4b41c3f	Values of outputs/revenues from activities (sum of 3a-3e) over the past 12 months	Household having activities relating to forest	19-67000	Numeric

13	m4b41c4	Value for sales or exchange	Household having activities relating to forest	0-67000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b42a variables 20

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b42ma	Forest code	All	1-2	Numeric
				1	Forest activities
				2	Forest services
7	m4b42c1	Cost for seeds, seedings	Household having activities relating to forest	0-6631	Numeric
8	m4b42c2	Costs for fertilizers,	Household having activities relating to forest	0-8673	Numeric
9	m4b42c3	Costs for small instruments	Household having activities relating to forest	0-2133	Numeric
10	m4b42c4a	Cost for electricity	Household having activities relating to forest	0-683	Numeric
11	m4b42c4b	Cost for coal	Household having activities relating to forest	0-120	Numeric
12	m4b42c4c	Cost for coal briquette	Household having activities relating to forest	0-3200	Numeric
13	m4b42c4d	Cost for petrol	Household having activities relating to forest	0-12500	Numeric
14	m4b42c4e	Cost for kerosene	Household having activities relating to forest	0-68	Numeric
15	m4b42c4f	Cost for mazut oil	Household having activities relating to forest	0-332	Numeric
16	m4b42c4g	Cost for diesel oil	Household having activities relating to forest	0-265	Numeric
17	m4b42c4h	Cost for LPG	Household having activities relating to forest	0-1006	Numeric
18	m4b42c4i	Cost for natual gas	Household having activities relating to forest	0	Numeric
19	m4b42c4j	Cost for firewood	Household having activities relating to forest	0-1466	Numeric
20	m4b42c4k	Other costs	Household having activities relating to forest	0-1184	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b42b variables 16

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b42ma	Forest code	All	1-2	Numeric
				1	Forest activities
				2	Forest services
7	m4b42c5	Cost for small repair and maintenance	Household having activities relating to forest	0-2000	Numeric
8	m4b42c6	Fixed asset depreciation	Household having activities relating to forest	0-3001	Numeric
9	m4b42c7	Rent and use of procured land	Household having activities relating to forest	0-10000	Numeric
10	m4b42c8	Rent of asset and machines, rented means of transport	Household having activities relating to forest	0-8891	Numeric
11	m4b42c9	Rent of ploughing cattle	Household having activities relating to forest	0-3879	Numeric
12	m4b42c10	Cost of outsourced labours	Household having activities relating to forest	0-13798	Numeric
13	m4b42c11	Pament of loan interests	Household having activities relating to forest	0-4642	Numeric
14	m4b42c12	Business tax	Household having activities relating to forest	0-2809	Numeric
15	m4b42c13	Other costs	Household having activities relating to forest	0-20373	Numeric
16	m4b42c14	Total costs	Household having activities relating to forest	0-31768	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b51 variables 10

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b51ma	Aquaculture production code	All	3-23	Numeric
				1.1	Fish
				1.2	Shrimps
				1.3	Breeding fish, shrimps
				1.4	Other aquaculture
				2.1	Fish
				2.2	Shrimps
				2.3	Other aquaculture
				3	Aquacultural services
7	m4b51c3	Total catch	Household having aquaculture activities	1-357000	Numeric
8	m4b51c4a	Quantity for sales/exchange,	Household having aquaculture activities	0-357000	Numeric
9	m4b51c4b	Payment for labors	Household having aquaculture activities	0-3328000	Numeric
10	m4b51c5	Total values of production gained	Household having aquaculture activities	13-3328000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4b52 variables 30

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4b52ma	Aquaculture cost code	All	1-3	
				1	Aquaculture production
				2	Aquaculture catch
				3	Aquaculture services
7	m4b52c6	Cost for breeds of aquaculture	Household having aquaculture activities	0-150000	Numeric
8	m4b52c7	Cost for feed	Household having aquaculture activities	0-2771000	Numeric
9	m4b52c8	Cost for small instruments	Household having aquaculture activities	0-46636	Numeric
10	m4b52c9a	Cost for electricity	Household having aquaculture activities	0-18000	Numeric
11	m4b52c9b	Cost for coal	Household having aquaculture activities	0	Numeric
12	m4b52c9c	Cost for coal briquette	Household having aquaculture activities	0-700	Numeric
13	m4b52c9d	Cost for petrol	Household having aquaculture activities	0-9000	Numeric
14	m4b52c9e	Cost for kerosene	Household having aquaculture activities	0-106710	Numeric
15	m4b52c9f	Cost for mazut oil	Household having aquaculture activities	0-20969	Numeric
16	m4b52c9g	Cost for diesel oil	Household having aquaculture activities	0-1492682	Numeric
17	m4b52c9h	Cost for LPG	Household having aquaculture activities	0-41567	Numeric
18	m4b52c9i	Cost for natual gas	Household having aquaculture activities	0	Numeric
19	m4b52c9j	Cost for firewood	Household having aquaculture activities	0-360	Numeric
20	m4b52c9k	Other costs	Household having aquaculture activities	0-684532	Numeric
21	m4b52c10	Cost for salt, ice water	Household having aquaculture activities	0-92606	Numeric
22	m4b52c11	Cost for small repair, maintenance	Household having aquaculture activities	0-147198	Numeric
23	m4b52c12	Depreciation of fixed assets	Household having aquaculture activities	0-176730	Numeric
24	m4b52c13	Rent and use of procured land	Household having aquaculture activities	0-40000	Numeric
25	m4b52c14	Rent of assets and machines, rented means of transport	Household having aquaculture activities	0-179449	Numeric
26	m4b52c15	Cost of outsourced labors	Household having aquaculture activities	0-636226	Numeric
27	m4b52c16	Interest payment for loans for aquaculture related activities	Household having aquaculture activities	0-144000	Numeric
28	m4b52c17	Business tax	Household having aquaculture activities	0-5438	Numeric
29	m4b52c18	Other costs	Household having aquaculture activities	0-189518	Numeric
30	m4b52c19	Total	Household having aquaculture activities	2-3200100	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4c1 variables 23

