

(Version 1.1)

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

VHLSS 2006

2015
The Institute of Statistical Mathematics (ISM)
and
Statistical Information Institute for Consulting and Analysis (SINFONICA)

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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) 2006.

80% resampled micro data sets in CSV format				
[1]	"muc1a_80.csv"	"muc1b_80.csv"	"muc2a_80.csv"	"muc2b_80.csv"
[5]	"muc2c_80.csv"	"muc2d_80.csv"	"muc2e_80.csv"	"muc3a1_80.csv"
[9]	"muc3a2_80.csv"	"muc3b_80.csv"	"muc3c_80.csv"	"muc3d_80.csv"
[13]	"muc3e_80.csv"	"muc3f_80.csv"	"muc3g_80.csv"	"muc3h_80.csv"
[17]	"muc3i_80.csv"	"muc4a_80.csv"	"muc4b0_80.csv"	"muc4b11_80.csv"
[21]	"muc4b12_80.csv"	"muc4b13_80.csv"	"muc4b14_80.csv"	"muc4b15_80.csv"
[25]	"muc4b16_80.csv"	"muc4b161_80.csv"	"muc4b21_80.csv"	"muc4b22_80.csv"
[29]	"muc4b31_80.csv"	"muc4b32_80.csv"	"muc4b41_80.csv"	"muc4b42_80.csv"
[33]	"muc4b51_80.csv"	"muc4b52_80.csv"	"muc4c_80.csv"	"muc4c2_80.csv"
[37]	"muc4d_80.csv"	"muc5a1_80.csv"	"muc5a2_80.csv"	"muc5b1_80.csv"
[41]	"muc5b2_80.csv"	"muc5b3_4_80.csv"	"muc6_80.csv"	"muc6a_80.csv"
[45]	"muc6b_80.csv"	"muc7_80.csv"	"muc8_80.csv"	"muc8_vayvon_80.csv"
[49]	"ttchung_80.csv"			
80% resampled micro data sets in R format				
[1]	"muc1a.80"	"muc1b.80"	"muc2a.80"	"muc2b.80"
[6]	"muc2d.80"	"muc2e.80"	"muc3a1.80"	"muc3a2.80"
[11]	"muc3c.80"	"muc3d.80"	"muc3e.80"	"muc3f.80"
[16]	"muc3h.80"	"muc3i.80"	"muc4a.80"	"muc4b0.80"
[21]	"muc4b12.80"	"muc4b13.80"	"muc4b14.80"	"muc4b15.80"
[26]	"muc4b161.80"	"muc4b21.80"	"muc4b22.80"	"muc4b31.80"
[31]	"muc4b41.80"	"muc4b42.80"	"muc4b51.80"	"muc4b52.80"
[36]	"muc4c2.80"	"muc4d.80"	"muc5a1.80"	"muc5a2.80"
[41]	"muc5b2.80"	"muc5b3_4.80"	"muc6.80"	"muc6a.80"
[46]	"muc7.80"	"muc8.80"	"muc8_vayvon.80"	"ttchung.80"

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 of income and expenditure survey 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 September 2014 by;
Hiroshige Furuta
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 2006

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

Objectives of the survey	To collect information to be used as basis for assessment of living standard, including poverty and the gap between the rich and the poor, in order to continuously improve the living standard of population across the country, in all regions and localities.
Topics covered by the survey	The income and expenditure survey covered the following topics; ● Demographic characteristics of household's members ● Household income ● Household expenditure ● Education ● Health ● Employment ● Assets, housing and facilities ● Participation in hunger elimination and poverty reduction
Frequency of the survey	Every two years
Survey period	● The survey was conducted in May and September 2006. ● 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: 3,063 communes were selected. SSU: 3 EA were selected within PSU. Only one of EA was used for each year of VHLSS survey. FSU: household ● Sample size In total 45,945 households 36,756 households for income survey (short) 9,189 households for income and expenditure survey (long)

	● The income and expenditure survey was designed to assess living standards at national and regional level.
Data collection method	● Direct interview: 2.5 days per household regarding income and expenditure survey form ● (Long) Questionnaire 1B; Questions on income and expenditure
Data entry and data check	● GSO provided Provincial Statistics Offices (PSO) the 2-time (twice) data entering program, inspecting program, quick compilation program and official compilation program. ● After the preliminary results have been assessed by the Socio-Environmental Statistics Department, PSOs proceed to officially compilation, as well as send the entered raw data to Hanoi Statistical Informatics Center. ● The Statistical Information Centre of Hanoi chairs the cooperation with Socio- Environmental Statistics Department to compile the nationwide data.
Publication	Preliminary results in June 2007 and the official results “Result of the Survey on Household Living Standards 2006” in December 2007

3. Data and metadata provided

[VHLSS 2006]

◆ Outline of the survey;

Survey plan.pdf	Description of objectives, contents, methodology, direction and implementation of VHLSS2006 (See attachment)

◆ Data in STATA and SAS format

File names in STATA format;			
[1] "muc1a.dta"	"muc1b.dta"	"muc2a.dta"	"muc2b.dta"
[5] "muc2c.dta"	"muc2d.dta"	"muc2e.dta"	"muc3a1.dta"
[9] "muc3a2.dta"	"muc3b.dta"	"muc3c.dta"	"muc3d.dta"
[13] "muc3e.dta"	"muc3f.dta"	"muc3g.dta"	"muc3h.dta"
[17] "muc3i.dta"	"muc4a.dta"	"muc4b0.dta"	"muc4b11.dta"
[21] "muc4b12.dta"	"muc4b13.dta"	"muc4b14.dta"	"muc4b15.dta"
[25] "muc4b16.dta"	"muc4b161.dta"	"muc4b21.dta"	"muc4b22.dta"
[29] "muc4b31.dta"	"muc4b32.dta"	"muc4b41.dta"	"muc4b42.dta"
[33] "muc4b51.dta"	"muc4b52.dta"	"muc4c.dta"	"muc4c2.dta"
[37] "muc4d.dta"	"muc5a1.dta"	"muc5a2.dta"	"muc5b1.dta"
[41] "muc5b2.dta"	"muc5b3_4.dta"	"muc6.dta"	"muc6a.dta"
[45] "muc6b.dta"	"muc7.dta"	"muc8.dta"	"muc8_vayvon.dta"
[49] "ttchung.dta"			

◆ Questionnaire

Household Questionnaire for Income & Expenditure Survey in English	
File name	VHLSS06_questionnaire.pdf (85 pages) Section 1: Household members Section 2: Education Section 3: Health Section 4: Income Section 5: Expenditure Section 6: Fixed assets and durables Section 7: Accommodation Section 8: Poverty alleviation programme

Remarks: Some pages of the questionnaire were not in English, such as Section 3C (Health), Section 3D (Fertility) and Section 4C2 (Business cost).

◆ Organization of data files

The relationship between the data files and the questionnaire was written in the “Summary sheet.xlsx”. This list was revised and is available in 4.2.

Summary sheet.xlsx	Description of list of data files including the next items; Year, STATA filenames, Section in the questionnaire, Main contents, Number of variables	
	Sheet ‘2006’	Number of data files is 49. Number of sections is 8.

Example of Sheet ‘2006’

	A	B	C	D	E	F
1	List of data files					
2	Year	No.	STATA filenames	Section	Main contents	Number of variables
3	2006	1	muc1a.dta	Section 1: List of household members	List of household members	17
4	2006	2	muc1b.dta	Section 1: List of household members	List of household members	16
5	2006	3	muc2a.dta	Section 2: Education, training and vocational training	General information	34
6	2006	4	muc2b.dta	Section 2: Education, training and vocational training	Detail information on general and tertiary education	21

◆ Codebook

Codebook_2006.xls	Describes variable name, topics, scope, length, code and description in each sheet of dataset							
Example	1	Explanatory documents for the VHLSS 2006						
	2							
	3	Name of the dataset	MUC1A				variables	17
	4							
	5	No	Variable name in	Topics	Scope	Length	Code	Description
	6	1	TINH	Province	All	3	101-823	Character
	7	2	HUYEN	District	All	2	01-53	Character
	8	3	XA	Commune	All	2	01-95	Character
	9	4	DIABAN	Enumerator area	All	3	001-105	Character
	10	5	HOSO	Household code	All	8	13-25	Numeric
	11	6	MATV	ID code	All	8	1-17	Numeric
	12	7	M1AC2	Sex of HH member	All	8		
	13						1	Yes
	14						2	No
	15	8	M1AC3	Relationship with HH member	All	8		
	16						1	Head
	17						2	Spouse
	18						3	Children
	19						4	Parents
	20						5	Grandfather/Grandmother
	21						6	Grandchild
	22						7	Other relation
	23						9	Missing

◆ Province code

Province code.xls	Includes the next list; List of provinces in VHLSS 2006 (64 provinces)
Note: 1) Province codes are also listed on the questionnaire.	

2) Number of provinces are the same as VHLSS 2004.

Remarks:

The following lists of classification are also available in the questionnaire.

- List of ethnicity code
- List of industry code (, which is written as “branch code” in the questionnaire.)
- List of occupation code

◆ Survey results

Survey report of VHLSS 2006	Includes the results of 2002, 2004 and 2006 VHLSS
File name	Introduction.pdf and Part 01.pdf to Part 11.pdf
Content of the report	Result of the Vietnam household living standards survey 2006  ④ Living standard of the population reflected through the household living standard survey 2006 ④ Section 1. Demography ④ Section 2. Education ④ Section 3. Labour - Employment ④ Section 4. Health and Health care ④ Section 5. Income ④ Section 6. Consumption expenditure and consumption expenditure for living ④ Section 7. Fixed assets and durable goods ④ Section 8. Housing, electricity, access to safe drinking water, sanitary and internet ④ Section 9. Involvement in poverty alleviation programmes ④ Section 10. Household businesses ④ Section 11. Characteristics of communes
Note	The survey report is also available at NSO's website. http://www.gso.gov.vn/default_en.aspx?tabid=515&ItemID=8183

4. Data import

4.1 Import STATA data files into R

```
> list.files()
[1] "muc1a.dta"      "muc1b.dta"      "muc2a.dta"      "muc2b.dta"
[5] "muc2c.dta"      "muc2d.dta"      "muc2e.dta"      "muc3a1.dta"
[9] "muc3a2.dta"     "muc3b.dta"      "muc3c.dta"      "muc3d.dta"
[13] "muc3e.dta"     "muc3f.dta"      "muc3g.dta"      "muc3h.dta"
[17] "muc3i.dta"     "muc4a.dta"      "muc4b0.dta"     "muc4b11.dta"
[21] "muc4b12.dta"   "muc4b13.dta"   "muc4b14.dta"   "muc4b15.dta"
[25] "muc4b16.dta"   "muc4b161.dta"  "muc4b21.dta"   "muc4b22.dta"
[29] "muc4b31.dta"   "muc4b32.dta"   "muc4b41.dta"   "muc4b42.dta"
[33] "muc4b51.dta"   "muc4b52.dta"   "muc4c.dta"     "muc4c2.dta"
[37] "muc4d.dta"     "muc5a1.dta"     "muc5a2.dta"     "muc5b1.dta"
[41] "muc5b2.dta"     "muc5b3_4.dta"  "muc6.dta"       "muc6a.dta"
[45] "muc6b.dta"     "muc7.dta"       "muc8.dta"       "muc8_vayvon.dta"
[49] "ttchung.dta"
> file.names<-list.files()
```

```
# Imported STATA files into R
```

```
> lss2006<-list()
> for(j in 1:49){
+ lss2006<-c(lss2006,list(read.dta(file.names[j],convert.factors=F)))
+ }
```

```
# 49 R data frames were stored in the list "lss2006".
```

```
# Made list of data file name, number of records and variables
```

```
> for(j in 1:49){
+ cat(file.names[j],": ",dim(lss2006[[j]]),"¥n")
+ }
```

```
muc1a.dta : 39071 17
```

```
muc1b.dta : 18792 16
```

```
:
```

```
ttchung.dta : 9189 141
```

4.2 Summary of data files

The data files of VHLSS 2006 are summarized as the next.

No.	STATA filenames	Section	Main contents	No. of variables	No. of records	Unit of records
1	muc1a.dta	Section 1: List of household members	List of household members	17	39,071	Individual
2	muc1b.dta	Section 1: List of household members	List of household members surveyed in VHLSS 2004	16	18,792	Individual surveyed in VHLSS 2004
3	muc2a.dta	Section 2: Education, training and vocational training	General information	34	39,071	Individual
4	muc2b.dta	Section 2: Education, training and vocational training	Detail information on general and tertiary education	21	39,071	Individual
5	muc2c.dta	Section 2: Education, training and vocational training	Extra classes	31	39,071	Individual
6	muc2d.dta	Section 2: Education, training and vocational training	Repeated the school year	19	39,071	Individual
7	muc2e.dta	Section 2: Education, training and vocational training	Vocational training	16	39,071	Individual
8	muc3a1.dta	Section 3: Health and health insurance	Health and health care	12	39,071	Individual
9	muc3a2.dta	Section 3: Health and health	Health and health care	18	18,524	Individual

		insurance				
10	muc3b.dta	Section 3: Health and health insurance	Disability	93	39,071	Individual
11	muc3c.dta	Section 3: Health and health insurance	Health	17	39,071	Individual
12	muc3d.dta	Section 3: Health and health insurance	Fertility	15	6,647	Individual
13	muc3e.dta	Section 3: Health and health insurance	Behavouriours that have impacts on health	11	33,826	Individual
14	muc3f.dta	Section 3: Health and health insurance	Health insurance	28	39,071	Individual
15	muc3g.dta	Section 3: Health and health insurance	Out-patient diagnosis treatment	28	11,058	Individual (out-patient)
16	muc3h.dta	Section 3: Health and health insurance	In-patient diagnosis treatment	31	9,214	Individual (in-patient)
17	muc3i.dta	Section 3: Health and health insurance	Self-treatment	16	21,622	Individual
18	muc4a.dta	Section 4: Income	Employment	52	39,071	Individual
19	muc4b0.dta	Section 4: Income	Land for agriculture, forestry and water surface for aquaculture	16	24,080	Household, Land piece
20	muc4b11.dta	Section 4: Income	Rice	19	14,961	Household, Type of rice
21	muc4b12.dta	Section 4: Income	Other starchy, vegetable	12	15,499	Household,

						Kind of crops
22	muc4b13.dta	Section 4: Income	Annual and perennial industrial crops	13	3,932	Household, Kind of product
23	muc4b14.dta	Section 4: Income	Fruit crops	13	9,791	Household, Kind of fruit
24	muc4b15.dta	Section 4: Income	Income from crops by products	10	8,379	Household, Kind of by-product
25	muc4b16.dta	Section 4: Income	Crop planting expenditure	11	52,513	Household, Kind of expense
26	muc4b161.dta	Section 4: Income	Table of quantity of chemical fertilizers used for types of trees	11	16,592	Household, Type of chemical fertilizer
27	muc4b21.dta	Section 4: Income	Income from livestock breeding	14	16,577	Household, Kind of product
28	muc4b22.dta	Section 4: Income	Livestock breeding expenditure	18	10,222	Household, Kind of livestock breeding
29	muc4b31.dta	Section 4: Income	Income from agricultural services	9	279	Household, Kind of activities
30	muc4b32.dta	Section 4: Income	Expenses on agricultural services	17	277	Household, Kind of activities
31	muc4b41.dta	Section 4: Income	Income from forestry and hunting, trapping and domesticating forest animals and birds	13	3,932	Household, Kind of tree
32	muc4b42.dta	Section 4: Income	Expenditure from forestry and hunting, trapping and domesticating forest animals and birds	20	2,283	Household, Kind of activities

33	muc4b51.dta	Section 4: Income	Income from aquaculture	14	3,653	Household, Kind of product
34	muc4b52.dta	Section 4: Income	Expenditure from aquaculture	19	2,706	Household, Kind of activities
35	muc4c.dta	Section 4: Income	Non-agriculture, non-forestry, non-aquaculture business and production trades	33	4,379	Household, Order of trade activity
36	muc4c2.dta	Section 4: Income	Expenditure on non-agriculture, non-forestry, non-aquaculture business and production trades	9	29,333	Household, Order of trade activity, Expenditure item
37	muc4d.dta	Section 4: Income	Other income	22	9,189	Household
38	muc5a1.dta	Section 5: Expenditure	Expenditure on foods and drinks during holidays	10	131,726	Household, Expenditure item
39	muc5a2.dta	Section 5: Expenditure	Daily expenditure on food and drinks	15	288,564	Household, Expenditure item
40	muc5b1.dta	Section 5: Expenditure	Daily non-foods expenditure and other expenditures	10	114,114	Household, Expenditure item
41	muc5b2.dta	Section 5: Expenditure	Annual consumption expenditure	8	114,952	Household, Expenditure item
42	muc5b3_4.dta	Section 5: Expenditure	Other spending that is considered and not considered as household expenditure	23	9,189	Household
43	muc6.dta	Section 6: Fixed assets and durable appliances	Fixed assets and durable appliances	67	9,189	Household
44	muc6a.dta	Section 6: Fixed assets and	Fixed assets	12	15,897	Household,

		durable appliances				Asset code
45	muc6b.dta	Section 6: Fixed assets and durable appliances	Durable appliances	11	85,890	Household, Asset code
46	muc7.dta	Section 7: Accommodation	Accommodation	51	9,189	Household
47	muc8.dta	Section 8: Participation in the poverty alleviation and hunger eradication programme	Participation in the poverty alleviation and hunger eradication programme	37	9,189	Household
48	muc8_vayvon.dta	Section 8: Participation in the poverty alleviation and hunger eradication programme	Participation in the poverty alleviation and hunger eradication programme	20	4,987	Household
49	ttchung.dta	Summary	Summary	141	9,189	Household

4.3 Import weight data

The weight data was not included in the original data and metadata provided to Sinfonica in 2012. The file “weight_by_xa06.dta” was provided upon request by Ms. Van in July 2014.

It is weight data by xa (commune). The number of record is 3,063, the same as the number of unique xa codes in data files. The variables are tinh (province), huyen (district), xa and wt9.

```
> library(foreign)
> weight_by_xa06<-read.dta("weight_by_xa06.dta")
> dim(weight_by_xa06)
[1] 3063      4
> head(weight_by_xa06)
  tinh huyen xa      wt9
1  101     1  3 3107.318
2  101     1  9 3092.521
3  101     1 15 3085.123
4  101     1 17 3099.920
5  101     1 21 3085.123
6  101     1 23 3099.920
```

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

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

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

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

```
xaid = xa + (10^2)*huyen + (10^4)*tinh
```

```
ID = hoso + (10^2)*diaban + (10^5)*xa + (10^7)*huyen + (10^9)*tinh
    = hoso + (10^2)*diaban + (10^5)*xaid
```

```
PID = matv +(10^2) hoso + (10^4)*diaban + (10^7)*xa + (10^9)*huyen + (10^11)*tinh
    = matv +(10^2) *ID
```

Note: The above identifier were generated as character.

✓ Defined the variable of commune identifier “xaid” in weight_by_xa06;

```
> wt<-weight_by_xa06
```

```
> wt["xaid"]<-as.character(as.integer(wt$xa)+(10^2)*as.integer(wt$huyen)+
+ (10^4)*as.integer(wt$tinh))
```

```
> head(wt)
```

	tinh	huyen	xa	wt9	xaid
1	101	1	3	3107.318	1010103
2	101	1	9	3092.521	1010109
3	101	1	15	3085.123	1010115
4	101	1	17	3099.920	1010117
5	101	1	21	3085.123	1010121
6	101	1	23	3099.920	1010123

```
> wt<-wt[,c(5,4)]
```

```
> colnames(wt)<-c("xaid", "wt")
```

```
> head(wt)
```

	xaid	wt
1	1010103	3107.318
2	1010109	3092.521
3	1010115	3085.123
4	1010117	3099.920
5	1010121	3085.123
6	1010123	3099.920

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

```
> lss2006.old<-lss2006
> for(j in 1:49){
+ d<-lss2006[[j]]
+ d["xaid"]<-as.character(as.integer(d$xa)+(10^2)*as.integer(d$huyen)+(10^4)*as.integer(d$stinh))
+ d["ID"]<-as.character(d$hoso+(10^2)*as.integer(d$diaban)+(10^5)*as.integer(d$xaid))
+ d<-merge(d,wt,by="xaid")
+ n<-ncol(d)
+ d<-d[,c(2:n,1)]
+ lss2006[[j]]<-d
+ }
```

- ✓ 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(1,3:14,17,18)
```

```
> for(j in ind.files){
+ d<-lss2006[[j]]
+ d["PID"]<-paste(d$ID,formatC(d$matv,width=2,flag="0"),sep="")
+ lss2006[[j]]<-d
+ }
```

Example of results

```
> head(lss2006[[1]])
```

	tinh	huyen	xa	diaban	hoso	matv	m1ac2	m1ac3	m1ac4a	m1ac4b	m1ac5	m1ac6	m1ac7
1	101	01	03	014	15	1	2	1	7	1957	48	3	12
2	101	01	03	014	15	2	1	3	11	1977	28	1	12
3	101	01	03	014	15	3	1	3	3	1980	26	1	12
4	101	01	03	014	15	4	1	3	3	1986	20	1	12
5	101	01	03	014	19	1	2	1	1	1952	54	3	12

	6	101	01	03	014	19	2	1	3	1	1980	26	2	12
	m1ac8	m1ac9	m1ac10a	m1ac10b		ID	wt	xaid		PID				
1	1	NA	NA	NA	101010301415	3107.318	1010103	10101030141501						
2	1	NA	NA	NA	101010301415	3107.318	1010103	10101030141502						
3	1	NA	NA	NA	101010301415	3107.318	1010103	10101030141503						
4	1	NA	NA	NA	101010301415	3107.318	1010103	10101030141504						
5	1	NA	NA	NA	101010301419	3107.318	1010103	10101030141901						
6	1	NA	NA	NA	101010301419	3107.318	1010103	10101030141902						

Number of records and variables in data files

```
> Rnames<-sub("%.dta","", file.names)
> for(j in 1:49) {
+ cat(format(Rnames[j],width=11),": ",format(nrow(lss2006[[j]]),width=6),",",
+ format(ncol(lss2006[[j]]),width=3),"n")
+ }
```

```
muc1a      : 39071 , 21
muc1b      : 18792 , 19
muc2a      : 39071 , 38
muc2b      : 39071 , 25
muc2c      : 39071 , 35
muc2d      : 39071 , 23
muc2e      : 39071 , 20
muc3a1     : 39071 , 16
muc3a2     : 18524 , 22
muc3b      : 39071 , 97
muc3c      : 39071 , 21
muc3d      : 6647 , 19
muc3e      : 33826 , 15
muc3f      : 39071 , 32
muc3g      : 11058 , 31
muc3h      : 9214 , 34
muc3i      : 21622 , 20
muc4a      : 39071 , 56
```

muc4b0	:	24080	,	19
muc4b11	:	14961	,	22
muc4b12	:	15499	,	15
muc4b13	:	3932	,	16
muc4b14	:	9791	,	16
muc4b15	:	8379	,	13
muc4b16	:	52513	,	14
muc4b161	:	16592	,	14
muc4b21	:	16577	,	17
muc4b22	:	10222	,	21
muc4b31	:	279	,	12
muc4b32	:	277	,	20
muc4b41	:	3932	,	16
muc4b42	:	2283	,	23
muc4b51	:	3653	,	17
muc4b52	:	2706	,	22
muc4c	:	4379	,	36
muc4c2	:	29333	,	12
muc4d	:	9189	,	25
muc5a1	:	131726	,	13
muc5a2	:	288564	,	18
muc5b1	:	114114	,	13
muc5b2	:	114952	,	11
muc5b3_4	:	9189	,	26
muc6	:	9189	,	70
muc6a	:	15897	,	15
muc6b	:	85890	,	14
muc7	:	9189	,	54
muc8	:	9189	,	40
muc8_vayvon	:	4987	,	23
ttchung	:	9189	,	144

4.5 Basic statistics

Item	Value	R scripts	Survey report
Un-weighted number of household	9,189	<pre>> d<-ttchung > nrow(d) [1] 9189</pre>	
Weighted number of household	19,629,872	<pre>> sum(d\$wt) [1] 19629872</pre>	
Un-weighted number of household members	39,071	<pre>> sum(d\$tsnguoi) [1] 39071</pre>	
Weighted number of household members	82,480,853	<pre>> sum(d\$tsnguoi*d\$wt) [1] 82480853</pre>	
Household size	4.20	<pre>> sum(d\$tsnguoi*d\$wt)/sum(d\$wt) [1] 4.201803</pre>	4.24 (Table 1.1)*
Monthly total expenditure per capita	511.1	<pre>> sum(d\$chitieu*d\$wt)/sum(d\$tsnguoi*d\$wt)/12 [1] 511.141</pre>	511,4 (Table 6.1)
Monthly income per capita	706.1	<pre>> sum(d\$thunhap*d\$wt)/sum(d\$tsnguoi*d\$wt)/12 [1] 706.089</pre>	636,5 (Table 5.1)*

Remarks:

For Table 6.1, 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.

According to Brian McCaig, University of Toronto, “Comparison of income between the ‘short’ and ‘long’ samples of the 2004 VHLSS”, April 2008, the analysis suggests “*First, there are statistically significant differences in mean net income between the long and short samples of the 2004 VHLSS. Mean net income is more than 10 percent higher for the long samples as compared to the short sample. ... Second, there is evidence that the main reason for the difference in mean net income is the share of households reporting income from various sources.*”

4.6 Sample allocation

- ✓ The number of province in data set is 64.