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4c1ma	Activities relating to non-agriculture, forestry and aquaculture	All	1-4	Numeric
7	m4c1c2	Sectoral code	All	6-98	Numeric
8	m4c1c3	Number of months	Household having activities relating to non-agriculture, forestry and aquaculture	0.3,12	Numeric
9	m4c1c4	Posses entire activitiy	Household having activities relating to non-agriculture, forestry and aquaculture	1-2 1 2	Numeric Yes No
10	m4c1c5	Number of household related to activity	Household having activities relating to non-agriculture, forestry and aquaculture	2-7	Numeric
11	m4c1c6	Percentage of income received from this activity	Household having activities relating to non-agriculture, forestry and aquaculture	14-100	Numeric
12	m4c1c7	Registererd for business	Household having activities relating to non-agriculture, forestry and aquaculture	1-3 1 2 3	Numeric Yes, by type of enterprise Yes, by type of individual household enterprise No
13	m4c1c8	Product for sale/exchange or service supply	Household having activities relating to non-agriculture, forestry and aquaculture	1-2 1 2	Numeric Có Không
14	m4c1c9	Average revenue per month	Household having activities relating to non-agriculture, forestry and aquaculture	40-576737	Numeric
15	m4c1c10	Revenue over past 12 months	Household having activities relating to non-agriculture, forestry and aquaculture	40-6920845	Numeric
16	m4c1c11	Exchange products for other products/services	Household having activities relating to non-agriculture, forestry and aquaculture	1-2 1 2	Numeric Có Không
17	m4c1c12	Value of exchanged products	Household having activities relating to non-agriculture, forestry and aquaculture	24-9363	Numeric

18	m4c1c13	Products used/consumed by household	Household having activities relating to non-agriculture, forestry and aquaculture	1-2 1 2	Numeric Có Không
19	m4c1c14	Value of used/consumed products	Household having activities relating to non-agriculture, forestry and aquaculture	10-72323	Numeric
20	m4c1c15	Products used/sold by household	Household having activities relating to non-agriculture, forestry and aquaculture	1-2 1 2	Numeric Có Không
21	m4c1c16	Value of used/sold products	Household having activities relating to non-agriculture, forestry and aquaculture	4-63182	Numeric
22	m4c1c17	Total revenue	Household having activities relating to non-agriculture, forestry and aquaculture	0-6920845	Numeric
23	m4c1c18	Total revenue divided by household	Household having activities relating to non-agriculture, forestry and aquaculture	0-6920845	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4c2 variables 32

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4c2ma	Activities relating to non-agriculture, forestry and aquaculture	All	1-4	Numeric
7	m4c2c19	Cost for main and minor materials	Household having activities relating to non-agriculture, forestry and aquaculture	0-4151528	Numeric
8	m4c2c20	Cost for small, cheap, undurable tools	Household having activities relating to non-agriculture, forestry and aquaculture	0-68530	Numeric
9	m4c2c21a	Cost for electricity	Household having activities relating to non-agriculture, forestry and aquaculture	0-161688	Numeric
10	m4c2c21b	Cost for coal	Household having activities relating to non-agriculture, forestry and aquaculture	0-1565437	Numeric
11	m4c2c21c	Cost for coal briquette	Household having activities relating to non-agriculture, forestry and aquaculture	0-21873	Numeric
12	m4c2c21d	Cost for petrol	Household having activities relating to non-agriculture, forestry and aquaculture	0-135668	Numeric
13	m4c2c21e	Cost for kerosene	Household having activities relating to non-agriculture, forestry and aquaculture	0-71280	Numeric
14	m4c2c21f	Cost for mazut oil	Household having activities relating to non-agriculture, forestry and aquaculture	0-209140	Numeric
15	m4c2c21g	Cost for diesel oil	Household having activities relating to non-agriculture, forestry and aquaculture	0-762330	Numeric
16	m4c2c21h	Cost for LPG	Household having activities relating to non-agriculture, forestry and aquaculture	0-53732	Numeric

17	m4c2c21i	Cost for natual gas	Household having activities relating to non-agriculture, forestry and aquaculture	0-8641	Numeric
18	m4c2c21j	Cost for firewood	Household having activities relating to non-agriculture, forestry and aquaculture	0-59201	Numeric
19	m4c2c21k	Other costs	Household having activities relating to non-agriculture, forestry and aquaculture	0-27336	Numeric
20	m4c2c22	Cost for water	Household having activities relating to non-agriculture, forestry and aquaculture	0-24168	Numeric
21	m4c2stt	Activities relating to non-agriculture, forestry and aquaculture	Household having activities relating to non-agriculture, forestry and aquaculture	1-4	Numeric
22	m4c2c23	Cost for minor repair, maintenance	Household having activities relating to non-agriculture, forestry and aquaculture	0-113981	Numeric
23	m4c2c24	Depreciation of fixed assets	Household having activities relating to non-agriculture, forestry and aquaculture	0-237502	Numeric
24	m4c2c25	Rent of land, workshop, shops, machines, and other means of production	Household having activities relating to non-agriculture, forestry and aquaculture	0-226075	Numeric
25	m4c2c26	Cost for transport	Household having activities relating to non-agriculture, forestry and aquaculture	0-133216	Numeric
26	m4c2c27	Cost of labor	Household having activities relating to non-agriculture, forestry and aquaculture	0-2037011	Numeric
27	m4c2c28	Loan interests	Household having activities relating to non-agriculture, forestry and aquaculture	0-261152	Numeric
28	m4c2c29	Taxes, fees, charges	Household having activities relating to non-agriculture, forestry and aquaculture	0-582149	Numeric
29	m4c2c30	Cost of treament of sewage and solid waste	Household having activities relating to non-agriculture, forestry and aquaculture	0-5000	Numeric

30	m4c2c31	Other costs	Household having activities relating to non-agriculture, forestry and aquaculture	0-880765	Numeric
31	m4c2c32	Total costs	Household having activities relating to non-agriculture, forestry and aquaculture	0-5830543	Numeric
32	m4c2c33	Total costs divided by household	Household having activities relating to non-agriculture, forestry and aquaculture	0-5830543	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc4d variables 29

No	Variable nan	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m4dc2_01	Cash and kind sent as a gift or aid for domestic use by non-members of the household from overseas	All	0-661227	Numeric
7	m4dc2_02	- Cash and kind (value) for domestic use sent as a gift or aid by relatives residing and working overseas temporarily	All	0-661227	Numeric
8	m4dc2_03	- Gift of housing	All	0-66509	Numeric
9	m4dc2_04	- Gift of automobile(s) for domestic use	All	0	Numeric
10	m4dc2_05	- Other gifts of assets for domestic use	All	0-91240	Numeric
11	m4dc2_06	Cash and kind (value) for domestic use sent as a gift or aid by non-members of the household from within the country	All	0-1112385	Numeric
12	m4dc2_07	- Cash and kind (value) for domestic use sent as a gift or aid by relatives residing and working overseas temporarily	All	0-193345	Numeric
13	m4dc2_08	- Gift of housing	All	0-889908	Numeric
14	m4dc2_09	- Gift of automobile(s) for domestic use	All	0-472516	Numeric
15	m4dc2_10	- Other gifts of assets for domestic use	All	0-207293	Numeric
16	m4dc2_11	Wedding cash gifts after deducting expenses of guests' food and drinks	All	-20199-54384	Numeric
17	m4dc2_12	Funeral cash tributes after deducting expenses of guests' food and drinks	All	-12000-136907	Numeric
18	m4dc2_13	Social benefits for war invalids, families of fallen combatants, and individuals/families with revolutionary merits	All	0-79642	Numeric
19	m4dc2_14	Social benefits for beneficiary households of social policies	All	0,37618	Numeric
20	m4dc2_15	Assistance to overcome natural disasters and fire	All	0-16010	Numeric
21	m4dc2_16	From types of insurance (excluding social, health and life insurance)	All	0-37427	Numeric
22	m4dc2_17	Interests of savings deposits, stocks, shares, lending, contributed capital	All	0-842162	Numeric
23	m4dc2_18	Revenues from renting out workshop floors, machines, assets and facilities not included in sections of sectoral production and business (except housing, farming and forest land, and water surface for aquaculture production)	All	0-543781	Numeric

24	m4dc2_19	Revenues as donations from organizations, humanitarian aid, associations and units of production and business	All		0-47455	Numeric
25	m4dc2_20	Others	All		0-648921	Numeric
26	m4dc2_21	No information	All			
27	m4dc2_22	No information	All			
28	m4dc2_23	No information	All			
29	m4dc2_24	No information	All			

Explanatory documents for the VHLSS 2010

Name of the dataset muc5a1 variables 10

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m5a1ma	Expenditure code	All	101-154	Numeric
				101	Fragrant plain rice, specialty rice?
				102	Sticky rice?
				110	Pork (with fat removed)?
				111	Beef?
				112	Buffalo meat?
				113	Chicken meat?
				114	Duck and other poultry meat?
				115	Other types of meat? (goats, dogs, sheep, wild animals, birds,...)
				116	Processed meat? (boiled pork pies, fried pork pies, roasted pork, sausages,...)
				118	Fresh shrimp, fish?
				120	Other aqua-products and seafood? (crabs, snails,...)
				121	Eggs of chickens, ducks, Muscovy ducks, and geese?
				124	Beans of various kinds?
				134	Fruits?
				139	Sugar, molasses?
				140	Confectionery?
				144	Alcohol of various kinds?
				145	Beer of various kinds?
				146	Bottled, canned, boxed beverages?
				148	Coffee?
				150	Dried tea?
				151	Cigarettes, tobacco for water pipes?
				153	Outdoors meals and drinks?
				154	Other meals and drinks? (Other food and foodstuff, additives, seasonings, ...)
7	m5a1c2a	Quantity purchased/exchanged	All	-1-535	Numeric
8	m5a1c2b	Value purchased/exchanged	All	0-8000	Numeric
9	m5a1c3a	Quantity of self-subsidy, gift or donation	All	-1-425	Numeric
10	m5a1c3b	Value of self-subsidy, gift or donation	All	0-8000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc5a2 variables 14

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m5a2ma	Expenditure code	All	101-154	Numeric
				101	Plain rice? (including fragrant and specialty rice)
				102	Sticky rice?
				103	Maize? (in seed equivalent)
				104	Cassava? (in fresh-type equivalent)
				105	Potato of various kinds? (in fresh-type equivalent)
				106	Wheat grains, bread, wheat powder?
				107	Flour noodle, instant rice noodle/porridge?
				108	Fresh rice noodle, dried rice noodle?
				109	Vermicelli?
				110	Pork? (in equivalent of the pork type with removed fat)
				111	Beef?
				112	Buffalo meat?
				113	Chicken meat?
				114	Duck and other poultry meat?
				115	Other types of meat? (goats, dogs, sheep, wild animals, birds,...)
				116	Processed meat (boiled pork pies, fried pork pies, roasted pork, sausages,...)
				117	Lard, cooking oil?
				118	Fresh shrimp, fish?
				119	Dried and processed shrimps, fish?
				120	Other aquatic products and seafood? (crabs, snails,...)
				121	Eggs of chickens, ducks, Muscovy ducks, geese?
				122	Tofu?
				123	Peanuts, sesame?
				124	Beans of various kinds?
				125	Fresh peas of various kinds?
				126	Morning glory vegetables?
				127	Kohlrabi?
				128	Cabbage?
				129	Tomato?
				130	Other vegetables? (gourd, winter melon, cucumber, cabbage, squash...)
				131	Orange?
				132	Banana?
				133	Mango?
				134	Other fruits? (rambutan melon, papaya, guava, litchi, grapes,...)
				135	Fish sauce?
				136	Salt?
				137	MSG?
				138	Glutamate?
				139	Sugar, molasses?
				140	Confectionery?
				141	Condensed milk, milk powder?
				142	Ice cream, yoghurt?
				143	Fresh milk?
				144	Alcohol of various kinds?
				145	Beer of various kinds?

				146	Bottled, canned, boxed beverages? (pure water, carbonated drinks, juice, fruit smoothies, pep drinks,...)
				147	Instant coffee?
				148	Coffee powder?
				149	Instant tea powder?
				150	Other dried tea?
				151	Cigarettes, waterpipe tobacco?
				152	Betel leaves, areca nuts, lime, betel pieces?
				153	Outdoors meals and drinks? (breakfast, lunch, dinner)?
				154	Other food and drinks? (other processed food and foodstuff, additives, seasonings, ...)
7	m5a2c2a	Quantity consumed	All	0.1-1000	Numeric
8	m5a2c2b	Value consumed	All	0-22800	Numeric
9	m5a2c3a	Consumed quantity of purchase or exchange	All	0-1000	Numeric
10	m5a2c3b	Consumed value of purchase or exchange	All	0-22800	Numeric
11	m5a2c4a	Consumed quantity of self-subsidy	All	0-220	Numeric
12	m5a2c4b	Consumed value of self-subsidy	All	0-6800	Numeric
13	m5a2c5a	Consumed quantity of gift, donation, present	All	0-150	Numeric
14	m5a2c5b	Consumed value of gift, donation, present	All	0-4000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc5b1 variables 10

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m5b1ma	Expenditure code	All	201-228	Numeric
				201	Pocket money for children?
				202	Coal?
				203	Coal briquette?
				204	Petroleum?
				205	Kerosene?
				206	Mazut oil?
				207	Diesel oil?
				208	LPG?
				209	Natural gas?
				210	Firewood, husk, sawdust?
				211	Farm by-products? (straw,
				212	Other types of fuel?
				213	Deposit fees for vehicles?
				214	Matches, candles, fire stones,
				215	Soap/ detergent, softening
				216	Dish washing liquid, floor-
				217	Shampoo, conditioner?
				218	Bath soap, shower gel?
				219	Skin-nourishing cream,
				220	Tooth paste and brush?
				221	Toilet paper, razor?
				222	Books, newspapers,
				223	Books, newspapers for
				224	Fresh flowers?(excluding
				225	Lottery tickets?
				226	Regular worship activities?
				227	Hair cut, hair dressing
				228	Other daily expenditures?
7	m5b1c2	Value consumed	All	1-11500	Numeric
8	m5b1c3	Consumed quantity of purchase or exchange	All	0-11500	Numeric
9	m5b1c4	Consumed quantity of self-subsidy	All	0-2500	Numeric
10	m5b1c5	Consumed quantity of gift, donation, present	All	0-1170	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc5b2 variables 8