```
> length(unique(ttchung$stinh))
```

```
[1] 64
```

Number of sample household by province

```
> table(ttchung$stinh)
```

```
101 103 104 105 106 107 109 111 113 115 117 201 203 205 207 209 211 213 215 217 221 225
240 186 144 216 138 192 150 138 204 204 132 96 96 90 84 108 111 114 144 156 174 144
301 302 303 305 401 403 405 407 409 411 501 503 505 507 509 511 601 603 605 606 607 701
102 99 114 114 258 234 162 126 102 132 114 162 150 168 120 138 72 132 147 99 132 300
705 707 709 711 713 715 717 801 803 805 807 809 811 813 815 816 817 819 821 823
90 114 132 114 186 132 120 156 168 192 174 138 156 156 102 99 132 138 114 138
```

- ✓ The first digit of province code represents region code. The number of sample household by region is as follows;

```
> t<-table(substr(ttchung$stinh, 1, 1))
```

```
> region.name<-c("Red River Delta", "North East", "North West", "North Central",
+ "South Central Coast", "Central Highlands", "South East", "Mekong River Delta")
```

```
> names(t)<-region.name
```

```
> t
```

Red River Delta	North East	North West	North Central
1944	1317	429	1014
South Central Coast	Central Highlands	South East	Mekong River Delta
852	582	1188	1863

Number of sample by region and urban/rural

```
> t<-addmargins(table(substr(ttchung$stinh, 1, 1), ttchung$ttnt))
```

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

```
> colnames(t)<-c("Urban", "Rural", "Total")
```

```
> t
```

Urban	Rural	Total

Red River Delta	423	1521	1944
North East	291	1026	1317
North West	66	363	429
North Central	162	852	1014
South Central Coast	267	585	852
Central Highlands	165	417	582
South East	543	645	1188
Mekong River Delta	390	1473	1863
Viet Nam	2307	6882	9189

- ✓ According to the survey report, the survey was conducted in two rounds in May and September 2006. However, the survey month in data file is spread from May to November.

```
> table(ttchung$thangdt)
 5    6    7    8    9   10   11
166 3988  286   80 2876 1665  128
```

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

```
> t<-table(substr(ttchung$stin, 1, 1), ttchung$thangdt, ttchung$ttnt)
> dimnames(t)<-list(region.name, c(5:11), c("Urban", "Rural"))
> t
```

, , Urban

	5	6	7	8	9	10	11
Red River Delta	9	206	4	5	147	52	0
North East	12	130	5	0	104	37	3
North West	0	33	3	0	8	22	0
North Central	0	63	4	17	45	33	0
South Central Coast	0	110	25	0	95	35	2
Central Highlands	0	81	0	1	63	20	0
South East	0	229	46	2	186	72	8
Mekong River Delta	1	180	17	0	113	73	6

, , Rural

	5	6	7	8	9	10	11
Red River Delta	89	631	33	0	433	330	5
North East	44	464	7	4	344	152	11

North West	2	173	5	0	66	115	2
North Central	1	343	28	51	233	190	6
South Central Coast	0	262	29	0	249	45	0
Central Highlands	1	203	3	0	184	26	0
South East	1	265	17	0	229	78	55
Mekong River Delta	6	615	60	0	377	385	30

- ✓ The half of EAs of VHLSS 2006 is the same as VHLSS 2004, and the sample household which had been surveyed with income-expenditure in 2004 were surveyed with income-expenditure for VHLSS 2006.

```
> t<-table(ttchung$m1c1)
> names(t)<-c("Surveyed in 2004","No")
> t
```

Surveyed in 2004	No
4298	4891

Sample rotation by region and urban/rural

```
> t<-table(substr(ttchung$tinh, 1, 1), ttchung$m1c1, ttchung$ttnt)
> dimnames(t)<-list(region.name, c("Surveyed in 2004", "New sample"), c("Urban", "Rural"))
> t
```

, , Urban

	Surveyed in 2004	New sample
Red River Delta	177	246
North East	129	162
North West	32	34
North Central	88	74
South Central Coast	124	143
Central Highlands	77	88
South East	219	324
Mekong River Delta	185	205

, , Rural

	Surveyed in 2004	New sample
Red River Delta	710	811

North East	510	516
North West	168	195
North Central	410	442
South Central Coast	281	304
Central Highlands	187	230
South East	305	340
Mekong River Delta	696	777

4.7 Sample design

- ✓ Strata are province and urban/rural. For each stratum, xa (commune/ward) was selected as follows.

Generated a subset of ttchung with unique xaid.

```
> d<-ttchung
```

```
> dfxa<-d[!duplicated(d$xaid), c(1:5, 7, 143:144)]
```

```
> head(dfxa)
```

	tin	huyen	xa	diaban	hoso	ttnt	wt	xaid
1	101	01	03	014	15	1	3107.318	1010103
4	101	01	09	019	13	1	3092.521	1010109
7	101	01	15	027	13	1	3085.123	1010115
10	101	01	17	002	13	1	3099.920	1010117
13	101	01	21	024	13	1	3085.123	1010121
16	101	01	23	018	13	1	3099.920	1010123

```
> dim(dfxa)
```

```
[1] 3063 8
```

Number of selected xa in each stratum

```
> t<-table(dfxa$ttnt, dfxa$tin)
```

```
> rownames(t)<-c("Urban", "Rural")
```

```
> t
```

	101	103	104	105	106	107	109	111	113	115	117	201	203	205	207	209	211	213	215	217	221	225
Urban	56	25	9	6	5	10	5	4	11	4	6	4	6	8	4	8	5	10	12	9	7	24

Rural 24 37 39 66 41 54 45 42 57 64 38 28 26 22 24 28 32 28 36 43 51 24

301 302 303 305 401 403 405 407 409 411 501 503 505 507 509 511 601 603 605 606 607 701
 Urban 4 5 6 7 9 10 7 6 8 14 32 9 6 15 8 19 8 12 12 5 18 86
 Rural 30 28 32 31 77 68 47 36 26 30 6 45 44 41 32 27 16 32 37 28 26 14

705 707 709 711 713 715 717 801 803 805 807 809 811 813 815 816 817 819 821 823
 Urban 9 6 8 12 20 22 18 10 10 19 8 8 5 13 16 6 7 8 10 10
 Rural 21 32 36 26 42 22 22 42 46 45 50 38 47 39 18 27 37 38 28 36

- ✓ In each xa, one EA was selected for VHLSS 2006. In each EA, 15 sample households were selected for VHLSS 2006, of which 12 were for short and 3 were for long, i.e. income and expenditure survey.

```
> d<-ttchung[c(1:5, 21, 22, 142:144)]
```

```
> head(d)
```

	tin	huyen	xa	diaban	hoso	tsnguo	m1c1	ID	wt	xaid
1	101	01	03	014	15	4	1	101010301415	3107.318	1010103
2	101	01	03	014	19	4	1	101010301419	3107.318	1010103
3	101	01	03	014	24	4	2	101010301424	3107.318	1010103
4	101	01	09	019	13	2	2	101010901913	3092.521	1010109
5	101	01	09	019	15	3	2	101010901915	3092.521	1010109
6	101	01	09	019	19	3	2	101010901919	3092.521	1010109

- ✓ The household code “hoso” is from 13 to 20 for those surveyed in 2004, and from 13 to 25 for new sample households.

```
> t<-addmargins(table(d$m1c1, d$hoso))
```

```
> rownames(t)<-c("Surveyed in 2004", "New sample", "Total")
```

```
> t
```

	13	14	15	19	20	21	22	23	24	25	Sum
Surveyed in 2004	1385	1356	1342	138	77	0	0	0	0	0	4298
New sample	1365	1391	1374	433	283	9	7	1	22	6	4891
Total	2750	2747	2716	571	360	9	7	1	22	6	9189

- ✓ In each commune/ward, 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.

It was not necessary to consider the adjustment of weight for non-response.

hhs: Number of sample households within commune, that is, EA.

```
> hhs<-tapply(d$ID,d$xa, length)
```

```
> dim(hhs)
```

```
[1] 3063
```

```
# Frequency of hhs
```

```
> table(hhs)
```

```
hhs
```

```
3
```

```
3063
```

- ✓ The number of unique value of weight is 2,079.

```
> length(unique(d$wt))
```

```
[1] 2079
```

- ✓ The weight is unique within the commune/ward.

```
> wts<-tapply(d$wt,d$xa, function(x) length(unique(x)))
```

```
> table(wts)
```

```
wts
```

```
1
```

```
3063
```

- ✓ In rotation system of VHLSS, a half of xa in VHLSS 2004 are re-selected in VHLSS 2006, and in principle all sample households in VHLSS 2004 are to be re-surveyed. However, some households might move out of the EA.

The data set shows that three households were surveyed in 1,222 xa of VHLSS 2006, two households in 290 xa and one household in 52 xa.

```

> nhs<-tapply(d$m1c1==1,d$xa, sum)
> xa.p<-data.frame(xa=x,nhs=as.vector(nhs))
> fix(xa.p)
> dim(xa.p)
[1] 3063    2
> table(xa.p$nhs)
  0    1    2    3
1499  52 290 1222

```

5. Data Check

5.1 Summary of each variable

SUMMARY OF EACH DATA FRAME

```
> Rnames<-sub(".",dta","",file.names)
> for(j in 1:49){
+ cat("#### ",Rnames[j]," #####\n")
+ print(summary(lss2006[[j]]))
+ cat("\n\n")
+ }
```

```
#### muc1a #####
      tinh      huyen      xa      diaban
Length:39071 Length:39071 Length:39071 Length:39071
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

```
      hoso      matv      m1ac2      m1ac3
Min. :13.00 Min. : 1.00 Min. :1.00 Min. :1.000
1st Qu.:13.00 1st Qu.: 2.00 1st Qu.:1.00 1st Qu.:2.000
Median :14.00 Median : 3.00 Median :2.00 Median :3.000
Mean :14.57 Mean : 2.96 Mean :1.51 Mean :2.646
3rd Qu.:15.00 3rd Qu.: 4.00 3rd Qu.:2.00 3rd Qu.:3.000
Max. :25.00 Max. :17.00 Max. :2.00 Max. :9.000
```

```
      m1ac4a      m1ac4b      m1ac5      m1ac6
Min. : -2.000 Min. :1898 Min. : 0.00 Min. :1.000
1st Qu.: 3.000 1st Qu.:1960 1st Qu.:15.00 1st Qu.:1.000
Median : 6.000 Median :1978 Median :27.00 Median :2.000
Mean : 6.128 Mean :1975 Mean :30.98 Mean :1.747
3rd Qu.: 9.000 3rd Qu.:1991 3rd Qu.:45.00 3rd Qu.:2.000
Max. :12.000 Max. :2006 Max. :108.00 Max. :5.000
NA's :7734
```

```
      m1ac7      m1ac8      m1ac9      m1ac10a
Min. : 0.00 Min. :1.000 Min. :101.0 Min. : 0.0
1st Qu.:12.00 1st Qu.:1.000 1st Qu.:138.5 1st Qu.: 2.0
Median :12.00 Median :1.000 Median :507.0 Median : 6.0
Mean :11.62 Mean :1.023 Mean :479.9 Mean : 9.6
3rd Qu.:12.00 3rd Qu.:1.000 3rd Qu.:713.0 3rd Qu.:12.0
Max. :12.00 Max. :4.000 Max. :823.0 Max. :84.0
NA's :38881 NA's :38872
```

```
      m1ac10b      ID      wt      xaid
Min. : 0.00 Length:39071 Min. : 467.2 Length:39071
1st Qu.: 0.00 Class :character 1st Qu.:1629.8 Class :character
Median : 3.00 Mode :character Median :2006.0 Mode :character
Mean : 3.22 Mean :2111.1
3rd Qu.: 6.00 3rd Qu.:2470.8
```

```
Max.      :11.00                      Max.      :4637.7
NA's      :38872
PID
Length:39071
Class :character
Mode :character
```

```
#### muc1b #####
      tinh          huyen          xa          diaban
Length:18792      Length:18792      Length:18792      Length:18792
Class :character   Class :character   Class :character   Class :character
Mode :character    Mode :character    Mode :character    Mode :character
```

hoso		m1bc2	m1bc3		m1bc4	
Min.	:13.00	Length:18792	Min.	: 1.000	Min.	:1.000
1st Qu.	:13.00	Class :character	1st Qu.	: 2.000	1st Qu.	:1.000
Median	:14.00	Mode :character	Median	: 3.000	Median	:2.000
Mean	:14.26		Mean	: 3.029	Mean	:1.504
3rd Qu.	:15.00		3rd Qu.	: 4.000	3rd Qu.	:2.000
Max.	:20.00		Max.	:31.000	Max.	:2.000

m1bc5		m1bc6		m1bc7		m1bc8	
Min.	: 0.00	Min.	:1.000	Min.	: 1.000	Min.	:1.000
1st Qu.	: 14.00	1st Qu.	:1.000	1st Qu.	: 1.000	1st Qu.	:1.000
Median	: 26.00	Median	:1.000	Median	: 3.000	Median	:1.000
Mean	: 29.88	Mean	:1.091	Mean	: 2.838	Mean	:1.223
3rd Qu.	: 44.00	3rd Qu.	:1.000	3rd Qu.	: 4.000	3rd Qu.	:1.000
Max.	:100.00	Max.	:2.000	Max.	:16.000	Max.	:3.000
				NA's	:1716	NA's	:17076

m1bc9		m1bc10		m1bc11		ghep	
Min.	:1.000	Min.	:101.0	Min.	:0.00	Min.	:0.0000
1st Qu.	:1.000	1st Qu.	:509.0	1st Qu.	:72.00	1st Qu.	:1.0000
Median	:2.000	Median	:701.0	Median	:74.00	Median	:1.0000
Mean	:2.481	Mean	:596.3	Mean	:73.61	Mean	:0.9789
3rd Qu.	:3.000	3rd Qu.	:711.0	3rd Qu.	:92.00	3rd Qu.	:1.0000
Max.	:6.000	Max.	:999.0	Max.	:99.00	Max.	:9.0000
NA's	:17357	NA's	:18402	NA's	:18402	NA's	:1045

ID	wt	xaid
Length:18792	Min. : 467.2	Length:18792
Class :character	1st Qu.:1620.5	Class :character
Mode :character	Median :1998.7	Mode :character
	Mean :2099.0	
	3rd Qu.:2460.5	
	Max. :4632.5	

```
#### muc2a #####
```


tin	huyen	xa	diaban
Length:39071	Length:39071	Length:39071	Length:39071
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	matv	m2ac1	m2ac2
Min. :13.00	Min. : 1.00	Min. : 0.000	Min. :1.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.: 3.000	1st Qu.:1.000
Median :14.00	Median : 3.00	Median : 7.000	Median :1.000
Mean :14.57	Mean : 2.96	Mean : 6.384	Mean :1.451
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.: 9.000	3rd Qu.:2.000
Max. :25.00	Max. :17.00	Max. :12.000	Max. :2.000
			NA's :26091
m2ac3a	m2ac3b	m2ac4	m2ac5
Min. :-1.000	Min. :0.000	Min. :1.000	Min. :1.000
1st Qu.: 1.000	1st Qu.:0.000	1st Qu.:1.000	1st Qu.:2.000
Median : 2.000	Median :0.000	Median :1.000	Median :3.000
Mean : 2.031	Mean :0.509	Mean :1.053	Mean :2.559
3rd Qu.: 2.000	3rd Qu.:0.000	3rd Qu.:1.000	3rd Qu.:3.000
Max. :11.000	Max. :6.000	Max. :9.000	Max. :3.000
NA's :12980	NA's :12980	NA's :12980	
m2ac6	m2ac7	m2ac8	m2ac9
Min. :1.000	Min. :1.00	Min. :-1.000	Min. :1.000
1st Qu.:2.000	1st Qu.:5.00	1st Qu.: 1.000	1st Qu.:1.000
Median :2.000	Median :5.00	Median : 2.000	Median :1.000
Mean :1.978	Mean :4.82	Mean : 2.379	Mean :1.141
3rd Qu.:2.000	3rd Qu.:5.00	3rd Qu.: 3.000	3rd Qu.:1.000
Max. :2.000	Max. :9.00	Max. :11.000	Max. :9.000
NA's :10817	NA's :36606	NA's :27644	NA's :27644
m2ac10	m2ac11a	m2ac11b	m2ac12a
Min. :1.000	Min. :0.00	Min. :0.00	Min. : 0.00
1st Qu.:1.000	1st Qu.:4.00	1st Qu.:0.00	1st Qu.:100.00
Median :2.000	Median :7.00	Median :0.00	Median :100.00
Mean :1.584	Mean :5.41	Mean :1.29	Mean : 93.33
3rd Qu.:2.000	3rd Qu.:7.00	3rd Qu.:2.00	3rd Qu.:100.00
Max. :2.000	Max. :9.00	Max. :9.00	Max. :100.00
NA's :27644	NA's :34317	NA's :34317	NA's :34671
m2ac12b	m2ac13a	m2ac13b	m2ac13c
Min. : 0.00	Min. : -2.0	Min. : -2.000	Min. : -2.00
1st Qu.: 50.00	1st Qu.: 0.0	1st Qu.: 0.000	1st Qu.: 10.00
Median :100.00	Median : 54.0	Median : 0.000	Median : 40.00
Mean : 76.81	Mean : 307.1	Mean : 1.594	Mean : 70.24
3rd Qu.:100.00	3rd Qu.: 180.0	3rd Qu.: 0.000	3rd Qu.: 90.00
Max. :100.00	Max. :30000.0	Max. :2000.000	Max. :4500.00
NA's :37355	NA's :27644	NA's :27644	NA's :27644
m2ac13d	m2ac13e	m2ac13f	m2ac13g
Min. : -2.00	Min. : -2.00	Min. : -2.0	Min. : -2.00
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 30.00
Median : 20.00	Median : 30.00	Median : 80.0	Median : 60.00
Mean : 33.23	Mean : 65.21	Mean :100.4	Mean : 83.31
3rd Qu.: 40.00	3rd Qu.: 100.00	3rd Qu.:140.0	3rd Qu.: 100.00
Max. :1500.00	Max. :1400.00	Max. :2500.0	Max. :6500.00
NA's :27644	NA's :27644	NA's :27644	NA's :27644

m2ac13h	m2ac13i	m2ac13k	m2ac14
Min. : -2.0	Min. : -2.0	Min. : 0	Min. : 0.00
1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 270	1st Qu.: 0.00
Median : 0.0	Median : 2.0	Median : 520	Median : 0.00
Mean : 148.9	Mean : 185.3	Mean : 1075	Mean : 32.03
3rd Qu.: 120.0	3rd Qu.: 50.0	3rd Qu.: 1112	3rd Qu.: 0.00
Max. : 18000.0	Max. : 24000.0	Max. : 30000	Max. : 19200.00
NA's : 27644	NA's : 27644	NA's : 27644	NA's : 27644

m2ac15	m2ac16	ID	wt
Min. : 0.00	Min. : 0.00	Length:39071	Min. : 467.2
1st Qu.: 0.00	1st Qu.: 0.00	Class :character	1st Qu.:1629.8
Median : 0.00	Median : 0.00	Mode :character	Median :2006.0
Mean : 26.44	Mean : 14.21		Mean :2111.1
3rd Qu.: 0.00	3rd Qu.: 0.00		3rd Qu.:2470.8
Max. :4700.00	Max. :12000.00		Max. :4637.7
NA's :27644			

xaid	PID
Length:39071	Length:39071
Class :character	Class :character
Mode :character	Mode :character

```
#### muc2b #####
      tinh      huyen      xa      diaban
Length:39071   Length:39071   Length:39071   Length:39071
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hoso	matv	m2bc1	m2bc2
Min. :13.00	Min. : 1.00	Min. :0.000	Min. :1.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:1.000	1st Qu.:1.000
Median :14.00	Median : 3.00	Median :2.000	Median :1.000
Mean :14.57	Mean : 2.96	Mean :1.447	Mean :1.127
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.000	3rd Qu.:1.000
Max. :25.00	Max. :17.00	Max. :2.000	Max. :2.000
			NA's :28711

m2bc3a	m2bc3b	m2bc4	m2bc5
Length:39071	Min. :10.0	Min. :1.000	Min. :1.000
Class :character	1st Qu.:10.0	1st Qu.:2.000	1st Qu.:2.000
Mode :character	Median :20.0	Median :3.000	Median :2.000
	Mean :36.7	Mean :2.423	Mean :2.498
	3rd Qu.:40.0	3rd Qu.:3.000	3rd Qu.:3.000
	Max. :99.0	Max. :5.000	Max. :5.000
	NA's :30031	NA's :30031	NA's :30031

m2bc6a	m2bc6b	m2bc6c	m2bc7
Min. :1.00	Min. :0.0	Min. :0.00	Min. : -1
1st Qu.:2.00	1st Qu.:0.0	1st Qu.:0.00	1st Qu.:1971
Median :4.00	Median :2.0	Median :0.00	Median :1983
Mean :4.23	Mean :2.3	Mean :1.74	Mean :1972

3rd Qu. :7.00	3rd Qu. :4.0	3rd Qu. :4.00	3rd Qu. :1996
Max. :7.00	Max. :7.0	Max. :7.00	Max. :2005
NA's :30031	NA's :33132	NA's :35270	NA's :14655
m2bc8	m2bc9	m2bc10a	m2bc10b
Min. :1.000	Min. :1.000	Min. :5014	Min. : 0.0
1st Qu. :1.000	1st Qu. :2.000	1st Qu. :5052	1st Qu. : 0.0
Median :1.000	Median :2.000	Median :5231	Median : 0.0
Mean :1.109	Mean :1.941	Mean :5183	Mean : 107.3
3rd Qu. :1.000	3rd Qu. :2.000	3rd Qu. :5248	3rd Qu. : 0.0
Max. :5.000	Max. :2.000	Max. :6272	Max. :6090.0
NA's :14655	NA's :5615	NA's :37097	NA's :37097
m2bc10c	ID	wt	xaid
Min. : 0.0	Length:39071	Min. : 467.2	Length:39071
1st Qu. : 0.0	Class :character	1st Qu. :1629.8	Class :character
Median : 0.0	Mode :character	Median :2006.0	Mode :character
Mean : 159.8		Mean :2111.1	
3rd Qu. : 0.0		3rd Qu. :2470.8	
Max. :6231.0		Max. :4637.7	
NA's :39032			
PID			
Length:39071			
Class :character			
Mode :character			