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m5b2ma	Expenditure code	All	301-336	Numeric
				301	Fabrics?
				302	Garment? (including underwear)
				303	Anti-mosquito nets and cotton gauze?
				304	Kerchiefs, turbans, scarfs of various kinds?
				305	Mats, blankets, bed sheets, pillows, curtains, table-cloth?
				306	Other garment accessories? (needle, thread, socks,...)
				307	Fees of tailoring, washing and ironing?
				308	Shoes, slippers, wooden underfoot?
				309	Plastics, conical hats, hats, umbrellas of various kinds?
				310	Electrical appliances: light bulbs, electrical cords, plugs, fuses,...?
				311	Ceramics and glassware: bowls, plates, teapots, cups,...?
				312	Pots, saucepans, frying-pans, barrels, buckets?
				313	Thermos, inner thermos?
				314	Bags?
				315	Torches, batteries for lighting, TVs, radio?
				316	Hammock, cradles, cots, prams?
				317	Other expenditures on household utensils?
				318	Inner tubes, tires, and spare parts of bicycles?
				319	Inner tubes, tires, and spare parts of scooters, automobiles?
				320	Maintenance and repair of household utensils?
				321	Travel expenditure? (including fees for boats, ferries, and others)
				322	Paintings, photos, ornamental plants?

				323	Sports facilities?
				324	Adult toys?
				325	Child toys?
				326	Envelops, postal stamps, postal fees?
				327	Fees of phone subscription, calls, and repairs
				328	Internet (costs of installation, subscription, access)
				329	Expenditures on plastic (cosmetic) surgeries, gym exercises?
				330	Entertainment (cinemas, music, video, sports)?
				331	Domestic holidays?
				332	Overseas holidays?
				333	Watches, eyewear, jewellery?
				334	Expenditures on other cultural activities?
				335	Hiring domestic helps?
				336	Other annual expenditures?
7	m5b2c2	Consumed value of purchase or exchange	All	0-150000	Numeric
8	m5b2c3	Consumed quantity of self-subsidy, gift, donation, present	All	0-50000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc5b3 variables 14

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m5b3c2_1	Fees and charges on administrative and legal services for daily-life requirements (certificates of marriage, birth, and death, notary services…)	All	0-120000	Numeric
7	m5b3c2_2	Fund contributions? (funds in aid of natural calamity victims, for charitable activities, poverty reduction, study encouragement,...)	All	0-7000	Numeric
8	m5b3c2_3	Cash contributions in lieu of public labor and other obligations?	All	0-4000	Numeric
9	m5b3c2_4	Taxes of various kinds (except production taxes), e.g. PIT, and taxes for transfer of use rights of houses and residential land?	All	0-38500	Numeric
10	m5b3c2_5	Engagement and wedding parties of the household (after deducting expenditures on guests' food and drinks)?	All	0-60000	Numeric
11	m5b3c2_6	Funerals and death anniversaries of the household (after deducting expenditures on guests' food and drinks)?	All	0-80000	Numeric
12	m5b3c2_7	Organization of parties and entertaining activities? (birthdays, opening ceremonies, guest reception,...)	All	0-30000	Numeric
13	m5b3c2_8	Gift, donation, assistance, tributes, contributions to death anniversaries… to other households? (in cash and kind)	All	0-153150	Numeric
14	m5b3c2_9	Other expenditures?(damages for other people, non-student body insurance, traffic insurance, housing and assets insurance,...)	All	0-74000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc6 variables 42

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m6ma_01	Automobile(s)	All	0-37	Numeric
7	m6ma_02	Motorbike(s)	All	0-37	Numeric
8	m6ma_03	Bicycle(s)	All	0-37	Numeric
9	m6ma_04	Ship(s), boat(s), junk(s), outer part with a motor	All	0-37	Numeric
10	m6ma_05	Ship(s), boat(s), junk(s), outer part without a motor	All	0-37	Numeric
11	m6ma_06	Other means of travel	All	0-37	Numeric
12	m6ma_07	Pumping machine(s)	All	0-37	Numeric
13	m6ma_08	Electricity generator(s)	All	0-37	Numeric
14	m6ma_09	Printer(s)	All	0-37	Numeric
15	m6ma_10	Fax machine(s)	All	0-37	Numeric
16	m6ma_11	Landline telephone(s)	All	0-37	Numeric
17	m6ma_12	Mobile telephone(s)	All	0-37	Numeric
18	m6ma_13	Sewing machine(s)	All	0-37	Numeric
19	m6ma_14	Video player(s), DVD player(s), digital player(s), satellite antenna	All	0-37	Numeric
20	m6ma_15	Color TV(s)	All	0-37	Numeric
21	m6ma_16	Black and white TV(s)	All	0-37	Numeric
22	m6ma_17	Music rack of various kinds	All	0-37	Numeric
23	m6ma_18	Radio/radio-cassette player(s)	All	0-37	Numeric
24	m6ma_19	Disk player(s)	All	0-37	Numeric
25	m6ma_20	Computer(s)	All	0-37	Numeric
26	m6ma_21	Camera(s), video recorder(s)	All	0-37	Numeric
27	m6ma_22	Refrigerator(s)	All	0-37	Numeric
28	m6ma_23	Air conditioner(s)	All	0-37	Numeric
29	m6ma_24	Washing machine(s), (clothes-) drying machine(s)	All	0-37	Numeric
30	m6ma_25	Electric fan(s)	All	0-37	Numeric
31	m6ma_26	(Bath) water heater(s)	All	0-36	Numeric
32	m6ma_27	Gas cooker(s), magnetic cooker(s)	All	0-35	Numeric
33	m6ma_28	Electric cooker(s), electric rice cooker(s), pressure cooker(s)	All		Numeric
34	m6ma_29	Trolleys of various kinds	All		Numeric
35	m6ma_30	Cupboard(s), cabinet(s), wardrobe(s) (of various kinds)	All		Numeric
36	m6ma_31	Bed(s)	All		Numeric
37	m6ma_32	Desk(s), chair(s), long bench(es), dressing table(s)	All		Numeric
38	m6ma_33	Vacuum cleaner(s), dehumidifier(s), water filter(s)	All		Numeric
39	m6ma_34	Microwave oven(s), baking oven(s)	All		Numeric
40	m6ma_35	Juice extractor(s), citrus juicer(s)	All		Numeric
41	m6ma_36	Piano(s), keyboard(s)	All		Numeric
42	m6ma_37	Others	All		Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc6b variables 11