```
#### muc2c #####
      tinh      huyen      xa      diaban
Length:39071   Length:39071   Length:39071   Length:39071
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hos0	matv	m2cc1	m2cc2
Min. :13.00	Min. : 1.00	Min. :1.000	Min. : 0.000
1st Qu. :13.00	1st Qu. : 2.00	1st Qu. :1.000	1st Qu. : 0.000
Median :14.00	Median : 3.00	Median :2.000	Median : 1.000
Mean :14.57	Mean : 2.96	Mean :1.732	Mean : 2.186
3rd Qu. :15.00	3rd Qu. : 4.00	3rd Qu. :2.000	3rd Qu. : 4.000
Max. :25.00	Max. :17.00	Max. :2.000	Max. :20.000
			NA's :28616
m2cc3	m2cc4a	m2cc4b	m2cc4c
Min. :1.00	Min. :1.00	Min. :0.00	Min. :0.00
1st Qu. :1.00	1st Qu. :1.00	1st Qu. :0.00	1st Qu. :0.00
Median :1.00	Median :1.00	Median :0.00	Median :0.00
Mean :1.25	Mean :1.37	Mean :0.08	Mean :0.23
3rd Qu. :1.00	3rd Qu. :2.00	3rd Qu. :0.00	3rd Qu. :0.00
Max. :2.00	Max. :9.00	Max. :4.00	Max. :4.00
NA's :33632	NA's :34972	NA's :35061	NA's :38945
m2cc5	m2cc6	m2cc7a	m2cc7b
Min. :-1.00	Min. :-1.00	Min. :1.0	Min. :0.00

1st Qu. :16.00	1st Qu. : 5.00	1st Qu. :1.0	1st Qu. :0.00
Median :30.00	Median : 6.00	Median :1.0	Median :0.00
Mean :25.74	Mean : 8.56	Mean :1.1	Mean :0.17
3rd Qu. :36.00	3rd Qu. :12.00	3rd Qu. :1.0	3rd Qu. :0.00
Max. :45.00	Max. :48.00	Max. :9.0	Max. :4.00
NA's :34972	NA's :34972	NA's :34972	NA's :34997
m2cc7c	m2cc8	m2cc9	m2cc10
Min. :0.00	Min. :1.00	Min. :1.00	Min. : 1.00
1st Qu. :0.00	1st Qu. :1.00	1st Qu. :1.00	1st Qu. : 4.00
Median :0.00	Median :2.00	Median :1.00	Median : 8.00
Mean :0.13	Mean :1.55	Mean :1.56	Mean : 7.47
3rd Qu. :0.00	3rd Qu. :2.00	3rd Qu. :2.00	3rd Qu. :10.00
Max. :4.00	Max. :2.00	Max. :4.00	Max. :16.00
NA's :38739	NA's :33632	NA's :36648	NA's :36648
m2cc11	m2cc12a	m2cc12b	m2cc12c
Min. :-1.00	Min. :1.00	Min. :0.00	Min. :0.00
1st Qu. : 6.00	1st Qu. :1.00	1st Qu. :0.00	1st Qu. :0.00
Median : 8.00	Median :1.00	Median :0.00	Median :0.00
Mean :10.21	Mean :1.17	Mean :0.18	Mean :0.12
3rd Qu. :12.00	3rd Qu. :1.00	3rd Qu. :0.00	3rd Qu. :0.00
Max. :55.00	Max. :4.00	Max. :4.00	Max. :3.00
NA's :36648	NA's :36648	NA's :36673	NA's :38854
m2cc13	m2cc14	m2cc15	m2cc16
Min. : 0.000	Min. :1.00	Min. : 3.00	Min. : 1.00
1st Qu. : 0.000	1st Qu. :1.00	1st Qu. : 8.00	1st Qu. : 6.00
Median : 0.000	Median :2.00	Median :18.00	Median : 6.00
Mean : 0.093	Mean :1.63	Mean :22.16	Mean : 8.89
3rd Qu. : 0.000	3rd Qu. :2.00	3rd Qu. :36.00	3rd Qu. :10.00
Max. :12.000	Max. :2.00	Max. :48.00	Max. :36.00
NA's :28616	NA's :38749	NA's :38952	NA's :38952
m2cc17a	m2cc17b	m2cc17c	ID
Min. :1.00	Min. :0.00	Min. :0	Length:39071
1st Qu. :1.00	1st Qu. :0.00	1st Qu. :0	Class :character
Median :1.00	Median :0.00	Median :0	Mode :character
Mean :1.89	Mean :0.24	Mean :0	
3rd Qu. :3.00	3rd Qu. :0.00	3rd Qu. :0	
Max. :4.00	Max. :3.00	Max. :0	
NA's :38952	NA's :38952	NA's :39057	
wt	xaid	PID	
Min. : 467.2	Length:39071	Length:39071	
1st Qu. :1629.8	Class :character	Class :character	
Median :2006.0	Mode :character	Mode :character	
Mean :2111.1			
3rd Qu. :2470.8			
Max. :4637.7			

muc2d

tin	huyen	xa	diaban
Length:39071	Length:39071	Length:39071	Length:39071
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	matv	m2dc1	m2dc2
Min. :13.00	Min. : 1.00	Min. :0.000	Min. :0.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:1.000	1st Qu.:0.000
Median :14.00	Median : 3.00	Median :2.000	Median :0.000
Mean :14.57	Mean : 2.96	Mean :1.681	Mean :0.015
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.000	3rd Qu.:0.000
Max. :25.00	Max. :17.00	Max. :3.000	Max. :4.000
			NA's :29866

m2dc3a	m2dc3b	m2dc3c	m2dc4
Min. :1.00	Min. :0.00	Min. :0	Min. :0.000
1st Qu.:1.00	1st Qu.:0.00	1st Qu.:0	1st Qu.:0.000
Median :2.00	Median :0.00	Median :0	Median :0.000
Mean :2.24	Mean :0.31	Mean :0	Mean :0.021
3rd Qu.:2.00	3rd Qu.:0.00	3rd Qu.:0	3rd Qu.:0.000
Max. :5.00	Max. :5.00	Max. :0	Max. :6.000
NA's :38943	NA's :38955	NA's :39063	NA's :16151

m2dc5a	m2dc5b	m2dc5c	m2dc6
Min. :1.00	Min. :0.0	Min. :0.0	Min. :0.000
1st Qu.:1.00	1st Qu.:0.0	1st Qu.:0.0	1st Qu.:0.000
Median :2.00	Median :0.0	Median :0.0	Median :0.000
Mean :2.45	Mean :0.5	Mean :0.4	Mean :0.045
3rd Qu.:4.00	3rd Qu.:0.0	3rd Qu.:0.0	3rd Qu.:0.000
Max. :9.00	Max. :5.0	Max. :5.0	Max. :5.000
NA's :38639	NA's :38696	NA's :39006	NA's :5524

m2dc7a	m2dc7b	m2dc7c	ID
Min. :1.0	Min. :0.00	Min. :0.00	Length:39071
1st Qu.:1.0	1st Qu.:0.00	1st Qu.:0.00	Class :character
Median :2.0	Median :0.00	Median :0.00	Mode :character
Mean :2.4	Mean :0.73	Mean :0.73	
3rd Qu.:4.0	3rd Qu.:1.00	3rd Qu.:0.00	
Max. :9.0	Max. :5.00	Max. :5.00	
NA's :37836	NA's :38058	NA's :38846	

wt	xaid	PID
Min. : 467.2	Length:39071	Length:39071
1st Qu.:1629.8	Class :character	Class :character
Median :2006.0	Mode :character	Mode :character
Mean :2111.1		
3rd Qu.:2470.8		
Max. :4637.7		

muc2e

tin	huyen	xa	diaban
Length:39071	Length:39071	Length:39071	Length:39071
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	matv	m2ec1	m2ec2a
Min. :13.00	Min. : 1.00	Min. :1.000	Min. :1.00
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:2.000	1st Qu.:1.00
Median :14.00	Median : 3.00	Median :2.000	Median :2.00

Mean :14.57	Mean : 2.96	Mean :1.924	Mean :2.18
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.000	3rd Qu.:3.00
Max. :25.00	Max. :17.00	Max. :2.000	Max. :4.00
		NA's :5245	NA's :36511

m2ec2b	m2ec2c	m2ec3a1	m2ec3a2
Min. :0.00	Min. :0.00	Min. :0.00	Min. : 0.00
1st Qu.:0.00	1st Qu.:0.00	1st Qu.:1.00	1st Qu.: 0.00
Median :0.00	Median :0.00	Median :2.00	Median : 0.00
Mean :0.02	Mean :0.15	Mean :1.53	Mean : 2.48
3rd Qu.:0.00	3rd Qu.:0.00	3rd Qu.:2.00	3rd Qu.: 6.00
Max. :4.00	Max. :3.00	Max. :4.00	Max. :11.00
NA's :36524	NA's :39044	NA's :36511	NA's :36511

m2ec3b1	m2ec3b2	m2ec3c1	m2ec3c2
Min. :0.00	Min. : 0.00	Min. :0.00	Min. :0
1st Qu.:0.00	1st Qu.: 1.00	1st Qu.:0.00	1st Qu.:3
Median :0.00	Median : 6.00	Median :0.00	Median :6
Mean :0.45	Mean : 4.41	Mean :0.67	Mean :4
3rd Qu.:1.00	3rd Qu.: 6.00	3rd Qu.:1.00	3rd Qu.:6
Max. :3.00	Max. :10.00	Max. :2.00	Max. :6
NA's :39042	NA's :39042	NA's :39068	NA's :39068

ID	wt	xaid	PID
Length:39071	Min. : 467.2	Length:39071	Length:39071
Class :character	1st Qu.:1629.8	Class :character	Class :character
Mode :character	Median :2006.0	Mode :character	Mode :character
	Mean :2111.1		
	3rd Qu.:2470.8		
	Max. :4637.7		

muc3a1

tin	huyen	xa	diaban
Length:39071	Length:39071	Length:39071	Length:39071
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	matv	m3ac1	m3ac2
Min. :13.00	Min. : 1.00	Min. :1.000	Min. :1.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:2.000	1st Qu.:1.000
Median :14.00	Median : 3.00	Median :2.000	Median :2.000
Mean :14.57	Mean : 2.96	Mean :1.813	Mean :1.592
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.000	3rd Qu.:2.000
Max. :25.00	Max. :17.00	Max. :2.000	Max. :2.000

NA's :7290

m3ac3a	m3ac3b	m3ac4	m3ac5
Min. : -1.000	Min. : -1.000	Min. :1.000	Min. :1.000
1st Qu.: 0.000	1st Qu.: 0.000	1st Qu.:1.000	1st Qu.:3.000
Median : 0.000	Median : 3.000	Median :2.000	Median :4.000
Mean : 3.637	Mean : 9.214	Mean :2.052	Mean :4.476
3rd Qu.: 0.000	3rd Qu.:10.000	3rd Qu.:3.000	3rd Qu.:6.000
Max. :365.000	Max. :365.000	Max. :3.000	Max. :8.000
NA's :18819	NA's :18819		NA's :23600

ID	wt	xaid	PID

Length:39071	Min. : 467.2	Length:39071	Length:39071
Class :character	1st Qu.:1629.8	Class :character	Class :character
Mode :character	Median :2006.0	Mode :character	Mode :character
	Mean :2111.1		
	3rd Qu.:2470.8		
	Max. :4637.7		

```
#### muc3a2 #####
      tinh      huyen      xa      diaban
Length:18524    Length:18524    Length:18524    Length:18524
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hosov	matv	m3ac7	m3ac8a
Min. :13.00	Min. : 1.000	Length:18524	Min. :1.00
1st Qu.:13.00	1st Qu.: 1.000	Class :character	1st Qu.:1.00
Median :14.00	Median : 2.000	Mode :character	Median :1.00
Mean :14.57	Mean : 2.698		Mean :1.23
3rd Qu.:15.00	3rd Qu.: 4.000		3rd Qu.:1.00
Max. :25.00	Max. :17.000		Max. :5.00

m3ac8b	m3ac9	m3ac10a	m3ac10b
Min. : 1.000	Min. :1.000	Min. : -1.000	Min. : 0.0
1st Qu.: 2.000	1st Qu.:4.000	1st Qu.: 1.000	1st Qu.: 15.0
Median : 4.000	Median :4.000	Median : 1.000	Median : 60.0
Mean : 5.482	Mean :3.746	Mean : 2.583	Mean : 286.4
3rd Qu.:10.000	3rd Qu.:4.000	3rd Qu.: 3.000	3rd Qu.: 200.0
Max. :12.000	Max. :4.000	Max. :80.000	Max. :105600.0
			NA's :1911

m3ac11	m3ac12a	m3ac12b	m3ac13
Min. : 0.000	Min. : -1.0000	Min. : 0	Min. : 0.000
1st Qu.: 0.000	1st Qu.: 0.0000	1st Qu.: 150	1st Qu.: 1.000
Median : 1.000	Median : 0.0000	Median : 500	Median : 1.000
Mean : 1.514	Mean : 0.1949	Mean : 1589	Mean : 1.016
3rd Qu.: 2.000	3rd Qu.: 0.0000	3rd Qu.: 1500	3rd Qu.: 1.000
Max. :80.000	Max. :13.0000	Max. :60000	Max. :12.000
NA's :8664		NA's :15650	NA's :16615

m3ac14	m3ac15	ID	wt
Min. :1.000	Min. :0.00	Length:18524	Min. : 467.2
1st Qu.:1.000	1st Qu.:3.00	Class :character	1st Qu.:1656.7
Median :1.000	Median :7.00	Mode :character	Median :2046.8
Mean :1.167	Mean :5.52		Mean :2136.4
3rd Qu.:1.000	3rd Qu.:8.00		3rd Qu.:2466.9
Max. :3.000	Max. :9.00		Max. :4637.7
	NA's :16237		

xaid	PID
Length:18524	Length:18524
Class :character	Class :character
Mode :character	Mode :character