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m6c2	Names of durables purchased or received or self-produced over the past 10 years	All	1-37	Numeric
7	m6c3	Quantity of durables purchased or received or self-produced over the past 10 years	All	-1-15	Numeric
8	m6c4t	Year purchase or receive or self-produce it	All	-1-12	Numeric
9	m6c4n	Month purchase or receive or self-produce it	All	-1-2010	Numeric
10	m6c5	Value at purchased reception, self-production	All	0-1080000	Numeric
11	m6c6	Remaining value in current time	All	-1-1200000	Numeric

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Name of the dataset muc7 variables 30

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m7c1	Number of houses	All	0,11	Numeric
7	m7c2	Total residential area?	All	-1,660	Numeric
8	m7c3	Main material as poles (or pillars, or carrying walls) of the house where household lives now	All	1-5	Numeric
				1	Reinforcement concrete
				2	Bricks/stones
				3	Iron/steel/good wood
				4	Poor-quality wood/bamboo
				5	Others
9	m7c4	Main material as roofing of the house where household lives now	All	1-5	Numeric
				1	Reinforcement concrete
				2	Tiles (cement, terracotta)
				3	Roof slabs (cement, metal)
				4	Leave/straw/rolled roofing
				5	Others
10	m7c5	Main material as walls or surroundings of the house where household lives now	All	1-6	Numeric
				1	Reinforcement concrete
				2	Bricks/stones
				3	Wood/metal
				4	Calcareous soil/straw
				5	Bamboo partitions/hardboards
				6	Others
11	m7c6	Household pay rents?	All	1-2	Numeric
				1	Yes
				2	No
12	m7c7	Value pay for rent	All	120-180000	Numeric
13	m7c8	Duration of the existing rental contract	All	-1-24000	Numeric
14	m7c9	Whole accommodation were now put on sale	All	-1-30000000	Numeric
15	m7c10	Any other residential land lots or houses	All	1-2	Numeric
				1	Yes
				2	No
16	m7c11	receive rents from those residential land lots or houses	All	1-2	Numeric
				1	Yes
				2	No
17	m7c12	Value household received from leasing residential land and houses	All	0-543781	Numeric

18	m7c13	Expenditures on house repair and maintenance over the past 12 months	All	0-87977	Numeric
19	m7c14	Main drinking water supply of household	All	1-10	Numeric
				1	tap water reaching the house
				2	public tap water
				3	drilled well
				4	protected dug well
				5	unprotected dug well
				6	protected stream water
				7	unprotected stream water
				8	Bought water (in bottles, jars, or small vehicles…)
				9	rain water
				10	Others
20	m7c15a	Treat drinking water	All	1-2	Numeric
				1	Yes
				2	No
21	m7c15b	Money has household spent on water for drinking and other daily activities	All	1-2	Numeric
				1	Yes
				2	No
22	m7c16	Spent on water for drinking and other daily activities	All	0-8400	Numeric
23	m7c17	Toilets household use	All	1-6,9	Numeric
				1	septic/semi-septic tank
				2	suilabh
				3	double septic tank
				4	fishing bridge
				5	Others
				6	None
				9	Missing
24	m7c18	Main lighting in household	All	1-4	Numeric
				1	National-grid electricity
				2	Battery or generator or small-scale-hyrdo electricity
				3	Gas, oil lamps of various kinds
				4	Others
25	m7c19	Spent on electricity for daily consumption (value)	All	-1-23000	Numeric
26	m7c19k	Spent on electricity for daily consumption (in Kwh)	All	-1-2538	Numeric
27	m7c20	Spent on electricity for daily activities over the past 12 months	All	0-280000	Numeric
28	m7c21	Treated daily-life waste over the past 12 months	All	1-6	Numeric
				1	Somebody else collects it
				2	Dumping into ponds, lakes, rivers, streams
				3	Dumping in a nearby site
				4	Landfill burial
				5	Burning
				6	Others

29	m7c22	money has your household on collection of daily-life waste	All	0-900	Numeric
30	m7c23	Total expenditures on housing, electricity, water, waste	All	0-280000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset muc8 variables 53

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m8c1a	Classified as 'poor' hous	All	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
7	m8c1b	Classified as 'poor' hous	All	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
8	m8c1c	Classified as 'poor' hous	All	1-2,9	Numeric
				1	Yes
				2	No
				9	Missing
9	m8c1d	Classified as 'poor' hous	All	1-2	Numeric
				1	Yes
				2	No
10	m8c1e	Classified as 'poor' hous	All	1-2	Numeric
				1	Yes
				2	No
		a. Support in purchasing health insurance cards in			
11	m8c21_01	2009	All	1-3	Numeric
				1	Yes
				2	No
				3	Don’t know
		b. Reduction of and exemption from costs of medical checks/treatment for			
12	m8c21_02	the poor in 2009	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		c. Reduction of and exemption from tuition fees for the poor in			
13	m8c21_03	2009	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		d. Policy-based			
14	m8c21_04	scholarships in 2009	All		Numeric
				1	Yes
				2	No
				3	Don’t know

15	m8c21_05	e. Vocational training for the poor and low-income earners in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
16	m8c21_06	f. Support in housing and residential land for poor households in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
17	m8c21_07	g. Support in cleaning/improving daily-life water supplies for poor households in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
18	m8c21_08	h. Providing productive land for poor ethnic minorities households in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
19	m8c21_09	i. Extension services in agriculture, forestry and fisheries in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
20	m8c21_10	j. Support in migrating abroad for employment in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
21	m8c21_11	k. Food aid in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
22	m8c21_12	l. Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know
23	m8c21_13	m. Preferential credit for the poor in 2009	All		Numeric
				1	Yes
				2	No
				3	Don't know

		n. Support in machinery, production inputs (fertiliser, breed animals, seedlings,...)			
24	m8c21_14	in 2009	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		o. Others (kerosene,...)			
25	m8c21_15	in 2009	All		Numeric
				1	Yes
				2	No
				3	Don’t know
				9	Missing
		a. Support in purchasing health insurance cards in			
26	m8c22_01	2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		b. Reduction of and exemption from costs of medical checks/treatment for			
27	m8c22_02	the poor in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		c. Reduction of and exemption from tuition fees for the poor in			
28	m8c22_03	2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		d. Policy-based			
29	m8c22_04	scholarships in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		e. Vocational training for the poor and low-income earners in			
30	m8c22_05	2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
		f. Support in housing and residential land for poor households in			
31	m8c22_06	2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know

32	m8c22_07	g. Support in cleaning/improving daily-life water supplies for poor households in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
33	m8c22_08	h. Providing productive land for poor ethnic minorities households in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
34	m8c22_09	i. Extension services in agriculture, forestry and fisheries in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
35	m8c22_10	j. Support in migrating abroad for employment in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
36	m8c22_11	k. Food aid in 2010	All		Numeric
37	m8c22_12	l. Subsidized petroleum/kerosene for fishing boat(s)/vessel(s) in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
38	m8c22_13	m. Preferential credit for the poor in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
39	m8c22_14	n. Support in machinery, production inputs (fertiliser, breed animals, seedlings,...) in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
40	m8c22_15	o. Others (kerosene,...) in 2010	All		Numeric
				1	Yes
				2	No
				3	Don’t know
41	m8c2a	Number of months of vocational training provided	All	1-10	Numeric

42	m8c2b	The total area that household has been provided	All	500,57000	Numeric
43	m8c3	In 2010, borrowed from or remained indebted to preferential credit schemes for the poor	All	1-2	Numeric
				1	Yes
				2	No
44	m8c9	Living conditions in your household improved, compared with 5 years ago (2006)	All	1-4,9	Numeric
				1	Yes, substantially
				2	Yes, slightly
				3	The same as before
				4	Worsened
				9	Don't know
45	m8c10a	The first importance reason why it is 'the same as before'/'worsened'	All	1-12	Numeric
				1	Increased production costs in agriculture, forestry and fisheries
				2	Low selling prices of agricultural, forestry and fisheries products
				3	Cattle and poultry suffer from epidemics or death
				4	Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production
				5	Household member(s) is sick or dies
				6	High prices of food, foodstuff, and other consumer goods
				7	Low incomes
				8	Job loss or underemployment
				9	Conflicts or other problems among family members/friends/neighbors
				10	Decreased arable land/water surface for aquaculture production
				11	Unfortunate events (house on fire, stealth, traffic accident)
				12	Other reasons
46	m8c10b	The second importance reason why it is 'the same as before'/'worsened'	All	1-12	Numeric

				1	Increased production costs in agriculture, forestry and fisheries
				2	Low selling prices of agricultural, forestry and fisheries products
				3	Cattle and poultry suffer from epidemics or death
				4	Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production
				5	Household member(s) is sick or dies
				6	High prices of food, foodstuff, and other consumer goods
				7	Low incomes
				8	Job loss or underemployment
				9	Conflicts or other problems among family members/friends/neighbors
				10	Decreased arable land/water surface for aquaculture production
				11	Unfortunate events (house on fire, stealth, traffic accident)
				12	Other reasons
47	m8c10c	The third importance reason why it is 'the same as before'/'worsened'	All	1-12	Numeric
				1	Increased production costs in agriculture, forestry and fisheries
				2	Low selling prices of agricultural, forestry and fisheries products
				3	Cattle and poultry suffer from epidemics or death
				4	Droughts, floods, pests, and harvest loss affect agricultural, forestry and fisheries production
				5	Household member(s) is sick or dies
				6	High prices of food, foodstuff, and other consumer goods
				7	Low incomes
				8	Job loss or underemployment

				9	Conflicts or other problems among family members/friends/neighbors
				10	Decreased arable land/water surface for aquaculture production
				11	Unfortunate events (house on fire, stealth, traffic accident)
				12	Other reasons
48	m8c11a	Consumption of food	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable
49	m8c11b	Consumption of foodstuff	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable
50	m8c12a	Consumption of electricity	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable
51	m8c12b	Consumption of water	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable
52	m8c12c	Consumption of housing	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable
53	m8c13	Consumption of clothing and footwear by household been sufficient to meet needs over the last 30 days	All	1-4	Numeric
				1	Insufficient
				2	Sufficient
				3	More than sufficient
				4	No comment/ no applicable

Explanatory documents for the VHLSS 2010

Name of the dataset muc8vayno variables 12

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	m8ma	Code	All	1-4	Numeric
7	m8c4	Preferential credit schem	All	1-4	Numeric
				1	Social Policy Bank
				2	Employment Support Fund
				3	Poverty Reduction Fund
				4	Socio-political organisations
8	m8c5	Value of this loan	All	220-200000	Numeric
9	m8c6a	Interest rates of the loan	All	0-18	Numeric
10	m8c6b	Time unit	All	1-4,9	Numeric
				1	Month
				2	Quarter
				3	6 months
				4	Year
				9	Missing
11	m8c7	Pay cost to get the loan	All	0-2000	Numeric
12	m8c8	The balance of the loan	All	0-180000	Numeric

Explanatory documents for the VHLSS 2010

Name of the dataset ttchung variables 118

No	Variable name	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	hoso	Household code	All	13-24	Numeric
6	quyen	Income/Income & Expenditure	All	1	Numeric
7	tsphieu	Questionnaire	All	1	Numeric
8	ttnt	Urban/Rural	All	1-2	Numeric
				1	Yes
				2	No
9	dantoc	Household head's ethnicity	All	1-56	Numeric
				1	Kinh
				2	Tay
				3	Thai
				4	Chinese
				5	Khmer
				6	Muong
				7	Nung
				8	Hmong (meo)
				9	Dao
				10	Ngai
				11	Jarai
				12	Ede
				13	Bana
				14	Sedang
				15	San Chay (Cao lan - san chi)
				16	Co ho
				17	Cham
				18	San diu
				19	Hre
				20	Mnong
				21	Raglai
				22	Stieng
				23	Bru - Van kieu
				24	Tho
				25	Giay
				26	Co tu
				27	Gie trieng
				28	Ma
				29	Kho mu
				30	Co
				31	Ta oi
				32	Choro
				33	Khang
				34	Singmun
				35	Hanhi
				36	Churu
				37	Lao
				38	La chi
				39	La ha
				40	Phu la
				41	Lahu
				42	Lu

				43	Lolo
				44	Chut
				45	Mang
				46	Pathen
				47	Co lao
				48	Cong
				49	Bo y
				50	Si la
				51	Pu peo
				52	Brau
				53	O Du
				54	Ro Mam
				55	Foreigner
				56	Unspecified
10	phdich	Interpretation	All	1-2	Numeric
				1	Yes
				2	No
11	dtv	Surveyor's ID code	All	1-90	Numeric
12	dt	Team leader' ID code	All	1-90	Numeric
13	ngaydt	Surveyed date	All	1-31	Numeric
14	thangdt	Surveyed month	All	1-12	Numeric
15	tsnguoi	Hosehold size	All	1-15	Numeric
16	m1b1	Having domestic help or migrant labourers?	All	1-2	Numeric
				1	Yes
				2	No
17	tsmuc1b	Number of domestic help or migrant labourers	All	1-5	Numeric
18	m2act	Sum of questions 11k and 14 in Section 2: Education	All	0-455500	Numeric
19	m2atn	Sum of questions 12 and 13 in Section 2: Education (Green questionnaire)	All	0-46184	Numeric
20	m2btn	Sum of questions 12 and 13 in Section 2: Education (Yellow questionnaire)	All	0	Numeric
21	m4atn1	Total of Q11-section 4A	All	0-842113	Numeric
22	m4atn2	Total of Q12 a,b-section 4A	All	0-176610	Numeric
23	m4atn3	Total of Q23-section 4A	All	0-163145	Numeric
24	m4atn4	Total of Q24a,b-section 4A	All	0-26901	Numeric
25	m4atn5	Total of Q26-section 4A	All	0-24523	Numeric
26	m4atn6	Total of Q28a,b,c,d,e-section 4A	All	0-176552	Numeric
27	m4atn	Total income from wages, including bonus, subsidy	All	0-935096	Numeric
28	m4b21a	Raised livestock in past 12 month?	All	1-2	Numeric
				1	Yes
				2	No
29	m4b21b	Due to dissater affecting to production	All	1-2	Numeric
				1	Yes
				2	No