```
#### muc3b #####
      tinh          huyen          xa          diaban
Length:39071      Length:39071      Length:39071      Length:39071
Class :character   Class :character   Class :character   Class :character
Mode  :character   Mode  :character   Mode  :character   Mode  :character
```

hoso	matv	m3bc1	m3bc2
Min. :13.00	Min. : 1.00	Min. : 1.000	Min. :0.0000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.: 1.000	1st Qu.:0.0000
Median :14.00	Median : 3.00	Median : 2.000	Median :0.0000
Mean :14.57	Mean : 2.96	Mean : 1.891	Mean :0.1266
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.: 2.000	3rd Qu.:0.0000
Max. :25.00	Max. :17.00	Max. :17.000	Max. :3.0000
		NA's :2370	NA's :2370
m3bc3	m3bc4a	m3bc4b	m3bc5
Min. :1.000	Min. :0.000	Min. :0.0000	Min. :0.0000
1st Qu.:3.000	1st Qu.:0.000	1st Qu.:0.0000	1st Qu.:0.0000
Median :3.000	Median :0.000	Median :0.0000	Median :0.0000
Mean :2.877	Mean :0.088	Mean :0.0592	Mean :0.0412
3rd Qu.:3.000	3rd Qu.:0.000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :9.000	Max. :9.000	Max. :9.0000	Max. :3.0000
NA's :2444	NA's :2444	NA's :2444	NA's :2370
m3bc6	m3bc7a	m3bc7b	m3bc8
Min. :1.000	Min. :0.0000	Min. :0.0000	Min. :0.0000
1st Qu.:3.000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000
Median :3.000	Median :0.0000	Median :0.0000	Median :0.0000
Mean :3.002	Mean :0.0211	Mean :0.0372	Mean :0.0607
3rd Qu.:3.000	3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :9.000	Max. :9.0000	Max. :9.0000	Max. :3.0000
NA's :2426	NA's :2426	NA's :2426	NA's :2370
m3bc9	m3bc10	m3bc11	m3bc12a
Min. :0.0000	Min. :0.0000	Min. :0.0000	Min. :0.0000
1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000
Median :0.0000	Median :0.0000	Median :0.0000	Median :0.0000
Mean :0.0424	Mean :0.0368	Mean :0.0804	Mean :0.0606
3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :3.0000	Max. :3.0000	Max. :3.0000	Max. :9.0000
NA's :2500	NA's :2500	NA's :2370	NA's :2545
m3bc12b	m3bc12c	m3bc13	m3bc14a
Min. :0.0000	Min. :0.0000	Min. :0.0000	Min. :0.0000
1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000
Median :0.0000	Median :0.0000	Median :0.0000	Median :0.0000
Mean :0.0717	Mean :0.0617	Mean :0.0324	Mean :0.0085
3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :9.0000	Max. :9.0000	Max. :8.0000	Max. :3.0000
NA's :2545	NA's :2545	NA's :2370	NA's :2520
m3bc14b	m3bc14c	m3bc14d	m3bc14e
Min. :0.0000	Min. :0.0000	Min. :0.0000	Min. :0.0000
1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000	1st Qu.:0.0000

Median :0.0000	Median :0.0000	Median :0.0000	Median :0.0000
Mean :0.0094	Mean :0.1781	Mean :0.2068	Mean :0.0088
3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :3.0000	Max. :8.0000	Max. :8.0000	Max. :3.0000
NA's :2520	NA's :2520	NA's :2520	NA's :2520
m3bc14f	m3bc15	m3bc16	m3bc17
Min. :0.0000	Min. :1.000	Min. :0.0000	Min. :0.0000
1st Qu.:0.0000	1st Qu.:2.000	1st Qu.:0.0000	1st Qu.:0.0000
Median :0.0000	Median :2.000	Median :0.0000	Median :0.0000
Mean :0.0092	Mean :1.997	Mean :0.0396	Mean :0.0269
3rd Qu.:0.0000	3rd Qu.:2.000	3rd Qu.:0.0000	3rd Qu.:0.0000
Max. :3.0000	Max. :9.000	Max. :3.0000	Max. :3.0000
NA's :2520	NA's :2520	NA's :2370	NA's :2494
m3bc18	m3bc19	m3bc20a	m3bc20b
Min. :0.000	Min. :0.0000	Min. :0.00	Min. :0.00
1st Qu.:0.000	1st Qu.:0.0000	1st Qu.:1.00	1st Qu.:0.00
Median :0.000	Median :0.0000	Median :1.00	Median :0.00
Mean :0.028	Mean :0.1266	Mean :3.76	Mean :0.78
3rd Qu.:0.000	3rd Qu.:0.0000	3rd Qu.:9.00	3rd Qu.:0.00
Max. :3.000	Max. :3.0000	Max. :13.00	Max. :12.00
NA's :2494	NA's :2370	NA's :35016	NA's :35018
m3bc20c	m3bc20d	m3bc20e	m3bc20f
Min. :0.00	Min. :0.0	Min. :0.0	Min. :0.00
1st Qu.:0.00	1st Qu.:0.0	1st Qu.:0.0	1st Qu.:2.75
Median :0.00	Median :0.0	Median :0.0	Median :5.50
Mean :0.79	Mean :1.1	Mean :4.2	Mean :5.50
3rd Qu.:0.00	3rd Qu.:0.0	3rd Qu.:10.0	3rd Qu.:8.25
Max. :12.00	Max. :12.0	Max. :11.0	Max. :11.00
NA's :38580	NA's :39023	NA's :39066	NA's :39069
m3bc20g	m3bc21a	m3bc21b	m3bc22
Min. :0	Min. :-1.00	Min. :0.00	Min. :0.0000
1st Qu.:0	1st Qu.:3.00	1st Qu.:0.00	1st Qu.:0.0000
Median :0	Median :5.00	Median :2.00	Median :0.0000
Mean :0	Mean :7.25	Mean :3.09	Mean :0.0412
3rd Qu.:0	3rd Qu.:9.00	3rd Qu.:6.00	3rd Qu.:0.0000
Max. :0	Max. :85.00	Max. :11.00	Max. :3.0000
NA's :39070	NA's :35016	NA's :35027	NA's :2370
m3bc23a	m3bc23b	m3bc23c	m3bc23d
Min. :0.0	Min. :0.00	Min. :0.00	Min. :0.0
1st Qu.:1.0	1st Qu.:0.00	1st Qu.:0.00	1st Qu.:0.0
Median :1.0	Median :0.00	Median :0.00	Median :0.0
Mean :3.4	Mean :1.03	Mean :0.94	Mean :1.1
3rd Qu.:7.0	3rd Qu.:0.00	3rd Qu.:0.00	3rd Qu.:0.0
Max. :12.0	Max. :12.00	Max. :12.00	Max. :12.0
NA's :37885	NA's :37894	NA's :38874	NA's :39050
m3bc23e	m3bc23f	m3bc23g	m3bc24a
Min. :0.00	Min. :0	Min. :NA	Min. :-1.00
1st Qu.:0.00	1st Qu.:0	1st Qu.:NA	1st Qu.:3.00
Median :0.00	Median :0	Median :NA	Median :5.00
Mean :3.33	Mean :0	Mean :NaN	Mean :9.35
3rd Qu.:5.00	3rd Qu.:0	3rd Qu.:NA	3rd Qu.:10.00
Max. :10.00	Max. :0	Max. :NA	Max. :84.00
NA's :39068	NA's :39070	NA's :39071	NA's :37885
m3bc24b	m3bc25	m3bc26a	m3bc26b
Min. :0.00	Min. :0.0000	Min. :0.00	Min. :0.00
1st Qu.:0.00	1st Qu.:0.0000	1st Qu.:1.00	1st Qu.:0.00

Median : 2.00	Median :0.0000	Median : 1.00	Median : 0.00
Mean : 3.08	Mean :0.0607	Mean : 4.09	Mean : 1.33
3rd Qu.: 6.00	3rd Qu.:0.0000	3rd Qu.: 9.00	3rd Qu.: 0.00
Max. :11.00	Max. :3.0000	Max. :12.00	Max. :12.00
NA's :37890	NA's :2370	NA's :37399	NA's :37401
m3bc26c	m3bc26d	m3bc26e	m3bc26f
Min. : 0.00	Min. : 0.00	Min. : 0	Min. :0
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0	1st Qu.:0
Median : 0.00	Median : 0.00	Median : 0	Median :0
Mean : 0.96	Mean : 1.03	Mean : 3	Mean :0
3rd Qu.: 0.00	3rd Qu.: 0.00	3rd Qu.: 3	3rd Qu.:0
Max. :12.00	Max. :11.00	Max. :12	Max. :0
NA's :38755	NA's :39033	NA's :39067	NA's :39070
m3bc26g	m3bc27a	m3bc27b	m3bc28
Min. : NA	Min. : -1.00	Min. : 0.00	Min. :0.0000
1st Qu.: NA	1st Qu.: 3.00	1st Qu.: 0.00	1st Qu.:0.0000
Median : NA	Median : 5.00	Median : 2.00	Median :0.0000
Mean :NaN	Mean : 8.75	Mean : 3.05	Mean :0.0804
3rd Qu.: NA	3rd Qu.:10.00	3rd Qu.: 6.00	3rd Qu.:0.0000
Max. : NA	Max. :79.00	Max. :11.00	Max. :3.0000
NA's :39071	NA's :37399	NA's :37404	NA's :2370
m3bc29a	m3bc29b	m3bc29c	m3bc29d
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00
1st Qu.: 1.00	1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.00
Median : 1.00	Median : 0.00	Median : 0.00	Median : 0.00
Mean : 4.06	Mean : 1.28	Mean : 0.57	Mean : 1.34
3rd Qu.: 9.00	3rd Qu.: 0.00	3rd Qu.: 0.00	3rd Qu.: 0.00
Max. :12.00	Max. :12.00	Max. :12.00	Max. :12.00
NA's :36933	NA's :36935	NA's :38639	NA's :39042
m3bc29e	m3bc29f	m3bc29g	m3bc30a
Min. : 0	Min. :0	Min. : NA	Min. : -1.00
1st Qu.: 0	1st Qu.:0	1st Qu.: NA	1st Qu.: 2.00
Median : 0	Median :0	Median : NA	Median : 4.00
Mean : 3	Mean :0	Mean :NaN	Mean : 7.54
3rd Qu.: 3	3rd Qu.:0	3rd Qu.: NA	3rd Qu.: 8.00
Max. :12	Max. :0	Max. : NA	Max. :79.00
NA's :39067	NA's :39070	NA's :39071	NA's :36933
m3bc30b	m3bc31	m3bc32a	m3bc32b
Min. : 0.00	Min. :0.0000	Min. : 0.00	Min. : 0.00
1st Qu.: 0.00	1st Qu.:0.0000	1st Qu.: 1.00	1st Qu.: 0.00
Median : 2.00	Median :0.0000	Median : 2.00	Median : 0.00
Mean : 3.19	Mean :0.0324	Mean : 4.48	Mean : 1.45
3rd Qu.: 6.00	3rd Qu.:0.0000	3rd Qu.: 9.00	3rd Qu.: 0.00
Max. :11.00	Max. :8.0000	Max. :12.00	Max. :12.00
NA's :36939	NA's :2370	NA's :38368	NA's :38370
m3bc32c	m3bc32d	m3bc32e	m3bc32f
Min. : 0.00	Min. :0.00	Min. :0	Min. : NA
1st Qu.: 0.00	1st Qu.:0.00	1st Qu.:0	1st Qu.: NA
Median : 0.00	Median :0.00	Median :0	Median : NA
Mean : 0.64	Mean :0.46	Mean :0	Mean :NaN
3rd Qu.: 0.00	3rd Qu.:0.00	3rd Qu.:0	3rd Qu.: NA
Max. :12.00	Max. :6.00	Max. :0	Max. : NA
NA's :38920	NA's :39058	NA's :39070	NA's :39071
m3bc32g	m3bc33a	m3bc33b	m3bc34
Min. : NA	Min. : -1.0	Min. : 0.00	Min. :0.0000
1st Qu.: NA	1st Qu.: 2.0	1st Qu.: 0.00	1st Qu.:0.0000

Median : NA	Median : 5.0	Median : 3.00	Median :0.0000
Mean :NaN	Mean : 8.5	Mean : 3.56	Mean :0.0396
3rd Qu.: NA	3rd Qu.:10.0	3rd Qu.: 6.00	3rd Qu.:0.0000
Max. : NA	Max. :79.0	Max. :11.00	Max. :3.0000
NA's :39071	NA's :38368	NA's :38372	NA's :2370
m3bc35a	m3bc35b	m3bc35c	m3bc35d
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00
1st Qu.: 1.00	1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.00
Median : 1.00	Median : 0.00	Median : 0.00	Median : 0.00
Mean : 4.36	Mean : 2.01	Mean : 1.23	Mean : 1.54
3rd Qu.: 9.00	3rd Qu.: 1.00	3rd Qu.: 0.00	3rd Qu.: 0.00
Max. :12.00	Max. :12.00	Max. :12.00	Max. :12.00
NA's :38085	NA's :38092	NA's :38818	NA's :39034
m3bc35e	m3bc35f	m3bc35g	m3bc36a
Min. : 0.00	Min. :0	Min. : NA	Min. : -1.00
1st Qu.: 0.00	1st Qu.:0	1st Qu.: NA	1st Qu.: 3.00
Median : 0.00	Median :0	Median : NA	Median : 6.00
Mean : 2.33	Mean :0	Mean :NaN	Mean :10.44
3rd Qu.: 1.50	3rd Qu.:0	3rd Qu.: NA	3rd Qu.:13.00
Max. :12.00	Max. :0	Max. : NA	Max. :87.00
NA's :39065	NA's :39069	NA's :39071	NA's :38085
m3bc36b	ID	wt	xaid
Min. : 0.00	Length:39071	Min. : 467.2	Length:39071
1st Qu.: 0.00	Class :character	1st Qu.:1629.8	Class :character
Median : 2.00	Mode :character	Median :2006.0	Mode :character
Mean : 3.13		Mean :2111.1	
3rd Qu.: 6.00		3rd Qu.:2470.8	
Max. :11.00		Max. :4637.7	
NA's :38087			
PID			
Length:39071			
Class :character			
Mode :character			

```
#### muc3c #####
      tinh      huyen      xa      diaban
Length:39071    Length:39071    Length:39071    Length:39071
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character Mode :character
```

hoso	matv	m3cc1	m3cc2
Min. :13.00	Min. : 1.00	Min. :1.00	Min. : 1.00
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:2.00	1st Qu.: 2.00
Median :14.00	Median : 3.00	Median :2.00	Median : 3.00
Mean :14.57	Mean : 2.96	Mean :1.95	Mean : 3.42
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.00	3rd Qu.: 4.00
Max. :25.00	Max. :17.00	Max. :2.00	Max. :25.00
		NA's :36175	NA's :38917

m3cc3	m3cc4	m3cc5	m3cc6
Min. :1.00	Min. :1.00	Min. : 1.00	Min. :1.00
1st Qu.:1.00	1st Qu.:1.00	1st Qu.: 2.00	1st Qu.:2.00
Median :2.00	Median :1.00	Median : 4.00	Median :2.00
Mean :1.74	Mean :1.39	Mean : 4.33	Mean :1.97
3rd Qu.:2.00	3rd Qu.:2.00	3rd Qu.: 5.00	3rd Qu.:2.00
Max. :2.00	Max. :2.00	Max. :28.00	Max. :2.00
NA's :36175	NA's :38321	NA's :38321	NA's :36175

m3cc7	m3cc8	m3cc9	m3cc10
Min. :1.000	Min. : 1.00	Min. : 0.00	Min. : 0.0
1st Qu.:2.000	1st Qu.: 2.00	1st Qu.: 0.00	1st Qu.: 0.0
Median :2.000	Median : 4.00	Median : 0.00	Median : 0.0
Mean :1.825	Mean : 5.77	Mean : 3.03	Mean : 2.5
3rd Qu.:2.000	3rd Qu.: 7.00	3rd Qu.: 4.00	3rd Qu.: 2.0
Max. :2.000	Max. :28.00	Max. :28.00	Max. :28.0
NA's :2896	NA's :32760	NA's :32760	NA's :36083

m3cc11	ID	wt	xaid
Min. :1.000	Length:39071	Min. : 467.2	Length:39071
1st Qu.:2.000	Class :character	1st Qu.:1629.8	Class :character
Median :2.000	Mode :character	Median :2006.0	Mode :character
Mean :1.913		Mean :2111.1	
3rd Qu.:2.000		3rd Qu.:2470.8	
Max. :2.000		Max. :4637.7	
NA's :2896			

PID
Length:39071
Class :character
Mode :character

```
#### muc3d #####
      tinh          huyen          xa          diaban
Length:6647      Length:6647      Length:6647      Length:6647
Class :character  Class :character  Class :character  Class :character
Mode :character  Mode :character  Mode :character  Mode :character
```

hoso	matv	m3dc1	m3dc2
Min. :13.00	Min. : 1.000	Min. :1.000	Min. :1.00
1st Qu.:13.00	1st Qu.: 2.000	1st Qu.:3.000	1st Qu.:2.00
Median :14.00	Median : 2.000	Median :3.000	Median :2.00
Mean :14.57	Mean : 2.429	Mean :2.828	Mean :2.03
3rd Qu.:15.00	3rd Qu.: 2.000	3rd Qu.:3.000	3rd Qu.:2.00
Max. :25.00	Max. :17.000	Max. :3.000	Max. :3.00
			NA's :287

m3dc3	m3dc4a	m3dc4b	m3dc5
Min. :1.000	Min. : 1.00	Min. : 0.000	Min. :1.000
1st Qu.:1.000	1st Qu.: 2.00	1st Qu.: 0.000	1st Qu.:1.000
Median :1.000	Median : 2.00	Median : 0.000	Median :1.000
Mean :1.181	Mean : 3.84	Mean : 1.665	Mean :1.065

3rd Qu.: 1.000	3rd Qu.: 6.00	3rd Qu.: 0.000	3rd Qu.: 1.000
Max.: 2.000	Max.: 11.00	Max.: 11.000	Max.: 2.000
NA's : 605	NA's : 1697	NA's : 1697	
m3dc6	m3dc7a	m3dc7b	ID
Min.: 1.000	Min.: 0.000	Min.: 0.000	Length: 6647
1st Qu.: 2.000	1st Qu.: 1.000	1st Qu.: 0.000	Class : character
Median : 2.000	Median : 1.000	Median : 1.000	Mode : character
Mean : 2.534	Mean : 1.272	Mean : 1.195	
3rd Qu.: 3.000	3rd Qu.: 2.000	3rd Qu.: 2.000	
Max.: 10.000	Max.: 7.000	Max.: 7.000	
NA's : 429	NA's : 429	NA's : 429	
wt	xaid	PID	
Min.: 467.2	Length: 6647	Length: 6647	
1st Qu.: 1622.0	Class : character	Class : character	
Median : 2005.7	Mode : character	Mode : character	
Mean : 2099.4			
3rd Qu.: 2462.6			
Max.: 4637.7			

```
#### muc3e #####
      tinh      huyen      xa      diaban
Length:33826   Length:33826   Length:33826   Length:33826
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hosu	matv	m3ec1	m3ec2
Min.: 13.00	Min.: 1.000	Min.: 1.000	Min.: 1.000
1st Qu.: 13.00	1st Qu.: 1.000	1st Qu.: 1.000	1st Qu.: 1.000
Median : 14.00	Median : 2.000	Median : 2.000	Median : 1.000
Mean : 14.57	Mean : 2.682	Mean : 1.738	Mean : 1.072
3rd Qu.: 15.00	3rd Qu.: 4.000	3rd Qu.: 2.000	3rd Qu.: 1.000
Max.: 25.00	Max.: 17.000	Max.: 2.000	Max.: 2.000
			NA's : 24958
m3ec3	m3ec4	m3ec5	ID
Min.: 1.000	Min.: 7.0	Min.: 1.000	Length: 33826
1st Qu.: 1.000	1st Qu.: 17.0	1st Qu.: 1.000	Class : character
Median : 1.000	Median : 20.0	Median : 1.000	Mode : character
Mean : 1.427	Mean : 20.6	Mean : 1.066	
3rd Qu.: 2.000	3rd Qu.: 22.0	3rd Qu.: 1.000	
Max.: 3.000	Max.: 999.0	Max.: 2.000	
NA's : 25596	NA's : 27953	NA's : 26750	
wt	xaid	PID	
Min.: 467.2	Length: 33826	Length: 33826	
1st Qu.: 1643.2	Class : character	Class : character	
Median : 2010.1	Mode : character	Mode : character	
Mean : 2120.3			
3rd Qu.: 2478.2			
Max.: 4637.7			

```
#### muc3f #####
      tinh          huyen          xa          diaban
Length:39071      Length:39071      Length:39071      Length:39071
Class :character   Class :character   Class :character   Class :character
Mode  :character   Mode  :character   Mode  :character   Mode  :character
```

hosu	matv	m3fc1	m3fc2
Min. :13.00	Min. : 1.00	Min. :1.000	Min. : 1.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:2.000	1st Qu.: 1.000
Median :14.00	Median : 3.00	Median :3.000	Median : 5.000
Mean :14.57	Mean : 2.96	Mean :2.844	Mean : 3.984
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:4.000	3rd Qu.: 5.000
Max. :25.00	Max. :17.00	Max. :4.000	Max. :10.000
			NA's :30879

m3fc3	m3fc4a	m3fc4b	m3fc5
Min. :1.000	Min. :1.00	Min. :0.00	Min. : -2.00
1st Qu.:2.000	1st Qu.:1.00	1st Qu.:0.00	1st Qu.: 30.00
Median :2.000	Median :1.00	Median :0.00	Median : 40.00
Mean :1.985	Mean :1.92	Mean :0.03	Mean : 58.34
3rd Qu.:2.000	3rd Qu.:2.00	3rd Qu.:0.00	3rd Qu.: 65.00
Max. :2.000	Max. :8.00	Max. :8.00	Max. :12000.00
NA's :30879	NA's :31694	NA's :31699	NA's :31694

m3fc6a	m3fc6b	m3fc7a	m3fc7b
Min. :1950	Min. :1984	Min. : -1.00	Min. : 1.00
1st Qu.:2002	1st Qu.:2002	1st Qu.: 6.00	1st Qu.: 8.00
Median :2005	Median :2005	Median :12.00	Median :12.00
Mean :2003	Mean :2003	Mean :13.87	Mean : 9.77
3rd Qu.:2006	3rd Qu.:2005	3rd Qu.:12.00	3rd Qu.:12.00
Max. :2006	Max. :2006	Max. :80.00	Max. :72.00
NA's :24782	NA's :31694	NA's :24782	NA's :31694

m3fc8a	m3fc8b	m3fc9a	m3fc9b
Min. :1.000	Min. :1.00	Min. : 1.000	Min. : 1.0
1st Qu.:1.000	1st Qu.:1.00	1st Qu.: 1.000	1st Qu.: 2.0
Median :1.000	Median :1.00	Median : 3.000	Median : 3.0
Mean :1.131	Mean :1.15	Mean : 2.495	Mean : 2.8
3rd Qu.:1.000	3rd Qu.:1.00	3rd Qu.: 3.000	3rd Qu.: 3.0
Max. :2.000	Max. :2.00	Max. :11.000	Max. :11.0
NA's :24782	NA's :31694	NA's :30879	NA's :31694

m3fc9c	m3fc10	m3fc11a	m3fc11b
Min. : 1.00	Min. :1.000	Min. :1.0	Min. :1.00
1st Qu.: 1.00	1st Qu.:1.000	1st Qu.:2.0	1st Qu.:2.00
Median : 1.00	Median :2.000	Median :2.0	Median :2.00
Mean : 1.72	Mean :2.098	Mean :1.9	Mean :1.88
3rd Qu.: 3.00	3rd Qu.:3.000	3rd Qu.:2.0	3rd Qu.:2.00
Max. :11.00	Max. :3.000	Max. :3.0	Max. :3.00
NA's :32974	NA's :17526	NA's :33671	NA's :37159

m3fc12	m3fc13a	m3fc13b	m3fc14
Min. :1.00	Min. : 1.000	Min. : 0.000	Min. :1.000
1st Qu.:4.00	1st Qu.: 1.000	1st Qu.: 0.000	1st Qu.:1.000
Median :5.00	Median : 5.000	Median : 0.000	Median :2.000
Mean :4.63	Mean : 4.936	Mean : 1.673	Mean :1.673
3rd Qu.:6.00	3rd Qu.: 7.000	3rd Qu.: 1.000	3rd Qu.:2.000
Max. :6.00	Max. :12.000	Max. :12.000	Max. :9.000

NA's :34158	NA's :21545	NA's :22509	NA's :22818
ID	wt	xaid	PID
Length:39071	Min. : 467.2	Length:39071	Length:39071
Class :character	1st Qu.:1629.8	Class :character	Class :character
Mode :character	Median :2006.0	Mode :character	Mode :character
	Mean :2111.1		
	3rd Qu.:2470.8		
	Max. :4637.7		

```
#### muc3g #####
      tinh      huyen      xa      diaban
Length:11058    Length:11058    Length:11058    Length:11058
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hosu	m3gma	m3gc1b	m3gc1d
Min. :13.00	Min. : 1.00	Length:11058	Min. : -1.000
1st Qu.:13.00	1st Qu.: 2.00	Class :character	1st Qu.: 2.000
Median :14.00	Median : 7.00	Mode :character	Median : 4.000
Mean :14.59	Mean :49.81		Mean : 5.485
3rd Qu.:15.00	3rd Qu.:99.00		3rd Qu.:10.000
Max. :25.00	Max. :99.00		Max. :12.000
			NA's :5414

m3gc2	m3gc3	m3gc4a	m3gc4b
Min. : -1.00	Min. : -1.000	Min. : -1.000	Min. : 0.000
1st Qu.: 1.00	1st Qu.: 0.000	1st Qu.: 3.000	1st Qu.: 0.000
Median : 1.00	Median : 0.000	Median : 3.000	Median : 0.000
Mean : 1.46	Mean : 0.065	Mean : 3.886	Mean : 0.707
3rd Qu.: 2.00	3rd Qu.: 0.000	3rd Qu.: 3.000	3rd Qu.: 0.000
Max. :20.00	Max. :10.000	Max. :12.000	Max. :12.000
NA's :5414	NA's :5414	NA's :5414	NA's :5440

m3gc4c	m3gc5a	m3gc5b	m3gc5c
Min. : 0.00	Min. :0.000	Min. :0.000	Min. :0.00
1st Qu.: 0.00	1st Qu.:1.000	1st Qu.:0.000	1st Qu.:0.00
Median : 0.00	Median :1.000	Median :0.000	Median :0.00
Mean : 1.31	Mean :1.579	Mean :0.591	Mean :0.56
3rd Qu.: 0.00	3rd Qu.:2.000	3rd Qu.:0.000	3rd Qu.:0.00
Max. :12.00	Max. :9.000	Max. :9.000	Max. :9.00
NA's :10409	NA's :5540	NA's :5583	NA's :9780

m3gc6	m3gc7	m3gc8	m3gc9
Min. :1.000	Min. : -1.0	Min. : -1.000	Min. : -2.0
1st Qu.:2.000	1st Qu.: 0.0	1st Qu.: 0.000	1st Qu.: 10.0
Median :2.000	Median : 25.0	Median : 0.000	Median : 40.0
Mean :1.979	Mean : 115.6	Mean : 2.456	Mean : 121.6
3rd Qu.:2.000	3rd Qu.: 100.0	3rd Qu.: 0.000	3rd Qu.: 115.0
Max. :9.000	Max. :16000.0	Max. :1200.000	Max. :11500.0
NA's :5540	NA's :5540	NA's :7586	NA's :7586

m3gc10	m3gc11	m3gc12	m3gc13
Min. :1.000	Min. : 0.0	Min. : -1.00	Min. :1.00
1st Qu.:2.000	1st Qu.: 20.0	1st Qu.: 0.00	1st Qu.:1.00
Median :2.000	Median : 50.0	Median : 0.00	Median :2.00

Mean :1.879	Mean : 140.1	Mean : 18.66	Mean :1.73
3rd Qu.:2.000	3rd Qu.: 120.0	3rd Qu.: 10.00	3rd Qu.:2.00
Max. :2.000	Max. :8400.0	Max. :3000.00	Max. :9.00
NA's :5540	NA's :10367	NA's :5540	NA's :5540
m3gc14	m3gc15	m3gc16	m3gc17
Min. :1.000	Min. :1.000	Min. : 0.00	Min. :1.000
1st Qu.:2.000	1st Qu.:2.000	1st Qu.: 20.00	1st Qu.:2.000
Median :2.000	Median :2.000	Median : 40.00	Median :2.000
Mean :1.814	Mean :1.949	Mean : 95.23	Mean :1.972
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.: 80.00	3rd Qu.:2.000
Max. :9.000	Max. :2.000	Max. :4200.00	Max. :2.000
NA's :5540	NA's :5540	NA's :10779	NA's :5540
ID	wt	xaid	
Length:11058	Min. : 467.2	Length:11058	
Class :character	1st Qu.:1657.8	Class :character	
Mode :character	Median :2025.8	Mode :character	
	Mean :2136.4		
	3rd Qu.:2492.1		
	Max. :4637.7		