30	m4b21t	4B21T. Sum of Q5, from rows 1 to 18 (revenue from livestocks)	All	0-13088807	Numeric
31	kydt	Surveyed period	All	1-3	Numeric
32	m4b0c1	Used or managed farm land, forestry land or aquaculture surface water over the last 12 months	All	1-2 1 2	Numeric Yes No
33	m4b0tn	4BOTN. Sum of Qestion 5	All	1-2	Numeric
34	m4b1a	Harvested any products from cultivation over the last 12 months?	All	1-2 1 2	Numeric Yes No
35	m4b1b	Any impacts of natural disasters, diseases, etc. which have caused loss in production	All	1-2 1 2	Numeric Yes No
36	m4b11t	4B11T. Sum of Question 8	All	0-393319	Numeric
37	m4b12t	4B12T. Sum of Question 7	All	0-798447	Numeric
38	m4b13t	4B13T. Sum of Question 7	All	0-3508317	Numeric
39	m4b14t	4B14T. Sum of Question 7	All	0-369377	Numeric
40	tongthu_01	Total of household revenue	All	1387-16728795	Numeric
41	tongthu_02	Income from subsidies,scholarship	All	0-46184	Numeric
42	tongthu_03	Income from health subsidies	All	0-142745	Numeric
43	tongthu_04	Income from wage	All	0-935096	Numeric
44	tongthu_05	revenue from crops	All	0-66500	Numeric
45	tongthu_06	Revenue from livestock	All	0-3508317	Numeric
46	tongthu_07	Revenue from Agricultural Services	All	0-13088807	Numeric
47	tongthu_08	Revenue from hunting, trapping	All	0-40650	Numeric
48	tongthu_09	Revenue from forestry	All	0-485583	Numeric
49	tongthu_10	Revenue from aquaculture	All	0-67000	Numeric
50	tongthu_11	Revenue from non-farm business	All	0-3328050	Numeric
51	tongthu_12	Other income	All	0-6920845	Numeric
52	tongthu_13	Other money received, not considered as income	All	-20149-1112385	Numeric
53	tongthu_14	Income from house and land renting out	All	0-543781	Numeric
54	m4b22t	4B22T. Sum of Q5, row 19 (revenue from	All	0-40650	Numeric
55	m4b21c	4B21C. Sum of Q19, from rows 1 to 10 (cost of husbandry)	All	0-6950799	Numeric

56	m4b22c	4B22C. Sum of Q19, row 11 (cost of hunting)	All	0-4440	Numeric
57	m4b31a	owned machines, equipment and tools for agricultural services over the last 12 months?	All	1-2	Numeric
				1	Yes
				2	No
58	m4b31b	natural disasters and epidemics… damaged production	All	1-2	Numeric
				1	Yes
				2	No
59	m4b3t	4B3T. Sum of Q5 (revenue from agricultural services)	All	0-485583	Numeric
60	m4b3c	4B3C. Sum of Q17 (cost of agricultural services)	All	0-322355	Numeric
61	m4b41a	earned revenues from planting/management/protection/attending of forests, breeding forest trees,	All	1-2	Numeric
				1	Yes
				2	No
62	m4b41b	natural disasters, epidemics, … damaged production?	All	1-2	Numeric
				1	Yes
				2	No
63	m4b4t	4B4T. Sum of Q3f (revenue from forestry)	All	0-67000	Numeric
64	m4b4c	4B4C. Sum of Q14 (cost of forestry)	All	0-31768	Numeric
65	chisxkd_1	Expenditure on business	All	0-8159789	Numeric
66	chisxkd_2	Expenditure on crops	All	0-1208990	Numeric
67	chisxkd_3	Expenditure on livestock	All	0-6950799	Numeric
68	chisxkd_4	Expenditure on agricultural services	All	0-4440	Numeric
69	chisxkd_5	Expenditure on hunting, trapping..	All	0-322355	Numeric
70	chisxkd_6	Expenditure on forestry	All	0-31768	Numeric
71	chisxkd_7	Expenditure on aquaculture	All	0-3200105	Numeric
72	chisxkd_8	Expenditure on non-farm business	All	0-5830543	Numeric
73	thunhap	Income	All	1387-8569006	Numeric
74	thubq	Income per capita	All	34-238028	Numeric
75	chikhac_1	Expenditure	All	0-455500	Numeric
76	chikhac_2	Expenditure	All	0-260000	Numeric
77	chikhac_3	Expenditure	All	0-28170	Numeric
78	chikhac_4	Expenditure	All	89-26343	Numeric
79	chikhac_5	Expenditure	All	0-13362	Numeric
80	chikhac_6	Expenditure	All	0-241600	Numeric
81	chikhac_7	Expenditure	All	0-155537	Numeric
82	chikhac_8	Expenditure	All	0-1092000	Numeric
83	chikhac_9	Expenditure	All	0-280000	Numeric
84	m4b5c1a	household kept, bred fish, shrimps or other aquatic products;	All	1-2	Numeric
				1	Yes