```
#### muc3h #####
      tinh      huyen      xa      diaban
Length:9214      Length:9214      Length:9214      Length:9214
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character  Mode :character
```

hos0	m3hma	m3hc1b	m3hc1d
Min. :13.00	Min. : 1.00	Length:9214	Min. : -1.000
1st Qu.:13.00	1st Qu.: 4.00	Class :character	1st Qu.: 4.000
Median :14.00	Median :99.00	Mode :character	Median : 5.000
Mean :14.59	Mean :70.56		Mean : 4.572
3rd Qu.:15.00	3rd Qu.:99.00		3rd Qu.: 5.000
Max. :25.00	Max. :99.00		Max. :12.000
			NA's :6494
m3hc2	m3hc3	m3hc4	m3hc5a
Min. : -1.000	Min. : -1.000	Min. : -1.00	Min. :1.000
1st Qu.: 1.000	1st Qu.: 0.000	1st Qu.: 5.00	1st Qu.:2.000
Median : 1.000	Median : 0.000	Median : 7.00	Median :2.000
Mean : 1.239	Mean : 0.319	Mean :12.06	Mean :2.926
3rd Qu.: 1.000	3rd Qu.: 1.000	3rd Qu.:14.25	3rd Qu.:3.000
Max. :12.000	Max. : 5.000	Max. :335.00	Max. :9.000
NA's :6494	NA's :6494	NA's :6494	NA's :6494
m3hc5b	m3hc5c	m3hc6a	m3hc6b
Min. :0.000	Min. :0.000	Min. :0.000	Min. :0.000
1st Qu.:0.000	1st Qu.:0.000	1st Qu.:1.000	1st Qu.:2.000
Median :0.000	Median :0.000	Median :1.000	Median :2.000
Mean :0.936	Mean :1.181	Mean :1.168	Mean :1.825
3rd Qu.:0.000	3rd Qu.:0.000	3rd Qu.:1.000	3rd Qu.:2.000
Max. :9.000	Max. :9.000	Max. :9.000	Max. :9.000
NA's :6499	NA's :8932	NA's :6494	NA's :6506
m3hc6c	m3hc7	m3hc8	m3hc9

Min. :0.000	Min. :1.000	Min. :1.000	Min. : -1
1st Qu.:0.000	1st Qu.:2.000	1st Qu.:2.000	1st Qu.: 0
Median :0.000	Median :2.000	Median :2.000	Median : 245
Mean :1.592	Mean :1.929	Mean :1.909	Mean : 1150
3rd Qu.:3.000	3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.: 1000
Max. :9.000	Max. :9.000	Max. :9.000	Max. :55000
NA's :7107	NA's :6553	NA's :6553	NA's :6553

m3hc10	m3hc11	m3hc12	m3hc13
Min. : -1.00	Min. : -1.0	Min. :1.000	Min. : -1.0
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.:2.000	1st Qu.: 0.0
Median : 0.00	Median : 200.0	Median :2.000	Median : 50.0
Mean : 87.94	Mean : 834.7	Mean :1.798	Mean : 280.3
3rd Qu.: 50.00	3rd Qu.: 700.0	3rd Qu.:2.000	3rd Qu.: 200.0
Max. :14700.00	Max. :54750.0	Max. :2.000	Max. :12000.0
NA's :7390	NA's :7390	NA's :7390	NA's :8009

m3hc14	m3hc15	m3hc16	m3hc17
Min. : -1.0	Min. :1.00	Min. : -1.0	Min. :1.000
1st Qu.: 25.0	1st Qu.:1.00	1st Qu.: 0.0	1st Qu.:2.000
Median : 100.0	Median :2.00	Median : 37.5	Median :2.000
Mean : 346.5	Mean :1.74	Mean : 129.8	Mean :1.955
3rd Qu.: 300.0	3rd Qu.:2.00	3rd Qu.: 100.0	3rd Qu.:2.000
Max. :20000.0	Max. :2.00	Max. :8000.0	Max. :2.000
NA's :6553	NA's :6553	NA's :8522	NA's :6553

m3hc18	m3hc19	m3hc20	ID
Min. :1.000	Min. :2.000	Min. :1.000	Length:9214
1st Qu.:1.000	1st Qu.:2.000	1st Qu.:2.000	Class :character
Median :1.000	Median :2.000	Median :2.000	Mode :character
Mean :1.092	Mean :2.727	Mean :1.978	
3rd Qu.:1.000	3rd Qu.:4.000	3rd Qu.:2.000	
Max. :2.000	Max. :4.000	Max. :2.000	
NA's :9095	NA's :9203	NA's :6553	

wt	xaid
Min. : 467.2	Length:9214
1st Qu.:1654.7	Class :character
Median :2019.5	Mode :character
Mean :2130.1	
3rd Qu.:2492.8	
Max. :4637.7	

```
#### muc3i #####
      tinh      huyen      xa      diaban
Length:21622      Length:21622      Length:21622      Length:21622
Class :character      Class :character      Class :character      Class :character
Mode :character      Mode :character      Mode :character      Mode :character
```

hos0	matv	m3ic1	m3ic2a
Min. :13.0	Min. : 1.00	Min. :1.000	Min. : -1.00
1st Qu.:13.0	1st Qu.: 2.00	1st Qu.:2.000	1st Qu.: 0.00
Median :14.0	Median : 4.00	Median :2.000	Median : 0.00
Mean :14.6	Mean :41.88	Mean :1.918	Mean : 19.75
3rd Qu.:15.0	3rd Qu.:99.00	3rd Qu.:2.000	3rd Qu.: 0.00

Max. :25.0	Max. :99.00	Max. :2.000	Max. :2600.00
		NA's :244	NA's :19871
m3ic2b	m3ic3	m3ic4a	m3ic4b
Min. : 0.00	Min. :1.000	Min. : 0.00	Min. : 0.000
1st Qu.: 15.00	1st Qu.:2.000	1st Qu.:11.00	1st Qu.: 0.000
Median : 37.00	Median :2.000	Median :13.00	Median : 0.000
Mean : 86.29	Mean :1.829	Mean :10.95	Mean : 0.707
3rd Qu.: 100.00	3rd Qu.:2.000	3rd Qu.:13.00	3rd Qu.: 0.000
Max. :3000.00	Max. :2.000	Max. :15.00	Max. :15.000
NA's :19871	NA's :244	NA's :17957	NA's :17986
m3ic4c	m3ic5a	m3ic5b	m3ic6
Min. : 0.000	Min. : -1.000	Min. : -1.00	Min. :1.000
1st Qu.: 0.000	1st Qu.: 0.000	1st Qu.: 10.00	1st Qu.:4.000
Median : 0.000	Median : 0.000	Median : 20.00	Median :4.000
Mean : 1.389	Mean : 6.807	Mean : 60.15	Mean :3.895
3rd Qu.: 0.000	3rd Qu.: 0.000	3rd Qu.: 40.00	3rd Qu.:4.000
Max. :15.000	Max. :1000.000	Max. :60000.00	Max. :9.000
NA's :21329	NA's :17957	NA's :17957	NA's :244
ID	wt	xaid	PID
Length:21622	Min. : 467.2	Length:21622	Length:21622
Class :character	1st Qu.:1656.7	Class :character	Class :character
Mode :character	Median :2028.7	Mode :character	Mode :character
	Mean :2148.7		
	3rd Qu.:2511.0		
	Max. :4637.7		

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#### muc4a #####
      tinh          huyen          xa          diaban
Length:39071      Length:39071      Length:39071      Length:39071
Class :character  Class :character  Class :character  Class :character
Mode :character   Mode :character   Mode :character   Mode :character
```

hos0	matv	m4ac1a	m4ac1b
Min. :13.00	Min. : 1.00	Min. :1.000	Min. :1.000
1st Qu.:13.00	1st Qu.: 2.00	1st Qu.:1.000	1st Qu.:1.000
Median :14.00	Median : 3.00	Median :2.000	Median :2.000
Mean :14.57	Mean : 2.96	Mean :1.739	Mean :1.584
3rd Qu.:15.00	3rd Qu.: 4.00	3rd Qu.:2.000	3rd Qu.:2.000
Max. :25.00	Max. :17.00	Max. :2.000	Max. :2.000
		NA's :2896	NA's :2896
m4ac1c	m4ac2	m4ac3	m4ac4m
Min. :1.000	Min. :1.000	Min. :1.000	Length:39071
1st Qu.:2.000	1st Qu.:1.000	1st Qu.:1.000	Class :character
Median :2.000	Median :1.000	Median :1.000	Mode :character
Mean :1.847	Mean :1.367	Mean :1.674	
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:2.000	
Max. :2.000	Max. :2.000	Max. :7.000	
NA's :2896	NA's :2896	NA's :25791	
m4ac4	m4ac5c	m4ac5m	m4ac5
Min. : 0.00	Length:39071	Length:39071	Min. : 1.00
1st Qu.:79.00	Class :character	Class :character	1st Qu.: 1.00

Median :92.00	Mode :character	Mode :character	Median : 1.00
Mean :81.95			Mean :22.26
3rd Qu.:92.00			3rd Qu.:51.00
Max. :93.00			Max. :99.00
NA's :16176			NA's :16176
m4ac6	m4ac7	m4ac8	m4ac9
Min. : 1.000	Min. : 1.00	Min. : 1.000	Min. : -1.00
1st Qu.: 8.000	1st Qu.:20.00	1st Qu.: 6.000	1st Qu.: 3.00
Median :11.000	Median :23.00	Median : 8.000	Median : 9.00
Mean : 9.909	Mean :22.15	Mean : 6.928	Mean :12.52
3rd Qu.:12.000	3rd Qu.:26.00	3rd Qu.: 8.000	3rd Qu.:20.00
Max. :12.000	Max. :31.00	Max. :20.000	Max. :70.00
NA's :16176	NA's :16176	NA's :16176	NA's :16176
m4ac10a	m4ac10b	m4ac11	m4ac12a
Min. : 1.00	Min. : 1.00	Min. : 180	Min. : -2.0
1st Qu.:2.00	1st Qu.:1.00	1st Qu.: 5120	1st Qu.: 0.0
Median :2.00	Median :1.00	Median : 9420	Median : 50.0
Mean :2.61	Mean :1.36	Mean : 11426	Mean : 458.8
3rd Qu.:3.00	3rd Qu.:2.00	3rd Qu.: 15000	3rd Qu.: 350.0
Max. :7.00	Max. :2.00	Max. :480000	Max. :31000.0
NA's :16176	NA's :36805	NA's :31980	NA's :31980
m4ac12b	m4ac12c	m4ac12d	m4ac12e
Min. : -2.00	Min. : -2.00	Min. : -2.00	Min. : -2.0
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.0
Median : 0.00	Median : 0.00	Median : 0.00	Median : 0.0
Mean : 7.89	Mean : 18.02	Mean : 93.37	Mean : 654.2
3rd Qu.: 0.00	3rd Qu.: 0.00	3rd Qu.: 0.00	3rd Qu.: 500.0
Max. :6800.00	Max. :9000.00	Max. :33390.00	Max. :39000.0
NA's :31980	NA's :31980	NA's :31980	NA's :31980
m4ac12f	m4ac13	m4ac14m	m4ac14
Min. : 0	Min. :1.000	Length:39071	Min. : 0.00
1st Qu.: 0	1st Qu.:1.000	Class :character	1st Qu.:92.00
Median : 200	Median :2.000	Mode :character	Median :92.00
Mean : 1241	Mean :1.601		Mean :87.25
3rd Qu.: 1370	3rd Qu.:2.000		3rd Qu.:92.00
Max. :84730	Max. :2.000		Max. :93.00
NA's :31980	NA's :16176		NA's :29933
m4ac15c	m4ac15m	m4ac15	m4ac16
Length:39071	Length:39071	Min. : 1.00	Min. : 1.000
Class :character	Class :character	1st Qu.: 1.00	1st Qu.: 3.000
Mode :character	Mode :character	Median : 1.00	Median : 6.000
		Mean :14.08	Mean : 6.625
		3rd Qu.:15.00	3rd Qu.:11.000
		Max. :95.00	Max. :12.000
		NA's :29933	NA's :29933
m4ac17	m4ac18	m4ac19	m4ac20
Min. : -1.00	Min. : 1.000	Min. : -1.000	Min. : 1.000
1st Qu.:10.00	1st Qu.: 3.000	1st Qu.: 3.000	1st Qu.:2.000
Median :17.00	Median : 5.000	Median : 6.000	Median :2.000
Mean :16.88	Mean : 5.377	Mean : 9.856	Mean :2.352
3rd Qu.:25.00	3rd Qu.: 8.000	3rd Qu.:15.000	3rd Qu.:3.000
Max. :31.00	Max. :15.000	Max. :56.000	Max. :7.000
NA's :29933	NA's :29933	NA's :29933	NA's :29933
m4ac21	m4ac22a	m4ac22b	m4ac22c
Min. : 50	Min. : -2.00	Min. : -2.00	Min. :0
1st Qu.: 1200	1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.:0

Median : 2080	Median : 0.00	Median : 0.00	Median : 0
Mean : 2684	Mean : 11.54	Mean : 0.06	Mean : 0
3rd Qu. : 3500	3rd Qu. : 0.00	3rd Qu. : 0.00	3rd Qu. : 0
Max. : 36000	Max. : 3000.00	Max. : 100.00	Max. : 0
NA's : 36708	NA's : 36708	NA's : 36708	NA's : 36708
m4ac22d	m4ac22e	m4ac22f	m4ac23
Min. : 0.0	Min. : -2.00	Min. : 0.00	Min. : 1.000
1st Qu. : 0.0	1st Qu. : 0.00	1st Qu. : 0.00	1st Qu. : 1.000
Median : 0.0	Median : 0.00	Median : 0.00	Median : 2.000
Mean : 2.9	Mean : 47.26	Mean : 62.09	Mean : 1.748
3rd Qu. : 0.0	3rd Qu. : 0.00	3rd Qu. : 0.00	3rd Qu. : 2.000
Max. : 1440.0	Max. : 3000.00	Max. : 3656.00	Max. : 2.000
NA's : 36708	NA's : 36708	NA's : 36708	NA's : 29933
m4ac24	m4ac25	m4ac26	m4ac27
Min. : 1.00	Min. : 100	Min. : 1.000	Min. : 1.000
1st Qu. : 2.00	1st Qu. : 600	1st Qu. : 1.000	1st Qu. : 1.000
Median : 2.00	Median : 1200	Median : 1.000	Median : 2.000
Mean : 1.82	Mean : 1498	Mean : 1.319	Mean : 1.875
3rd Qu. : 2.00	3rd Qu. : 2000	3rd Qu. : 2.000	3rd Qu. : 2.000
Max. : 2.00	Max. : 9150	Max. : 2.000	Max. : 10.000
NA's : 36764	NA's : 38646	NA's : 2896	NA's : 14440
ID	wt	xaid	PID
Length:39071	Min. : 467.2	Length:39071	Length:39071
Class :character	1st Qu.:1629.8	Class :character	Class :character
Mode :character	Median :2006.0	Mode :character	Mode :character
	Mean :2111.1		
	3rd Qu.:2470.8		
	Max. :4637.7		

muc4b0

tin	huyen	xa	diaban
Length:24080	Length:24080	Length:24080	Length:24080
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b0ma	m4b0c3a	m4b0c3b
Min. :13.00	Min. : 1.000	Min. : -1.000	Min. : 10.0
1st Qu.:13.00	1st Qu. : 1.000	1st Qu. : 1.000	1st Qu. : 318.8
Median :14.00	Median : 3.000	Median : 1.000	Median : 648.5
Mean :14.48	Mean : 3.262	Mean : 1.243	Mean : 2390.8
3rd Qu.:15.00	3rd Qu. : 4.000	3rd Qu. : 1.000	3rd Qu. : 1760.0
Max. :25.00	Max. :15.000	Max. :96.000	Max. :396000.0

m4b0c4	m4b0c5	m4b0c6	m4b0c7
Min. :1.000	Min. :1.00	Min. : 1.000	Min. : 1.0
1st Qu.:1.000	1st Qu.:1.00	1st Qu. : 1.000	1st Qu. : 140.0
Median :1.000	Median :2.00	Median : 1.000	Median : 300.0
Mean :1.813	Mean :2.09	Mean : 2.359	Mean : 851.6
3rd Qu.:2.000	3rd Qu.:3.00	3rd Qu. : 3.000	3rd Qu. : 750.0
Max. :8.000	Max. :9.00	Max. :10.000	Max. :40000.0
	NA's :4185		NA's :23030

m4b0c8	m4b0c9	m4b0c10	m4b0c11
Min. : -1	Min. : 1.000	Min. : 1.000	Min. : 7
1st Qu.: 1990	1st Qu.: 1.000	1st Qu.: 1.000	1st Qu.: 225
Median : 1993	Median : 1.000	Median : 2.000	Median : 460
Mean : 1991	Mean : 1.054	Mean : 2.333	Mean : 1434
3rd Qu.: 1999	3rd Qu.: 1.000	3rd Qu.: 4.000	3rd Qu.: 1004
Max. : 2006	Max. : 2.000	Max. : 5.000	Max. : 36000
		NA's : 22787	NA's : 23513

ID	wt	xaid
Length: 24080	Min. : 467.2	Length: 24080
Class : character	1st Qu.: 1593.5	Class : character
Mode : character	Median : 1973.4	Mode : character
	Mean : 2036.1	
	3rd Qu.: 2424.7	
	Max. : 4632.5	

muc4b11

tin	huyen	xa	diaban
Length: 14961	Length: 14961	Length: 14961	Length: 14961
Class : character	Class : character	Class : character	Class : character
Mode : character	Mode : character	Mode : character	Mode : character

hoso	m4b11ma	m4b11c3	m4b11c4
Min. : 13.00	Min. : 1.000	Min. : 24	Min. : 15
1st Qu.: 13.00	1st Qu.: 1.000	1st Qu.: 1198	1st Qu.: 550
Median : 14.00	Median : 3.000	Median : 2345	Median : 1100
Mean : 14.48	Mean : 3.389	Mean : 4506	Mean : 2169
3rd Qu.: 15.00	3rd Qu.: 5.000	3rd Qu.: 4500	3rd Qu.: 2080
Max. : 25.00	Max. : 7.000	Max. : 291600	Max. : 183000

m4b11c5	m4b11c6	m4b11c7	m4b11c8
Min. : 0.000	Min. : 1.000	Min. : 5	Min. : 23
1st Qu.: 0.000	1st Qu.: 1.000	1st Qu.: 300	1st Qu.: 750
Median : 0.000	Median : 1.000	Median : 700	Median : 1800
Mean : 3.031	Mean : 1.481	Mean : 2347	Mean : 5523
3rd Qu.: 0.000	3rd Qu.: 2.000	3rd Qu.: 2000	3rd Qu.: 4737
Max. : 800.000	Max. : 2.000	Max. : 143338	Max. : 325528
		NA's : 7191	NA's : 7191

m4b11c9	m4b11c10	m4b11c11	m4b11c12
Min. : 1.000	Min. : 0.00	Min. : 0.0	Min. : 0.0
1st Qu.: 3.000	1st Qu.: 0.00	1st Qu.: 180.0	1st Qu.: 0.0
Median : 3.000	Median : 0.00	Median : 410.0	Median : 0.0
Mean : 3.219	Mean : 53.34	Mean : 505.1	Mean : 127.3
3rd Qu.: 3.000	3rd Qu.: 40.00	3rd Qu.: 720.0	3rd Qu.: 144.0
Max. : 9.000	Max. : 4800.00	Max. : 5768.0	Max. : 11500.0
NA's : 7191			

m4b11c13	m4b11c14	m4b11c15	ID
Min. : 0.00	Min. : 0.0	Min. : 50	Length: 14961
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 1400	Class : character
Median : 0.00	Median : 40.0	Median : 2793	Mode : character
Mean : 33.96	Mean : 213.7	Mean : 5232	

3rd Qu.: 0.00 3rd Qu.: 280.0 3rd Qu.: 5220
 Max.: 23200.00 Max.: 14400.0 Max.: 383600

wt xaid
 Min.: 467.2 Length:14961
 1st Qu.:1650.5 Class :character
 Median :2006.5 Mode :character
 Mean :2073.6
 3rd Qu.:2485.9
 Max.: 4632.5

muc4b12

tin	huyen	xa	diaban
Length:15499	Length:15499	Length:15499	Length:15499
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b12ma	m4b12c3	m4b12c4
Min.: 13.00	Min.: 8.00	Min.: -1.0	Min.: 0.0
1st Qu.:13.00	1st Qu.:10.00	1st Qu.: 24.0	1st Qu.: 40.0
Median :14.00	Median :15.00	Median : 99.0	Median : 100.0
Mean :14.43	Mean :14.33	Mean : 717.4	Mean : 720.5
3rd Qu.:15.00	3rd Qu.:18.00	3rd Qu.: 360.0	3rd Qu.: 350.0
Max.: 25.00	Max.: 21.00	Max.: 120000.0	Max.: 240000.0
			NA's :3719

m4b12c5	m4b12c6	m4b12c7	m4b12c8
Min.: 0.0	Min.: -1	Min.: 0.0	Min.: 0.0
1st Qu.: 0.0	1st Qu.: 0	1st Qu.: 20.0	1st Qu.: 60.0
Median : 0.0	Median : 120	Median : 50.0	Median : 150.0
Mean : 528.4	Mean : 1277	Mean : 184.1	Mean : 837.2
3rd Qu.: 60.0	3rd Qu.: 675	3rd Qu.: 150.0	3rd Qu.: 480.0
Max.: 240000.0	Max.: 100000	Max.: 22500.0	Max.: 100000.0
NA's :3895	NA's :8193	NA's :3895	

ID	wt	xaid
Length:15499	Min.: 467.2	Length:15499
Class :character	1st Qu.:1468.9	Class :character
Mode :character	Median :1869.7	Mode :character
	Mean :1919.7	
	3rd Qu.:2326.0	
	Max.: 4632.5	

muc4b13

tin	huyen	xa	diaban
Length:3932	Length:3932	Length:3932	Length:3932
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b13ma	m4b13c3a	m4b13c3b
Min. :13.00	Min. :22.00	Min. : 1	Min. :1.000
1st Qu.:13.00	1st Qu.:23.00	1st Qu.: 72	1st Qu.:1.000
Median :14.00	Median :30.00	Median : 400	Median :1.000
Mean :14.45	Mean :28.61	Mean : 2413	Mean :1.225
3rd Qu.:15.00	3rd Qu.:34.00	3rd Qu.: 1800	3rd Qu.:1.000
Max. :25.00	Max. :38.00	Max. :100000	Max. :2.000

m4b13c4	m4b13c5	m4b13c6	m4b13c7
Min. : 1	Min. : 0	Min. : 0	Min. : 0.00
1st Qu.: 50	1st Qu.: 10	1st Qu.: 272	1st Qu.: 0.00
Median : 150	Median : 100	Median : 900	Median : 10.00
Mean : 2224	Mean : 2148	Mean : 6937	Mean : 55.53
3rd Qu.: 620	3rd Qu.: 500	3rd Qu.: 3900	3rd Qu.: 35.00
Max. :420000	Max. :420000	Max. :816000	Max. :20000.00
NA's :236	NA's :236	NA's :855	NA's :236

m4b13c8	ID	wt	xaid
Min. : 4	Length:3932	Min. : 467.2	Length:3932
1st Qu.: 210	Class :character	1st Qu.:1573.8	Class :character
Median : 601	Mode :character	Median :1952.2	Mode :character
Mean : 5605		Mean :1992.7	
3rd Qu.: 2676		3rd Qu.:2350.8	
Max. :816000		Max. :4632.5	

muc4b14

tin	huyen	xa	diaban
Length:9791	Length:9791	Length:9791	Length:9791
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b14ma	m4b14c3a	m4b14c3b
Min. :13.00	Min. :39.00	Min. : -1.0	Min. :1.000
1st Qu.:13.00	1st Qu.:41.00	1st Qu.: 2.0	1st Qu.:2.000
Median :14.00	Median :45.00	Median : 5.0	Median :2.000
Mean :14.46	Mean :44.99	Mean : 179.5	Mean :1.866
3rd Qu.:15.00	3rd Qu.:49.00	3rd Qu.: 15.0	3rd Qu.:2.000
Max. :25.00	Max. :55.00	Max. :24000.0	Max. :2.000

m4b14c4	m4b14c5	m4b14c6	m4b14c7
Min. : 1.0	Min. : 0.0	Min. : 0	Min. : 0.00
1st Qu.: 20.0	1st Qu.: 0.0	1st Qu.: 56	1st Qu.: 10.00
Median : 50.0	Median : 0.0	Median : 160	Median : 22.00
Mean : 228.3	Mean : 186.7	Mean : 1757	Mean : 40.49
3rd Qu.: 120.0	3rd Qu.: 60.0	3rd Qu.: 500	3rd Qu.: 50.00
Max. :50300.0	Max. :50000.0	Max. :2000000	Max. :1000.00
NA's :1287	NA's :1287	NA's :4698	NA's :1287

m4b14c8	ID	wt	xaid
Min. : 1	Length:9791	Min. : 467.2	Length:9791
1st Qu.: 50	Class :character	1st Qu.:1589.5	Class :character
Median : 120	Mode :character	Median :1958.2	Mode :character

Mean : 1032	Mean : 1995.1
3rd Qu. : 300	3rd Qu. : 2351.7
Max. : 2000000	Max. : 4627.3

muc4b15

tin	huyen	xa	diaban
Length:8379	Length:8379	Length:8379	Length:8379
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b15ma	m4b15c2	m4b15c3
Min. :13.00	Min. :1.000	Min. : 0.0	Min. : 0.00
1st Qu.:13.00	1st Qu.:1.000	1st Qu. : 0.0	1st Qu. : 0.00
Median :14.00	Median :2.000	Median : 0.0	Median : 0.00
Mean :14.46	Mean :3.538	Mean : 27.3	Mean : 81.61
3rd Qu.:15.00	3rd Qu.:8.000	3rd Qu. : 0.0	3rd Qu. : 100.00
Max. :24.00	Max. :9.000	Max. :15000.0	Max. :4870.00
			NA's :1479

m4b15c4	m4b15c5	ID	wt
Min. : 0.0	Min. : 2.0	Length:8379	Min. : 467.2
1st Qu.: 0.0	1st Qu.: 60.0	Class :character	1st Qu.:1658.7
Median : 50.0	Median : 130.0	Mode :character	Median :2007.5
Mean : 122.3	Mean : 216.8		Mean :2083.6
3rd Qu.: 150.0	3rd Qu.: 280.0		3rd Qu.:2465.0
Max. :4080.0	Max. :15000.0		Max. :4632.5

xaid
Length:8379
Class :character
Mode :character

muc4b16

tin	huyen	xa	diaban
Length:52513	Length:52513	Length:52513	Length:52513
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b16ma	m4b16c2a	m4b16c2b
Min. :13.00	Min. : 1.000	Min. : -2.0	Min. : -2.00
1st Qu.:13.00	1st Qu. : 3.000	1st Qu. : 15.0	1st Qu. : 0.00
Median :14.00	Median : 7.000	Median : 96.0	Median : 0.00
Mean :14.49	Mean : 8.313	Mean : 356.6	Mean : 78.85
3rd Qu.:15.00	3rd Qu.:13.000	3rd Qu. : 289.0	3rd Qu. : 30.00
Max. :25.00	Max. :19.000	Max. :59500.0	Max. :29570.00

m4b16c2c	m4b16c2d	m4b16c2e	ID
Min. : -2.0	Min. : -2	Min. : 1.0	Length:52513
1st Qu.: 0.0	1st Qu.: 0	1st Qu.: 65.0	Class :character
Median : 0.0	Median : 0	Median : 190.0	Mode :character
Mean : 162.3	Mean : 75	Mean : 673.1	
3rd Qu.: 0.0	3rd Qu.: 0	3rd Qu.: 500.0	
Max. :91500.0	Max. :1600000	Max. :1600000.0	

wt	xaid
Min. : 467.2	Length:52513
1st Qu.:1668.3	Class :character
Median :2018.4	Mode :character
Mean :2078.1	
3rd Qu.:2462.0	
Max. :4632.5	

```
#### muc4b161 #####
      tinh      huyen      xa      diaban
Length:16592    Length:16592    Length:16592    Length:16592
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character Mode :character
```

hoso	m4b161ma	m4b161c2	m4b161c3
Min. :13.0	Min. :1.000	Min. : -1.0	Min. : -1.0
1st Qu.:13.0	1st Qu.:1.000	1st Qu.: 12.0	1st Qu.: 0.0
Median :14.0	Median :2.000	Median : 50.0	Median : 0.0
Mean :14.5	Mean :2.534	Mean : 108.1	Mean : 25.3
3rd Qu.:15.0	3rd Qu.:4.000	3rd Qu.: 120.0	3rd Qu.: 17.0
Max. :25.0	Max. :5.000	Max. :11500.0	Max. :4400.0

m4b161c4	m4b161c5	m4b161c6	ID
Min. : -1.00	Min. : -1.00	Min. : 1.0	Length:16592
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 40.0	Class :character
Median : 0.00	Median : 0.00	Median : 95.0	Mode :character
Mean : 56.11	Mean : 10.99	Mean : 200.6	
3rd Qu.: 3.00	3rd Qu.: 0.00	3rd Qu.: 200.0	
Max. :15000.00	Max. :3000.00	Max. :15500.0	

wt	xaid
Min. : 467.2	Length:16592
1st Qu.:1703.5	Class :character
Median :2032.8	Mode :character
Mean :2097.2	
3rd Qu.:2477.1	
Max. :4632.5	

```
#### muc4b21 #####
      tinh      huyen      xa      diaban
Length:16577    Length:16577    Length:16577    Length:16577
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character Mode :character
```

hoso	m4b21ma	m4b21c3a	m4b21c3b
Min. :13.00	Min. : 1.000	Min. : 0.0	Min. : 0
1st Qu.:13.00	1st Qu.: 5.000	1st Qu.: 0.0	1st Qu.: 375
Median :14.00	Median : 6.000	Median : 20.0	Median : 1320
Mean :14.48	Mean : 8.357	Mean : 320.8	Mean : 4141
3rd Qu.:15.00	3rd Qu.:12.000	3rd Qu.: 158.0	3rd Qu.: 3600
Max. :24.00	Max. :18.000	Max. :660000.0	Max. :660000
		NA's :3652	NA's :7267

m4b21c4a	m4b21c4b	m4b21c5a	m4b21c5b
Min. : 0.00	Min. : 0	Min. : 0.00	Min. : 0.0
1st Qu.: 0.00	1st Qu.: 80	1st Qu.: 0.00	1st Qu.: 0.0
Median : 10.00	Median : 225	Median : 0.00	Median : 0.0
Mean : 33.95	Mean : 393	Mean : 23.39	Mean : 526.2
3rd Qu.: 30.00	3rd Qu.: 500	3rd Qu.: 0.00	3rd Qu.: 120.0
Max. :5200.00	Max. :93600	Max. :207930.00	Max. :228723.0
NA's :4218	NA's :7103	NA's :4218	NA's :14137

m4b21c6a	m4b21c6b	ID	wt
Min. : 0.0	Min. : 3	Length:16577	Min. : 467.2
1st Qu.: 20.0	1st Qu.: 210	Class :character	1st Qu.:1557.0
Median : 70.0	Median : 600	Mode :character	Median :1952.9
Mean : 375.7	Mean : 2684		Mean :2007.9
3rd Qu.: 200.0	3rd Qu.: 2080		3rd Qu.:2402.5
Max. :660300.0	Max. :660300		Max. :4632.5
NA's :3652			

xaid
 Length:16577
 Class :character
 Mode :character

muc4b22

tin	huyen	xa	diaban
Length:10222	Length:10222	Length:10222	Length:10222
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b22ma	m4b22c7	m4b22c8
Min. :13.00	Min. : 1.000	Min. : 0.0	Min. : 0
1st Qu.:13.00	1st Qu.: 1.000	1st Qu.: 25.0	1st Qu.: 125
Median :14.00	Median : 5.000	Median : 100.0	Median : 370
Mean :14.48	Mean : 3.937	Mean : 741.6	Mean : 1761
3rd Qu.:15.00	3rd Qu.: 5.000	3rd Qu.: 400.0	3rd Qu.: 1200
Max. :24.00	Max. :10.000	Max. :100000.0	Max. :400000

m4b22c9	m4b22c10	m4b22c11
Min. : 0.00	Min. : -2.00	Min. : -2.00
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.00
Median : 10.00	Median : 0.00	Median : 0.00
Mean : 56.42	Mean : 81.13	Mean : 80.53
3rd Qu.: 35.00	3rd Qu.: 70.00	3rd Qu.: 50.00
Max. :24000.00	Max. :13800.00	Max. :14000.00

m4b22c12	m4b22c13	m4b22c14	m4b22c15
Min. : 0.000	Min. : 0.000	Min. : 0.00	Min. : 0.0
1st Qu.: 0.000	1st Qu.: 0.000	1st Qu.: 0.00	1st Qu.: 0.0
Median : 0.000	Median : 0.000	Median : 0.00	Median : 0.0
Mean : 1.558	Mean : 1.252	Mean : 9.53	Mean : 12.7
3rd Qu.: 0.000	3rd Qu.: 0.000	3rd Qu.: 0.00	3rd Qu.: 0.0
Max. : 10000.000	Max. : 3200.000	Max. : 36000.00	Max. : 7640.0

m4b22c16	m4b22c17	m4b22c18	ID
Min. : 0.0000	Min. : -2.00	Min. : 5.0	Length:10222
1st Qu.: 0.0000	1st Qu.: 0.00	1st Qu.: 217.2	Class :character
Median : 0.0000	Median : 10.00	Median : 628.0	Mode :character
Mean : 0.1379	Mean : 30.91	Mean : 2777.3	
3rd Qu.: 0.0000	3rd Qu.: 30.00	3rd Qu.: 2070.0	
Max. : 1000.0000	Max. : 9000.00	Max. : 550720.0	

wt	xaid
Min. : 467.2	Length:10222
1st Qu.:1575.1	Class :character
Median :1951.4	Mode :character
Mean :2011.4	
3rd Qu.:2401.6	
Max. :4632.5	

```
#### muc4b31 #####
      tinh      huyen      xa      diaban
Length:279      Length:279      Length:279      Length:279
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character Mode :character
```

hoso	m4b31ma	m4b31c3	m4b31c4
Min. :13.00	Min. :1.000	Min. : 1.000	Min. : 60
1st Qu.:13.00	1st Qu.:1.000	1st Qu.: 2.000	1st Qu.: 750
Median :14.00	Median :1.000	Median : 3.000	Median : 1750
Mean :14.39	Mean :2.183	Mean : 3.563	Mean : 3097
3rd Qu.:15.00	3rd Qu.:4.000	3rd Qu.: 4.000	3rd Qu.: 3500
Max. :24.00	Max. :5.000	Max. :12.000	Max. :52360

m4b31c5	ID	wt	xaid
Min. : 100	Length:279	Min. : 652.7	Length:279
1st Qu.: 2180	Class :character	1st Qu.:1698.8	Class :character
Median : 5250	Mode :character	Median :2006.5	Mode :character
Mean : 10830		Mean :2051.6	
3rd Qu.: 10100		3rd Qu.:2383.8	
Max. :471240		Max. :3674.1	

```
#### muc4b32 #####
      tinh      huyen      xa      diaban
Length:277      Length:277      Length:277      Length:277
Class :character Class :character Class :character Class :character
Mode :character  Mode :character  Mode :character Mode :character
```

hoso	m4b31ma	m4b32c7	m4b32c8

Min. :13.0	Min. :1.000	Min. : 0	Min. : 0.0
1st Qu.:13.0	1st Qu.:1.000	1st Qu.: 0	1st Qu.: 0.0
Median :14.0	Median :1.000	Median : 0	Median : 50.0
Mean :14.4	Mean :2.181	Mean : 1332	Mean : 121.1
3rd Qu.:15.0	3rd Qu.:4.000	3rd Qu.: 30	3rd Qu.: 100.0
Max. :24.0	Max. :5.000	Max. :315000	Max. :6750.0

m4b32c9	m4b32c10	m4b32c11	m4b32c12
Min. : -2	Min. : -2.0	Min. : 0.0	Min. : 0.000
1st Qu.: 0	1st Qu.: 0.0	1st Qu.: 100.0	1st Qu.: 0.000
Median : 850	Median : 100.0	Median : 300.0	Median : 0.000
Mean : 2340	Mean : 332.2	Mean : 592.7	Mean : 3.466
3rd Qu.: 2410	3rd Qu.: 300.0	3rd Qu.: 750.0	3rd Qu.: 0.000
Max. :92500	Max. :27000.0	Max. :10000.0	Max. :600.000

m4b32c13	m4b32c14	m4b32c15	m4b32c16
Min. : 0.0	Min. : 0.0	Min. : 0.00	Min. : -2.00
1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 0.00	1st Qu.: 0.00
Median : 0.0	Median : 0.0	Median : 0.00	Median : 0.00
Mean : 934.6	Mean : 126.3	Mean : 25.27	Mean : 75.52
3rd Qu.: 0.0	3rd Qu.: 0.0	3rd Qu.: 0.00	3rd Qu.: 0.00
Max. :43200.0	Max. :18000.0	Max. :4500.00	Max. :11700.00

m4b32c17	ID	wt	xaid
Min. : 5	Length:277	Min. : 652.7	Length:277
1st Qu.: 470	Class :character	1st Qu.:1700.0	Class :character
Median : 1950	Mode :character	Median :2010.1	Mode :character
Mean : 5894		Mean :2054.9	
3rd Qu.: 4630		3rd Qu.:2384.3	
Max. :437895		Max. :3674.1	

```
#### muc4b41 #####
      tinh      huyen      xa      diaban
Length:3932    Length:3932    Length:3932    Length:3932
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hos0	m4b41ma	m4b41c3a	m4b41c3b
Min. :13.00	Min. : 1.00	Min. : -2.0	Min. : 0.00
1st Qu.:13.00	1st Qu.:10.00	1st Qu.: 0.0	1st Qu.: 0.00
Median :14.00	Median :11.00	Median : 0.0	Median : 0.00
Mean :14.45	Mean :10.44	Mean : 364.2	Mean : 34.88
3rd Qu.:15.00	3rd Qu.:11.00	3rd Qu.: 0.0	3rd Qu.: 0.00
Max. :24.00	Max. :15.00	Max. :105000.0	Max. :9000.00
		NA's :111	NA's :111

m4b41c3c	m4b41c3d	m4b41c3e	m4b41c3f
Min. : -2.00	Min. : -2.0	Min. : -2.0	Min. : 15
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 250
Median : 0.00	Median : 0.0	Median : 240.0	Median : 500
Mean : 59.08	Mean : 60.4	Mean : 552.9	Mean : 1061
3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 620.0	3rd Qu.: 1100
Max. :22500.00	Max. :6500.0	Max. :30000.0	Max. :105000
NA's :111	NA's :111	NA's :111	

m4b41c4	ID	wt	xaid
Min. : 0.0	Length:3932	Min. : 467.2	Length:3932

1st Qu. :	0.0	Class :character	1st Qu. :1244.9	Class :character
Median :	0.0	Mode :character	Median :1618.8	Mode :character
Mean :	494.9		Mean :1662.6	
3rd Qu. :	196.2		3rd Qu. :2030.3	
Max. :	105000.0		Max. :4632.5	

muc4b42

tin	huyen	xa	diaban
Length:2283	Length:2283	Length:2283	Length:2283
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hos	m4b42ma	m4b42c1	m4b42c2
Min. :13.00	Min. :1.000	Min. : 0.00	Min. : 0.00
1st Qu.:13.00	1st Qu.:1.000	1st Qu. : 0.00	1st Qu. : 0.00
Median :14.00	Median :1.000	Median : 0.00	Median : 0.00
Mean :14.48	Mean :1.107	Mean : 17.77	Mean : 11.02
3rd Qu.:15.00	3rd Qu.:1.000	3rd Qu. : 0.00	3rd Qu. : 0.00
Max. :24.00	Max. :3.000	Max. :4000.00	Max. :5500.00
		NA's :144	NA's :144

m4b42c3	m4b42c4	m4b42c5	m4b42c6
Min. : -2.00	Min. : 0.000	Min. : -2.000	Min. : -2.00
1st Qu. : 20.00	1st Qu. : 0.000	1st Qu. : 0.000	1st Qu. : 0.00
Median : 36.00	Median : 0.000	Median : 0.000	Median : 0.00
Mean : 54.41	Mean : 6.508	Mean : 4.122	Mean : 13.53
3rd Qu. : 60.00	3rd Qu. : 0.000	3rd Qu. : 0.000	3rd Qu. : 0.00
Max. :1300.00	Max. :1800.000	Max. :450.000	Max. :1500.00

m4b42c7	m4b42c8	m4b42c9	m4b42c10
Min. : 0.0000	Min. : 0.00	Min. : 0.000	Min. : 0.00
1st Qu. : 0.0000	1st Qu. : 0.00	1st Qu. : 0.000	1st Qu. : 0.00
Median : 0.0000	Median : 0.00	Median : 0.000	Median : 0.00
Mean : 0.2887	Mean : 12.27	Mean : 3.374	Mean : 31.75
3rd Qu. : 0.0000	3rd Qu. : 0.00	3rd Qu. : 0.000	3rd Qu. : 0.00
Max. :300.0000	Max. :3000.00	Max. :1200.000	Max. :9000.00

m4b42c11	m4b42c12	m4b42c13	m4b42c14
Min. : 0.0000	Min. : 0.0000	Min. : -2.00	Min. : 0.0
1st Qu. : 0.0000	1st Qu. : 0.0000	1st Qu. : 0.00	1st Qu. : 25.0
Median : 0.0000	Median : 0.0000	Median : 0.00	Median : 50.0
Mean : 0.2698	Mean : 0.6592	Mean : 25.13	Mean : 179.4
3rd Qu. : 0.0000	3rd Qu. : 0.0000	3rd Qu. : 0.00	3rd Qu. : 120.0
Max. :340.0000	Max. :1200.0000	Max. :6000.00	Max. :16500.0

ID	wt	xaid
Length:2283	Min. : 467.2	Length:2283
Class :character	1st Qu. :1328.2	Class :character
Mode :character	Median :1724.2	Mode :character
	Mean :1750.3	
	3rd Qu. :2077.8	
	Max. :4632.5	

muc4b51

tin	huyen	xa	diaban
Length:3653	Length:3653	Length:3653	Length:3653
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b51ma	m4b51c3a	m4b51c3b
Min. :13.0	Min. : 1.00	Min. : 0.0	Min. : 0
1st Qu.:13.0	1st Qu.:11.00	1st Qu.: 0.0	1st Qu.: 100
Median :14.0	Median :14.00	Median : 10.0	Median : 800
Mean :14.5	Mean :16.49	Mean : 469.6	Mean : 12996
3rd Qu.:15.0	3rd Qu.:21.00	3rd Qu.: 120.0	3rd Qu.: 4000
Max. :24.0	Max. :23.00	Max. :276350.0	Max. :3288565
		NA's :845	NA's :1336

m4b51c4a	m4b51c4b	m4b51c5a	m4b51c5b
Min. : 0.00	Min. : 0	Min. : 0.000	Min. : 0.00
1st Qu.: 10.00	1st Qu.: 120	1st Qu.: 0.000	1st Qu.: 0.00
Median : 30.00	Median : 300	Median : 0.000	Median : 0.00
Mean : 50.11	Mean : 527	Mean : 1.895	Mean : 58.86
3rd Qu.: 60.00	3rd Qu.: 600	3rd Qu.: 0.000	3rd Qu.: 0.00
Max. :1200.00	Max. :12000	Max. :900.000	Max. :3800.00
NA's :847	NA's :149	NA's :850	NA's :2742

m4b51c6a	m4b51c6b	ID	wt
Min. : 1.0	Min. : 10	Length:3653	Min. : 467.2
1st Qu.: 25.0	1st Qu.: 210	Class :character	1st Qu.:1624.1
Median : 60.0	Median : 603	Mode :character	Median :1937.8
Mean : 522.4	Mean : 8763		Mean :1966.2
3rd Qu.: 200.0	3rd Qu.: 2400		3rd Qu.:2310.9
Max. :276450.0	Max. :3289755		Max. :4627.3
NA's :850			

xaid
Length:3653
Class :character
Mode :character

muc4b52

tin	huyen	xa	diaban
Length:2706	Length:2706	Length:2706	Length:2706
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4b52ma	m4b52c7	m4b52c8
Min. :13.00	Min. :1.000	Min. : 0	Min. : 0

1st Qu.:13.00	1st Qu.:1.000	1st Qu.: 0	1st Qu.: 0
Median :14.00	Median :1.000	Median : 20	Median : 0
Mean :14.48	Mean :1.462	Mean : 1197	Mean : 2408
3rd Qu.:15.00	3rd Qu.:2.000	3rd Qu.: 200	3rd Qu.: 100
Max. :24.00	Max. :3.000	Max. :790331	Max. :1755699
m4b52c9	m4b52c10	m4b52c11	m4b52c12
Min. : 0.0	Min. : 0	Min. : 0.0	Min. : 0.0
1st Qu.: 10.0	1st Qu.: 0	1st Qu.: 0.0	1st Qu.: 0.0
Median : 30.0	Median : 0	Median : 0.0	Median : 0.0
Mean : 135.5	Mean : 1477	Mean : 136.1	Mean : 337.9
3rd Qu.: 100.0	3rd Qu.: 5	3rd Qu.: 0.0	3rd Qu.: 50.0
Max. :16500.0	Max. :650000	Max. :66000.0	Max. :75000.0
m4b52c13	m4b52c14	m4b52c15	m4b52c16
Min. : 0.0	Min. : 0.00	Min. : 0.0	Min. : 0.0
1st Qu.: 0.0	1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.0
Median : 0.0	Median : 0.00	Median : 0.0	Median : 0.0
Mean : 102.5	Mean : 55.58	Mean : 872.7	Mean : 160.3
3rd Qu.: 0.0	3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 0.0
Max. :48000.0	Max. :20500.00	Max. :331200.0	Max. :72000.0
m4b52c17	m4b52c18	m4b52c19	ID
Min. : 0.00	Min. : 0.0	Min. : 1.0	Length:2706
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 60.0	Class :character
Median : 0.00	Median : 0.0	Median : 200.0	Mode :character
Mean : 14.24	Mean : 257.3	Mean : 7154.8	
3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 778.8	
Max. :8975.00	Max. :130116.0	Max. :2763394.0	
wt	xaid		
Min. : 467.2	Length:2706		
1st Qu.:1634.4	Class :character		
Median :1944.0	Mode :character		
Mean :1978.2			
3rd Qu.:2335.2			
Max. :4627.3			

muc4c

tin	huyen	xa	diaban
Length:4379	Length:4379	Length:4379	Length:4379
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m4c1ma	m4c1c2	m4c1c3
Min. :13.00	Min. :1.000	Min. :10.00	Min. : 1.00
1st Qu.:13.00	1st Qu.:1.000	1st Qu.:26.00	1st Qu.: 1.00
Median :14.00	Median :1.000	Median :52.00	Median : 2.00
Mean :14.65	Mean :1.223	Mean :45.49	Mean : 1.81
3rd Qu.:15.00	3rd Qu.:1.000	3rd Qu.:55.00	3rd Qu.: 2.00
Max. :25.00	Max. :4.000	Max. :93.00	Max. :99.00

m4c1c4	m4c1c5	m4c1c6	m4c1c7
Min. : 1.00	Min. : 1.00	Min. :1.000	Min. : -1.000
1st Qu.:10.00	1st Qu.:20.00	1st Qu.:1.000	1st Qu.: 2.000
Median :12.00	Median :25.00	Median :1.000	Median : 2.000

Mean :10.22	Mean :23.44	Mean :1.012	Mean : 2.755
3rd Qu.:12.00	3rd Qu.:28.00	3rd Qu.:1.000	3rd Qu.: 2.000
Max. :12.00	Max. :30.00	Max. :2.000	Max. :15.000
			NA's :4326

m4c1c8	m4c1c9a	m4c1c9b	m4c1c9c
Min. : 10.00	Min. :1.000	Min. :0.0000	Min. :0.000
1st Qu.:100.00	1st Qu.:1.000	1st Qu.:0.0000	1st Qu.:0.000
Median :100.00	Median :1.000	Median :0.0000	Median :0.000
Mean : 99.34	Mean :2.947	Mean :0.3518	Mean :1.052
3rd Qu.:100.00	3rd Qu.:5.000	3rd Qu.:0.0000	3rd Qu.:0.000
Max. :100.00	Max. :9.000	Max. :7.0000	Max. :7.000
		NA's :1	NA's :4030

m4c1c10	m4c1c11	m4c1c12	m4c1c13
Min. : 1.000	Min. :0.000	Min. : 0.000	Min. :0.00000
1st Qu.: 1.000	1st Qu.:1.000	1st Qu.: 0.000	1st Qu.:0.00000
Median : 1.000	Median :1.000	Median : 0.000	Median :0.00000
Mean : 1.645	Mean :1.317	Mean : 0.343	Mean :0.06303
3rd Qu.: 2.000	3rd Qu.:2.000	3rd Qu.: 0.000	3rd Qu.:0.00000
Max. :36.000	Max. :8.000	Max. :34.000	Max. :5.00000

m4c1c14	m4c1c15	m4c1c16	m4c1c17
Min. : -1	Min. :1.000	Min. :1.000	Min. : 0
1st Qu.:1996	1st Qu.:3.000	1st Qu.:1.000	1st Qu.: 680
Median :2000	Median :3.000	Median :1.000	Median : 1380
Mean :1997	Mean :2.746	Mean :1.044	Mean : 3768
3rd Qu.:2003	3rd Qu.:3.000	3rd Qu.:1.000	3rd Qu.: 3000
Max. :2006	Max. :3.000	Max. :2.000	Max. :583000
		NA's :1896	NA's :109

m4c1c18	m4c1c19	m4c1c20	m4c1c21
Min. : 0	Min. :1.000	Min. : 7	Min. :1.000
1st Qu.: 6035	1st Qu.:2.000	1st Qu.: 215	1st Qu.:1.000
Median : 13978	Median :2.000	Median : 460	Median :2.000
Mean : 40622	Mean :1.987	Mean :1192	Mean :1.674
3rd Qu.: 30570	3rd Qu.:2.000	3rd Qu.:1500	3rd Qu.:2.000
Max. :6996000	Max. :2.000	Max. :5800	Max. :2.000
NA's :109	NA's :2005	NA's :4348	NA's :1896

m4c1c22	m4c1c23	m4c1c24	m4c1c25
Min. : 4.0	Min. :1.00	Min. : 6	Min. : 0
1st Qu.: 120.0	1st Qu.:2.00	1st Qu.: 200	1st Qu.: 6000
Median : 300.0	Median :2.00	Median : 500	Median : 13500
Mean : 705.9	Mean :1.83	Mean :1222	Mean : 39958
3rd Qu.: 657.5	3rd Qu.:2.00	3rd Qu.:1200	3rd Qu.: 30000
Max. :26625.0	Max. :2.00	Max. :24500	Max. :6996000
NA's :3569		NA's :3633	

m4c1c25a	ID	wt	xaid
Min. : 0	Length:4379	Min. : 473.1	Length:4379
1st Qu.: 6000	Class :character	1st Qu.:1672.1	Class :character
Median : 13440	Mode :character	Median :2032.6	Mode :character
Mean : 39099		Mean :2181.7	
3rd Qu.: 30000		3rd Qu.:2538.8	
Max. :6996000		Max. :4637.7	