				2	No
85	m4b5c1b	natural disasters, epidemics, … damaged production?	All	1-2 1 2	Numeric Yes No
86	m4b5t	4B5T. Sum of Q5 (revenue from aquaculture)	All	0-3328050	Numeric
87	m4b5c	4b5c. Sum for Q19 (costs of aquaculture)	All	0-3200105	Numeric
88	m4c1	any activities of your own production and business, non-agricultural, forestry and aquaculture services; processing of agricultural, forestry and aquatic products over the past 12 months?	All	1-2 1 2	Numeric Yes No
89	m4ctt	4CTT. Total revenue from activities (sum of	All	0-6920845	Numeric
90	m4ct	4CT. Total revenue from activities divided by households (sum of Q18)	All	0-6920845	Numeric
91	m4cct	4CCT. Total cost of activities (sum of Q32)	All	0-5830543	Numeric
92	m4cc	4CC. Total revenue from activities divided by households (sum of Q33)	All	0-5830543	Numeric
93	m4dtn	4DTN. Sum of Q2 items (other revenues)	All	-20149,1112385	Numeric
94	m5a1ct	5A1CT. Sum (Q4-5)	All	0-28170	Numeric
95	m5a1c4	4. Sum of Q2B (Codes from 101-154)	All	0-28170	Numeric
96	m5a1c5	5. Sum of Q 3B (Codes from 101-154)	All	0-12812	Numeric
97	m5a2ct	5a2ct. Sum for question 2b (Codes from 101-154)	All	89-26343	Numeric
98	m5a2c6	6.Sum for Q3b (Codes from 101-154)	All	0-26343	Numeric
99	m5a2c7	7.Sum for Q4b (Codes from 101-154)	All	0-6800	Numeric
100	m5a2c8	8.Sum for Q5b (Codes from 101-154)	All	0-4000	Numeric
101	m5b1ct	5b1ct. Sum for Q2 (Codes from 201-228)	All	0-13362	Numeric
102	m5b1c6	6. Sum for Q3 (Codes 201-228)	All	0-13362	Numeric
103	m5b1c7	7.Sum for Q4 (Codes 201-228)	All	0-2600	Numeric
104	m5b1c8	8.Sum for Q5 (Codes 201-228)	All	0-1386	Numeric
105	m5b2ct	5b2ct. Sum (Q4-5)	All	0-241600	Numeric
106	m5b2c4	4.Sum for Q 2	All	0-161110	Numeric
107	m5b2c5	5. Sum for Q 3	All	0-120800	Numeric
108	m5b3ct	5b3ct . Sum for question 2	All	0-155537	Numeric
109	m6c7	7. Sum for question 5, Section 6	All	0-1092000	Numeric

110	m3c1	household visited medical establishments or had home visits by physicians for check-ups and treatment over the last 12 months? Section 3	All	1-2 1 2	Numeric Yes No
111	m3ct1	3ct1. Sum for Q5, Section 3	All	0-192500	Numeric
112	m3ct2	3ct2. Sum for Q6, Section 3	All	0-246000	Numeric
113	m3ct3	3ct3. Sum for Q11, Section 3	All	0-16160	Numeric
114	m3ct	3ct. Healthcare expenditures (3ct1 + 3ct2 + 3ct3 + Q13 + Q14)	All	0-260000	Numeric
115	m3tn	3tn. Sum for Q15	All	0-142745	Numeric
116	m4b15t	4B15T. Sum of Q5, Section 4	All	0-10502	Numeric
117	m4b1t	4B1T. Total revenues from crop production (4B11T+4B12T+4B13T+ 4B14T+4B15T)	All	0-3508317	Numeric
118	m4b1c	Total costs of crop production (Sum of Q2e)	All	0-1208990	Numeric

Explanatory documents for the VHLSS 2010

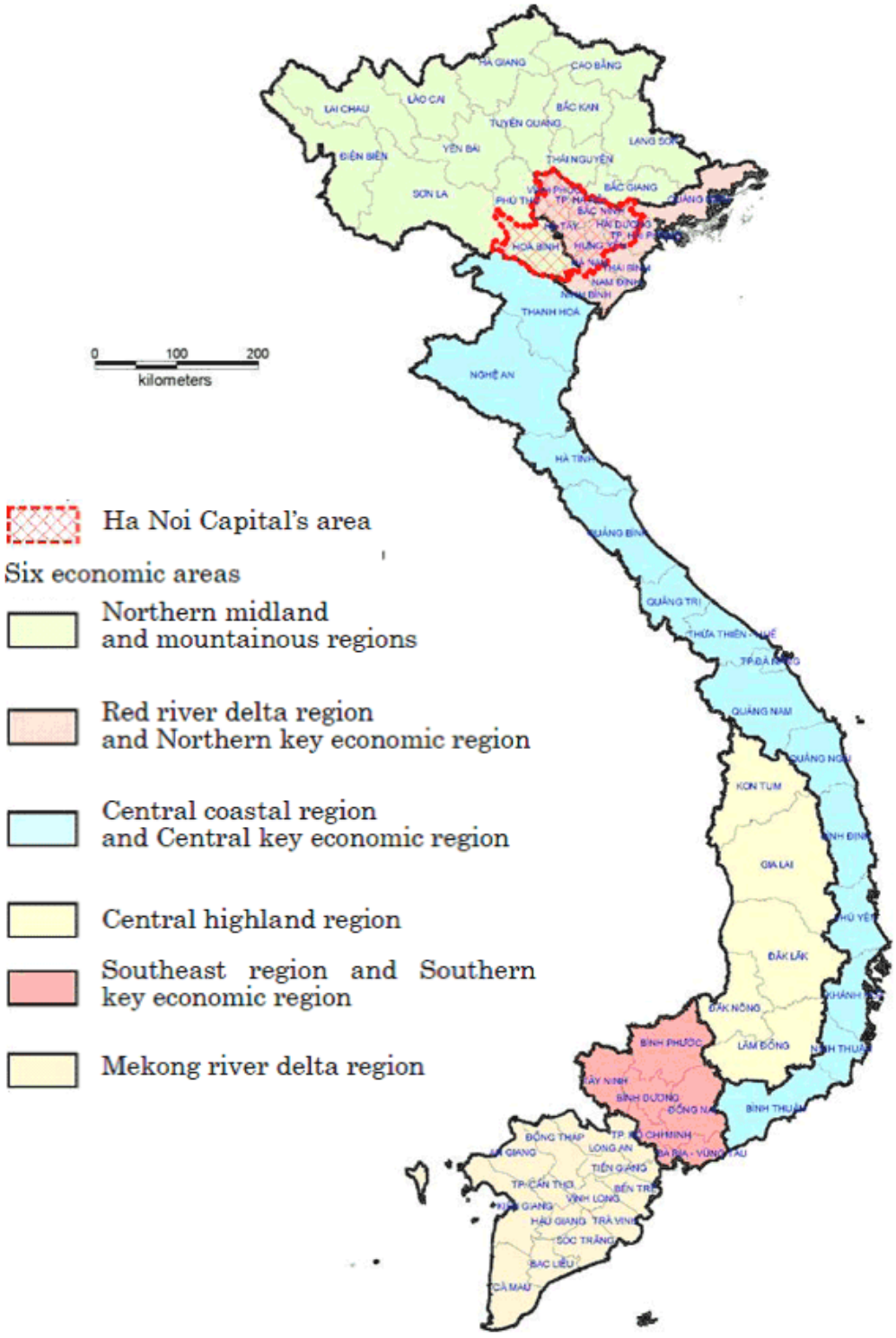
Name of the dataset weight variables 5

No	Variable na	Topics	Scope	Code	Description
1	tinh	Province	All	1-96	Numeric
2	huyen	District	All	1-973	Numeric
3	xa	Commune	All	4-32248	Numeric
4	diaban	Enumerator area	All	1-91	Numeric
5	wt9	weight	All	369-7936	Numeric

Attachment 3

Province Map

1. Six regions



2. Eight regions