```
#### muc4c2 #####
      tinh          huyen          xa          diaban
```


Length:29333	Length:29333	Length:29333	Length:29333
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hos0	m4c1ma	m4c2c26	m4c2c27
Min. :13.00	Min. :1.000	Min. : 1.00	Min. : -1.0
1st Qu.:13.00	1st Qu.:1.000	1st Qu.: 3.00	1st Qu.: 15.0
Median :14.00	Median :1.000	Median : 7.00	Median : 42.0
Mean :14.65	Mean :1.208	Mean : 8.89	Mean : 475.9
3rd Qu.:15.00	3rd Qu.:1.000	3rd Qu.:15.00	3rd Qu.: 150.0
Max. :25.00	Max. :4.000	Max. :16.00	Max. :405000.0
			NA's :8758

m4c2c28	ID	wt	xaid
Min. : 3	Length:29333	Min. : 473.1	Length:29333
1st Qu.: 200	Class :character	1st Qu.:1697.4	Class :character
Median : 720	Mode :character	Median :2046.8	Mode :character
Mean : 10812		Mean :2197.6	
3rd Qu.: 3564		3rd Qu.:2545.6	
Max. :5956800		Max. :4637.7	

muc4d

tin	huyen	xa	diaban
Length:9189	Length:9189	Length:9189	Length:9189
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hos0	m4d1c2_01	m4d1c2_02	m4d1c2_03
Min. :13.00	Min. : 0	Min. : 0	Min. : 0
1st Qu.:13.00	1st Qu.: 0	1st Qu.: 120	1st Qu.: 0
Median :14.00	Median : 0	Median : 500	Median : 0
Mean :14.59	Mean : 1182	Mean : 2209	Mean : 1193
3rd Qu.:15.00	3rd Qu.: 0	3rd Qu.: 2000	3rd Qu.: 0
Max. :25.00	Max. :600000	Max. :95000	Max. :55200
m4d1c2_04	m4d1c2_05	m4d1c2_06	m4d1c2_07
Min. : 0.00	Min. : 0.00	Min. : 0.0	Min. : 0.000
1st Qu.: 0.00	1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.000
Median : 0.00	Median : 0.00	Median : 0.0	Median : 0.000
Mean : 40.22	Mean : 76.32	Mean : 335.2	Mean : 6.065
3rd Qu.: 0.00	3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 0.000
Max. :17160.00	Max. :93000.00	Max. :29000.0	Max. :22000.000
m4d1c2_08	m4d1c2_09	m4d1c2_10	m4d1c2_11
Min. : 0.00	Min. : 0.0	Min. : 0.0	Min. : 0.00
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 0.00
Median : 0.00	Median : 0.0	Median : 0.0	Median : 0.00
Mean : 16.82	Mean : 309.3	Mean : 148.2	Mean : 43.45
3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 0.0	3rd Qu.: 0.00
Max. :24000.00	Max. :70000.0	Max. :80000.0	Max. :25000.00
m4d1c2_12	m4d2c2_1	m4d2c2_2	m4d2c2_3
Min. : 0	Min. : 0	Min. : 0	Min. : 0

1st Qu.:	0	1st Qu.:	0	1st Qu.:	0	1st Qu.:	0
Median:	0	Median:	0	Median:	0	Median:	0
Mean:	276	Mean:	1562	Mean:	715	Mean:	1284
3rd Qu.:	0	3rd Qu.:	0	3rd Qu.:	0	3rd Qu.:	0
Max.:	225000	Max.:	850000	Max.:	320000	Max.:	650000

m4d2c2_4	m4d2c2_5	ID	wt			
Min.:	0	Min.:	0.0	Length:9189	Min.:	467.2
1st Qu.:	0	1st Qu.:	0.0	Class :character	1st Qu.:	1656.7
Median:	0	Median:	0.0	Mode :character	Median:	2019.9
Mean:	4682	Mean:	558.2		Mean:	2136.2
3rd Qu.:	3000	3rd Qu.:	0.0		3rd Qu.:	2494.2
Max.:	980000	Max.:	1200000.0		Max.:	4637.7

xaid
Length:9189
Class :character
Mode :character

```
#### muc5a1 #####
      tinh          huyen          xa          diaban
Length:131726    Length:131726    Length:131726    Length:131726
Class :character  Class :character  Class :character  Class :character
Mode :character  Mode :character  Mode :character  Mode :character
```

hos0	m5a1c1	m5a1c2a	m5a1c2b
Min. :13.0	Min. :101.0	Min. : -1.00	Min. : 0
1st Qu.:13.0	1st Qu.:114.0	1st Qu. : 1.00	1st Qu. : 20
Median :14.0	Median :134.0	Median : 2.00	Median : 40
Mean :14.6	Mean :130.8	Mean : 4.23	Mean : 68
3rd Qu.:15.0	3rd Qu.:145.0	3rd Qu. : 5.00	3rd Qu. : 80
Max. :25.0	Max. :157.0	Max. :250.00	Max. :6000
		NA's :34239	NA's :12652

m5a1c3a	m5a1c3b	ID	wt
Min. : -1.00	Min. : 0.00	Length:131726	Min. : 467.2
1st Qu. : 0.00	1st Qu. : 0.00	Class :character	1st Qu. :1665.1
Median : 0.00	Median : 0.00	Mode :character	Median :2029.3
Mean : 1.43	Mean : 36.62		Mean :2149.0
3rd Qu. : 0.00	3rd Qu. : 30.00		3rd Qu. :2505.3
Max. :160.00	Max. :3150.00		Max. :4637.7
NA's :34239	NA's :81579		

xaid
Length:131726
Class :character
Mode :character

muc5a2

tin	huyen	xa	diaban
Length:288564	Length:288564	Length:288564	Length:288564
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m5a2c1	m5a2c2	m5a2c3
Min. :13.0	Min. :101	Min. :-1.00	Min. :-1.00
1st Qu.:13.0	1st Qu.:116	1st Qu.: 3.00	1st Qu.: 1.00
Median :14.0	Median :127	Median : 6.00	Median : 2.00
Mean :14.6	Mean :127	Mean : 7.06	Mean : 2.95
3rd Qu.:15.0	3rd Qu.:137	3rd Qu.:12.00	3rd Qu.: 3.00
Max. :25.0	Max. :157	Max. :12.00	Max. :60.00
		NA's :89638	

m5a2c4	m5a2c5	m5a2c6	m5a2c7
Min. : -1.00	Min. : -1.00	Min. : 1.0	Min. :1.000
1st Qu.: 0.50	1st Qu.: 3.00	1st Qu.: 36.0	1st Qu.:2.000
Median : 1.00	Median : 6.00	Median : 84.0	Median :2.000
Mean : 2.03	Mean : 13.91	Mean : 287.7	Mean :1.853
3rd Qu.: 1.00	3rd Qu.: 12.00	3rd Qu.: 200.0	3rd Qu.:2.000
Max. :322.00	Max. :1512.00	Max. :50000.0	Max. :2.000
NA's :89638	NA's :89638	NA's :31043	NA's :6951

m5a2c8	m5a2c9	m5a2c10	ID
Min. : -1.00	Min. : -1.0	Min. : 0.5	Length:288564
1st Qu.: 3.00	1st Qu.: 8.5	1st Qu.: 45.0	Class :character
Median : 6.00	Median : 25.0	Median : 110.0	Mode :character
Mean : 6.61	Mean : 122.0	Mean : 436.9	
3rd Qu.:12.00	3rd Qu.: 90.0	3rd Qu.: 330.0	
Max. :12.00	Max. :3500.0	Max. :12000.0	
NA's :247207	NA's :254830	NA's :247207	

wt	xaid
Min. : 467.2	Length:288564
1st Qu.:1669.1	Class :character
Median :2032.1	Mode :character
Mean :2158.9	
3rd Qu.:2505.3	
Max. :4637.7	

muc5b1

tin	huyen	xa	diaban
Length:114114	Length:114114	Length:114114	Length:114114
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m5b1c1	m5b1c2	m5b1c3
Min. :13.0	Min. :201.0	Min. :-1.000	Min. : -1.00
1st Qu.:13.0	1st Qu.:207.0	1st Qu.: 6.000	1st Qu.: 5.00
Median :14.0	Median :210.0	Median :12.000	Median : 10.00

Mean :14.6 Mean :212.7 Mean : 8.808 Mean : 24.55
 3rd Qu.:15.0 3rd Qu.:215.0 3rd Qu.:12.000 3rd Qu.: 20.00
 Max. :25.0 Max. :299.0 Max. :12.000 Max. :3000.00
 NA's :6750

m5b1c4	m5b1c5	ID	wt
Min. : -1.0	Min. : 0.0	Length:114114	Min. : 467.2
1st Qu.: 36.0	1st Qu.: 0.0	Class :character	1st Qu.:1676.6
Median : 84.0	Median : 0.0	Mode :character	Median :2046.0
Mean : 220.3	Mean : 27.7		Mean :2167.8
3rd Qu.: 180.0	3rd Qu.: 0.0		3rd Qu.:2505.3
Max. :36000.0	Max. :5760.0		Max. :4637.7
NA's :6750	NA's :7534		

xaid
 Length:114114
 Class :character
 Mode :character

```
#### muc5b2 #####
      tinh      huyen      xa      diaban
Length:114952   Length:114952   Length:114952   Length:114952
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hosu	m5b2c1	m5b2c2	m5b2c3
Min. :13.0	Min. :301.0	Min. : 0.0	Min. : 0.000
1st Qu.:13.0	1st Qu.:305.0	1st Qu.: 30.0	1st Qu.: 0.000
Median :14.0	Median :309.0	Median : 60.0	Median : 0.000
Mean :14.6	Mean :311.8	Mean : 177.5	Mean : 5.091
3rd Qu.:15.0	3rd Qu.:318.0	3rd Qu.: 150.0	3rd Qu.: 0.000
Max. :25.0	Max. :399.0	Max. :40000.0	Max. :20000.000

ID	wt	xaid
Length:114952	Min. : 467.2	Length:114952
Class :character	1st Qu.:1666.2	Class :character
Mode :character	Median :2029.3	Mode :character
	Mean :2148.7	
	3rd Qu.:2494.5	
	Max. :4637.7	

```
#### muc5b3_4 #####
      tinh      huyen      xa      diaban
Length:9189   Length:9189   Length:9189   Length:9189
Class :character Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character
```

hosu	m5b3c2_01	m5b3c2_02	m5b3c2_03
Min. :13.00	Min. : 0.00	Min. : 0.00	Min. : 0.00

1st Qu.:13.00	1st Qu.: 0.00	1st Qu.: 11.00	1st Qu.: 0.00
Median :14.00	Median : 0.00	Median : 40.00	Median : 0.00
Mean :14.59	Mean : 10.06	Mean : 69.05	Mean : 44.64
3rd Qu.:15.00	3rd Qu.: 0.00	3rd Qu.: 86.00	3rd Qu.: 70.00
Max. :25.00	Max. :25000.00	Max. :12000.00	Max. :2100.00
m5b3c2_04	m5b3c2_05	m5b3c2_06	m5b3c2_07
Min. : 0.00	Min. : 0.0	Min. : 0.0	Min. : 0.0
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 0.0
Median : 0.00	Median : 0.0	Median : 120.0	Median : 0.0
Mean : 29.14	Mean : 490.2	Mean : 578.3	Mean : 143.5
3rd Qu.: 20.00	3rd Qu.: 0.0	3rd Qu.: 500.0	3rd Qu.: 0.0
Max. :5000.00	Max. :60000.0	Max. :100000.0	Max. :42000.0
m5b3c2_08	m5b3c2_09	m5b3c2_10	m5b4c2_1
Min. : 0	Min. : 0.0	Min. : 0.00	Min. : 0
1st Qu.: 200	1st Qu.: 0.0	1st Qu.: 0.00	1st Qu.: 0
Median : 500	Median : 0.0	Median : 0.00	Median : 0
Mean : 1015	Mean : 62.6	Mean : 60.65	Mean : 1644
3rd Qu.: 1000	3rd Qu.: 0.0	3rd Qu.: 0.00	3rd Qu.: 156
Max. :358500	Max. :350000.0	Max. :105000.00	Max. :620000
m5b4c2_2	m5b4c2_3	m5b4c2_4	m5b4c2_5
Min. : 0.0	Min. : 0.0	Min. : 0	Min. : 0.0
1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 0	1st Qu.: 0.0
Median : 0.0	Median : 0.0	Median : 0	Median : 0.0
Mean : 499.8	Mean : 839.4	Mean : 886	Mean : 136.2
3rd Qu.: 0.0	3rd Qu.: 0.0	3rd Qu.: 0	3rd Qu.: 0.0
Max. :300000.0	Max. :300000.0	Max. :300000	Max. :52500.0
m5b4c2_6	m5b4c2_7	m5b4c2_8	
Min. : 0.00	Min. : 0.0	Min. : 0.0	
1st Qu.: 0.00	1st Qu.: 0.0	1st Qu.: 0.0	
Median : 0.00	Median : 0.0	Median : 0.0	
Mean : 16.56	Mean : 975.1	Mean : 749.3	
3rd Qu.: 0.00	3rd Qu.: 0.0	3rd Qu.: 0.0	
Max. :10000.00	Max. :700000.0	Max. :1203476.0	
ID	wt	xaid	
Length:9189	Min. : 467.2	Length:9189	
Class :character	1st Qu.:1656.7	Class :character	
Mode :character	Median :2019.9	Mode :character	
	Mean :2136.2		
	3rd Qu.:2494.2		
	Max. :4637.7		

muc6

tin	huyen	xa	diaban
Length:9189	Length:9189	Length:9189	Length:9189
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m6ma1_01	m6ma1_02	m6ma1_03
Min. :13.00	Min. : 0.00	Min. : 0.00	Min. : 0.00
1st Qu.:13.00	1st Qu.: 5.00	1st Qu.: 8.00	1st Qu.:20.00
Median :14.00	Median : 8.00	Median :21.00	Median :29.00
Mean :14.59	Mean :13.28	Mean :21.53	Mean :28.87

3rd Qu. :15.00	3rd Qu. :20.00	3rd Qu. :29.00	3rd Qu. :40.00	
Max. :25.00	Max. :57.00	Max. :62.00	Max. :62.00	
		NA's :64	NA's :187	
m6ma1_04	m6ma1_05	m6ma1_06	m6ma1_07	
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00	
1st Qu. :21.00	1st Qu. :29.00	1st Qu. :37.00	1st Qu. :41.00	
Median :34.00	Median :41.00	Median :42.00	Median :51.00	
Mean :34.31	Mean :38.44	Mean :41.57	Mean :44.22	
3rd Qu. :42.00	3rd Qu. :51.00	3rd Qu. :53.00	3rd Qu. :54.00	
Max. :62.00	Max. :62.00	Max. :62.00	Max. :62.00	
NA's :419	NA's :737	NA's :1156	NA's :1658	
m6ma1_08	m6ma1_09	m6ma1_10	m6ma1_11	
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00	
1st Qu. :41.00	1st Qu. :44.00	1st Qu. :48.00	1st Qu. :48.00	
Median :51.00	Median :53.00	Median :54.00	Median :54.00	
Mean :45.12	Mean :45.72	Mean :45.68	Mean :44.82	
3rd Qu. :56.00	3rd Qu. :56.00	3rd Qu. :57.00	3rd Qu. :57.00	
Max. :62.00	Max. :62.00	Max. :62.00	Max. :62.00	
NA's :2195	NA's :2875	NA's :3619	NA's :4404	
m6ma1_12	m6ma1_13	m6ma1_14	m6ma1_15	
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00	
1st Qu. :49.00	1st Qu. :48.00	1st Qu. : 0.00	1st Qu. : 0.00	
Median :54.00	Median :56.00	Median :56.00	Median :56.00	
Mean :43.98	Mean :42.86	Mean :41.16	Mean :40.56	
3rd Qu. :57.00	3rd Qu. :57.00	3rd Qu. :57.00	3rd Qu. :58.00	
Max. :62.00	Max. :62.00	Max. :62.00	Max. :62.00	
NA's :5233	NA's :6026	NA's :6754	NA's :7405	
m6ma1_16	m6ma1_17	m6ma1_18	m6ma1_19	
Min. : 0.00	Min. : 0.00	Min. : 0.0	Min. : 0.00	
1st Qu. : 0.00	1st Qu. : 0.00	1st Qu. : 0.0	1st Qu. : 0.00	
Median :56.00	Median :56.00	Median :56.0	Median :57.00	
Mean :37.94	Mean :37.93	Mean :35.4	Mean :38.03	
3rd Qu. :58.00	3rd Qu. :58.00	3rd Qu. :58.0	3rd Qu. :59.00	
Max. :62.00	Max. :62.00	Max. :62.0	Max. :62.00	
NA's :7913	NA's :8343	NA's :8632	NA's :8849	
m6ma1_20	m6ma1_21	m6ma1_22	m6ma1_23	
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.00	
1st Qu. : 0.00	1st Qu. : 0.00	1st Qu. : 0.00	1st Qu. : 0.00	
Median :57.00	Median :57.00	Median :57.00	Median :54.00	
Mean :34.28	Mean :35.28	Mean :35.64	Mean :30.96	
3rd Qu. :59.00	3rd Qu. :60.00	3rd Qu. :61.00	3rd Qu. :60.00	
Max. :62.00	Max. :62.00	Max. :62.00	Max. :62.00	
NA's :8968	NA's :9060	NA's :9112	NA's :9143	
m6ma1_24	m6ma1_25	m6ma1_26	m6ma1_27	
Min. : 0.00	Min. : 0.00	Min. : 0.00	Min. : 0.0	
1st Qu. : 0.00	1st Qu. :55.00	1st Qu. : 0.00	1st Qu. : 0.0	
Median :57.00	Median :60.50	Median : 0.00	Median :57.0	
Mean :34.58	Mean :47.14	Mean :27.36	Mean :36.2	
3rd Qu. :60.25	3rd Qu. :61.00	3rd Qu. :61.00	3rd Qu. :62.0	
Max. :62.00	Max. :62.00	Max. :62.00	Max. :62.0	
NA's :9165	NA's :9175	NA's :9178	NA's :9184	
m6ma1_28	m6ma1_29	m6ma1_30	m6ma1_31	m6ma1_32
Min. : 0.00	Min. :59	Min. :60	Min. :61	Min. :62
1st Qu. : 0.00	1st Qu. :59	1st Qu. :60	1st Qu. :61	1st Qu. :62
Median : 0.00	Median :59	Median :60	Median :61	Median :62
Mean :19.33	Mean :59	Mean :60	Mean :61	Mean :62

3rd Qu.:29.00	3rd Qu.:59	3rd Qu.:60	3rd Qu.:61	3rd Qu.:62
Max.:58.00	Max.:59	Max.:60	Max.:61	Max.:62
NA's :9186	NA's :9188	NA's :9188	NA's :9188	NA's :9188
m6ma1_33	m6ma1_34	m6ma1_35	m6ma1_36	m6ma1_37
Min.:0	Min.:NA	Min.:NA	Min.:NA	Min.:NA
1st Qu.:0	1st Qu.:NA	1st Qu.:NA	1st Qu.:NA	1st Qu.:NA
Median:0	Median:NA	Median:NA	Median:NA	Median:NA
Mean:0	Mean:NaN	Mean:NaN	Mean:NaN	Mean:NaN
3rd Qu.:0	3rd Qu.:NA	3rd Qu.:NA	3rd Qu.:NA	3rd Qu.:NA
Max.:0	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9188	NA's :9189	NA's :9189	NA's :9189	NA's :9189
m6ma1_38	m6ma1_39	m6ma1_40	m6ma1_41	m6ma1_42
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
Median:NA	Median:NA	Median:NA	Median:NA	Median:NA
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
Max.:NA	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9189	NA's :9189	NA's :9189	NA's :9189	NA's :9189
m6ma1_43	m6ma1_44	m6ma1_45	m6ma1_46	m6ma1_47
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
Median:NA	Median:NA	Median:NA	Median:NA	Median:NA
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
Max.:NA	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9189	NA's :9189	NA's :9189	NA's :9189	NA's :9189
m6ma1_48	m6ma1_49	m6ma1_50	m6ma1_51	m6ma1_52
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
Median:NA	Median:NA	Median:NA	Median:NA	Median:NA
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
Max.:NA	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9189	NA's :9189	NA's :9189	NA's :9189	NA's :9189
m6ma1_53	m6ma1_54	m6ma1_55	m6ma1_56	m6ma1_57
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
Median:NA	Median:NA	Median:NA	Median:NA	Median:NA
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
Max.:NA	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9189	NA's :9189	NA's :9189	NA's :9189	NA's :9189
m6ma1_58	m6ma1_59	m6ma1_60	m6ma1_61	m6ma1_62
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
Median:NA	Median:NA	Median:NA	Median:NA	Median:NA
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
Max.:NA	Max.:NA	Max.:NA	Max.:NA	Max.:NA
NA's :9189	NA's :9189	NA's :9189	NA's :9189	NA's :9189
ID	wt	xaid		
Length:9189	Min.:467.2	Length:9189		
Class:character	1st Qu.:1656.7	Class:character		
Mode:character	Median:2019.9	Mode:character		
	Mean:2136.2			

3rd Qu.:2494.2
Max. :4637.7

muc6a

tin	huyen	xa	diaban
Length:15897	Length:15897	Length:15897	Length:15897
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m6ama	m6ac3	m6ac4a
Min. :13.0	Min. : 1.00	Min. : 1.000	Min. : 0.000
1st Qu.:13.0	1st Qu.: 5.00	1st Qu.: 1.000	1st Qu.: 0.000
Median :14.0	Median : 8.00	Median : 1.000	Median : 0.000
Mean :14.5	Mean :13.47	Mean : 1.191	Mean : 1.265
3rd Qu.:15.0	3rd Qu.:20.00	3rd Qu.: 1.000	3rd Qu.: 0.000
Max. :25.0	Max. :62.00	Max. :60.000	Max. :12.000

m6ac4b	m6ac5	m6ac6	m6ac7
Min. : -1	Min. : -1	Min. : -1	Min. : 3.00
1st Qu.:1998	1st Qu.: 1000	1st Qu.: 800	1st Qu.:100.00
Median :2001	Median : 2500	Median : 2400	Median :100.00
Mean :1997	Mean : 9337	Mean : 14864	Mean : 99.42
3rd Qu.:2004	3rd Qu.: 6300	3rd Qu.: 7000	3rd Qu.:100.00
Max. :2006	Max. :1500000	Max. :15000000	Max. :100.00

ID	wt	xaid
Length:15897	Min. : 467.2	Length:15897
Class :character	1st Qu.:1640.5	Class :character
Mode :character	Median :1994.6	Mode :character
	Mean :2067.3	
	3rd Qu.:2422.4	
	Max. :4632.5	

muc6b

tin	huyen	xa	diaban
Length:85890	Length:85890	Length:85890	Length:85890
Class :character	Class :character	Class :character	Class :character
Mode :character	Mode :character	Mode :character	Mode :character

hoso	m6bma	m6bc3	m6bc4a
Min. :13.00	Min. :10.00	Min. : 1.000	Min. : 0.000
1st Qu.:13.00	1st Qu.:40.00	1st Qu.: 1.000	1st Qu.: 0.000
Median :14.00	Median :51.00	Median : 1.000	Median : 0.000
Mean :14.62	Mean :45.17	Mean : 1.193	Mean : 1.148
3rd Qu.:15.00	3rd Qu.:56.00	3rd Qu.: 1.000	3rd Qu.: 0.000
Max. :25.00	Max. :62.00	Max. :13.000	Max. :12.000

m6bc4b	m6bc5	m6bc6	ID
Min. : -1	Min. : -1	Min. : -1	Length:85890
1st Qu.:1997	1st Qu.: 400	1st Qu.: 200	Class :character
Median :2001	Median : 800	Median : 500	Mode :character
Mean :1993	Mean : 2184	Mean : 1428	


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3rd Qu.:2004   3rd Qu.: 2000   3rd Qu.: 1200
Max.      :2006   Max.      :980000   Max.      :1000000
      wt          xaid
Min.      : 473.1   Length:85890
1st Qu.:1708.8   Class :character
Median :2064.1   Mode  :character
Mean     :2218.8
3rd Qu.:2548.6
Max.     :4637.7

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#### muc7 #####
      tinh          huyen          xa          diaban
Length:9189      Length:9189      Length:9189      Length:9189
Class :character  Class :character  Class :character  Class :character
Mode  :character  Mode  :character  Mode  :character  Mode  :character

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      hoso          m7c1          m7c2          m7c3
Min.      :13.00   Min.      : 0.000   Min.      : 5.00   Min.      :1.000
1st Qu.:13.00   1st Qu.: 1.000   1st Qu.: 40.00   1st Qu.:4.000
Median :14.00   Median : 1.000   Median : 55.00   Median :4.000
Mean     :14.59   Mean     : 1.028   Mean     : 63.09   Mean     :3.861
3rd Qu.:15.00   3rd Qu.: 1.000   3rd Qu.: 78.00   3rd Qu.:4.000
Max.     :25.00   Max.     :11.000   Max.     :425.00   Max.     :5.000
                        NA's      :9      NA's      :9
      m7c4          m7c5          m7c6          m7c7
Min.      : -1     Min.      :1.000   Min.      :1.000   Min.      :1.000
1st Qu.:1987     1st Qu.:4.000   1st Qu.:1.000   1st Qu.:2.000
Median :1995     Median :5.000   Median :1.000   Median :2.000
Mean     :1992     Mean     :4.475   Mean     :1.067   Mean     :1.992
3rd Qu.:2000     3rd Qu.:5.000   3rd Qu.:1.000   3rd Qu.:2.000
Max.     :2006     Max.     :9.000   Max.     :3.000   Max.     :2.000
NA's      :9      NA's      :6984   NA's      :9      NA's      :9
      m7c8          m7c9          m7c10         m7c11
Min.      :1.000   Min.      : 50    Min.      : 3.00   Min.      : 3.00
1st Qu.:1.000   1st Qu.: 360    1st Qu.:12.00   1st Qu.:12.00
Median :1.000   Median : 600    Median :12.00   Median :12.00
Mean     :1.711   Mean     :1639   Mean     :11.58   Mean     :11.59
3rd Qu.:3.000   3rd Qu.:2025   3rd Qu.:12.00   3rd Qu.:12.00
Max.     :4.000   Max.     :14400   Max.     :12.00   Max.     :12.00
NA's      :9113   NA's      :9113   NA's      :9113   NA's      :9113
      m7c12         m7c13         m7c14         m7c15
Min.      : -1     Min.      :1.000   Min.      :1.000   Min.      : 300
1st Qu.: 30000    1st Qu.:2.000   1st Qu.:2.000   1st Qu.: 2610
Median : 65000    Median :2.000   Median :2.000   Median : 7500
Mean     :185597   Mean     :1.911   Mean     :1.849   Mean     :13176
3rd Qu.:175000    3rd Qu.:2.000   3rd Qu.:2.000   3rd Qu.:18000
Max.     :15000000 Max.     :2.000   Max.     :2.000   Max.     :100000
NA's      :9      NA's      :9      NA's      :8369   NA's      :9065
      m7c16         m7c17         m7c18         m7c19
Min.      : 1.00   Min.      : 1.00   Min.      : -1     Min.      :1.000
1st Qu.:12.00    1st Qu.:12.00    1st Qu.: 32000    1st Qu.:2.000
Median :12.00    Median :12.00    Median : 80000    Median :2.000

```

Mean :11.22	Mean :10.94	Mean : 228384	Mean :1.889
3rd Qu.:12.00	3rd Qu.:12.00	3rd Qu.: 200000	3rd Qu.:2.000
Max. :48.00	Max. :12.00	Max. :10000000	Max. :2.000
NA's :9065	NA's :9065	NA's :8369	NA's :9
m7c20a	m7c20b	m7c21	m7c22
Min. : -1.000	Min. : -1	Min. : 6000	Min. :1.000
1st Qu.: 2.000	1st Qu.:1990	1st Qu.: 16500	1st Qu.:2.000
Median : 6.000	Median :1996	Median : 32000	Median :2.000
Mean : 5.554	Mean :1991	Mean : 125297	Mean :1.953
3rd Qu.: 9.000	3rd Qu.:2002	3rd Qu.: 87500	3rd Qu.:2.000
Max. :12.000	Max. :2006	Max. :1200000	Max. :2.000
NA's :8173	NA's :8173	NA's :9130	NA's :9
m7c23	m7c23a	m7c24	m7c25
Min. : 0	Min. : 0	Min. : 0.0	Min. : 0.00
1st Qu.: 12000	1st Qu.: 10000	1st Qu.: 0.0	1st Qu.: 0.00
Median : 30000	Median : 25000	Median : 0.0	Median : 0.00
Mean : 67512	Mean : 57185	Mean : 874.6	Mean : 93.99
3rd Qu.: 80000	3rd Qu.: 69000	3rd Qu.: 0.0	3rd Qu.: 0.00
Max. :800000	Max. :800000	Max. :280000.0	Max. :20000.00
NA's :8762	NA's :8762	NA's :9	NA's :9
m7c26	m7c27	m7c28	m7c29
Min. : 1.000	Min. :1.000	Min. :1.000	Min. : 1.000
1st Qu.: 4.000	1st Qu.:2.000	1st Qu.:1.000	1st Qu.: 4.000
Median : 5.000	Median :2.000	Median :1.000	Median : 5.000
Mean : 5.453	Mean :1.849	Mean :1.475	Mean : 5.208
3rd Qu.: 8.000	3rd Qu.:2.000	3rd Qu.:1.000	3rd Qu.: 5.000
Max. :14.000	Max. :2.000	Max. :9.000	Max. :14.000
	NA's :3289		
m7c30	m7c31	m7c32	m7c33
Min. :1.000	Min. :1.00	Min. : 8.0	Min. :1.000
1st Qu.:2.000	1st Qu.:2.00	1st Qu.: 180.0	1st Qu.:1.000
Median :2.000	Median :2.00	Median : 360.0	Median :3.000
Mean :1.844	Mean :1.77	Mean : 422.7	Mean :3.256
3rd Qu.:2.000	3rd Qu.:2.00	3rd Qu.: 540.0	3rd Qu.:5.000
Max. :2.000	Max. :2.00	Max. :18000.0	Max. :9.000
NA's :1885		NA's :7078	
m7c34	m7c35	m7c36	m7c37
Min. :1.000	Min. :1.000	Min. : 10.0	Min. :1.000
1st Qu.:1.000	1st Qu.:1.000	1st Qu.: 252.0	1st Qu.:2.000
Median :1.000	Median :1.000	Median : 432.0	Median :3.000
Mean :1.103	Mean :1.053	Mean : 650.8	Mean :2.773
3rd Qu.:1.000	3rd Qu.:1.000	3rd Qu.: 720.0	3rd Qu.:4.000
Max. :4.000	Max. :2.000	Max. :36000.0	Max. :9.000
		NA's :484	
m7c38	m7c39	m7c40	m7c41
Min. :1.000	Min. : 2.00	Min. : 0	Min. :1.000
1st Qu.:2.000	1st Qu.: 48.00	1st Qu.: 300	1st Qu.:2.000
Median :2.000	Median : 72.00	Median : 600	Median :2.000
Mean :1.762	Mean : 80.27	Mean : 5176	Mean :1.932
3rd Qu.:2.000	3rd Qu.:120.00	3rd Qu.: 1440	3rd Qu.:2.000
Max. :2.000	Max. :720.00	Max. :1203708	Max. :2.000
	NA's :7003		
m7c42	m7c43	m7c44	ID
Min. :1.000	Min. : 0.000	Min. : -1	Length:9189
1st Qu.:2.000	1st Qu.: 8.500	1st Qu.: 210	Class :character
Median :2.000	Median :12.000	Median : 850	Mode :character

Mean :1.825	Mean : 9.564	Mean : 1848
3rd Qu.:2.000	3rd Qu.:12.000	3rd Qu.: 1975
Max. :2.000	Max. :12.000	Max. :20000
NA's :8561	NA's :9079	NA's :9083

wt	xaid
Min. : 467.2	Length:9189
1st Qu.:1656.7	Class :character
Median :2019.9	Mode :character
Mean :2136.2	
3rd Qu.:2494.2	
Max. :4637.7	

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#### muc8 #####
      tinh          huyen          xa          diaban
Length:9189      Length:9189      Length:9189      Length:9189
Class :character  Class :character  Class :character  Class :character
Mode :character   Mode :character   Mode :character   Mode :character
```

hoso	m8c1a	m8c1b	m8c1c
Min. :13.00	Min. :1.000	Min. :1.000	Min. :1.000
1st Qu.:13.00	1st Qu.:2.000	1st Qu.:2.000	1st Qu.:2.000
Median :14.00	Median :2.000	Median :2.000	Median :2.000
Mean :14.59	Mean :1.883	Mean :1.876	Mean :1.857
3rd Qu.:15.00	3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:2.000
Max. :25.00	Max. :2.000	Max. :2.000	Max. :2.000

m8c2a	m8c2b	m8c2c	m8c3a_1
Min. :1.000	Min. :1.000	Min. :1.00	Min. :1.000
1st Qu.:1.000	1st Qu.:1.000	1st Qu.:1.00	1st Qu.:1.000
Median :1.000	Median :1.000	Median :1.00	Median :2.000
Mean :1.344	Mean :1.297	Mean :1.23	Mean :1.717
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:1.00	3rd Qu.:2.000
Max. :2.000	Max. :2.000	Max. :2.00	Max. :3.000
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c3a_2	m8c3a_3	m8c3a_4	m8c3a_5
Min. :1.000	Min. :1.000	Min. :1.00	Min. :1.000
1st Qu.:1.000	1st Qu.:1.000	1st Qu.:2.00	1st Qu.:2.000
Median :1.000	Median :2.000	Median :2.00	Median :2.000
Mean :1.376	Mean :1.616	Mean :2.07	Mean :2.069
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:2.00	3rd Qu.:2.000
Max. :3.000	Max. :3.000	Max. :3.00	Max. :3.000
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c3a_6	m8c3a_7	m8c3a_8	m8c3b_1
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.:1.000
Median :2.000	Median :2.000	Median :2.000	Median :2.000
Mean :1.909	Mean :1.951	Mean :1.932	Mean :1.704
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
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c3b_2	m8c3b_3	m8c3b_4	m8c3b_5

Min. :1.000	Min. :1.000	Min. :1.00	Min. :1.000
1st Qu.:1.000	1st Qu.:1.000	1st Qu.:2.00	1st Qu.:2.000
Median :1.000	Median :2.000	Median :2.00	Median :2.000
Mean :1.284	Mean :1.584	Mean :2.07	Mean :2.075
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:2.00	3rd Qu.:2.000
Max. :3.000	Max. :3.000	Max. :3.00	Max. :3.000
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c3b_6	m8c3b_7	m8c3b_8	m8c4a_1
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.:1.000
Median :2.000	Median :2.000	Median :2.000	Median :2.000
Mean :1.902	Mean :1.956	Mean :1.934	Mean :1.768
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
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c4a_2	m8c4a_3	m8c4b_1	m8c4b_2
Min. :1.000	Min. :1.000	Min. :1.000	Min. :1.000
1st Qu.:2.000	1st Qu.:2.000	1st Qu.:1.000	1st Qu.:2.000
Median :2.000	Median :2.000	Median :2.000	Median :2.000
Mean :2.062	Mean :1.919	Mean :1.751	Mean :2.055
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
NA's :7673	NA's :7673	NA's :7673	NA's :7673

m8c4b_3	m8c5	m8c6a	m8c6b
Min. :1.000	Min. :1.000	Min. :1.000	Min. :0.000
1st Qu.:2.000	1st Qu.:1.000	1st Qu.:2.000	1st Qu.:0.000
Median :2.000	Median :2.000	Median :2.000	Median :2.000
Mean :1.916	Mean :1.836	Mean :2.925	Mean :2.226
3rd Qu.:2.000	3rd Qu.:2.000	3rd Qu.:5.000	3rd Qu.:5.000
Max. :3.000	Max. :4.000	Max. :5.000	Max. :5.000
NA's :7673		NA's :7820	NA's :8245

m8c6c	ID	wt	xaid
Min. :0.000	Length:9189	Min. : 467.2	Length:9189
1st Qu.:0.000	Class :character	1st Qu.:1656.7	Class :character
Median :0.000	Mode :character	Median :2019.9	Mode :character
Mean :1.367		Mean :2136.2	
3rd Qu.:3.000		3rd Qu.:2494.2	
Max. :5.000		Max. :4637.7	
NA's :8895			

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#### muc8_vayvon #####
      tinh          huyen          xa          diaban
Length:4987      Length:4987      Length:4987      Length:4987
Class :character  Class :character  Class :character  Class :character
Mode :character  Mode :character  Mode :character  Mode :character
```

hosu	m8ma	m8c8	m8c9
Min. :13.00	Min. :1.000	Min. :1.000	Min. : -1.00
1st Qu.:13.00	1st Qu.:1.000	1st Qu.:2.000	1st Qu.: 1.00
Median :14.00	Median :1.000	Median :2.000	Median : 10.00
Mean :14.59	Mean :1.252	Mean :4.214	Mean : 19.39
3rd Qu.:15.00	3rd Qu.:1.000	3rd Qu.:8.000	3rd Qu.: 15.00

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Max.      :25.00   Max.      :7.000   Max.      :9.000   Max.      :7000.00
                        NA's      :4129
      m8c10a      m8c10b      m8c11a      m8c11b
Min.      :    -1   Min.      :    -1   Min.      : -1.000   Min.      :    -1
1st Qu.   :   3000   1st Qu.   :   2000   1st Qu.   :  4.000   1st Qu.   : 2005
Median    :   5000   Median    :   5000   Median    :  6.000   Median    : 2005
Mean      :  13903   Mean      :  12054   Mean      :  6.304   Mean      : 2003
3rd Qu.   :  10000   3rd Qu.   :  10000   3rd Qu.   :  9.000   3rd Qu.   : 2006
Max.      :1300000   Max.      :1800000   Max.      :12.000   Max.      :2006

      m8c12      m8c13      m8c14      m8c15a
Min.      : -1.00   Min.      :  1.000   Min.      :  1.00   Min.      : -1.000
1st Qu.   :  12.00   1st Qu.   :  1.000   1st Qu.   :  1.00   1st Qu.   :  0.450
Median    :  19.00   Median    :  3.000   Median    :  1.00   Median    :  0.800
Mean      :  59.49   Mean      :  4.288   Mean      :  1.45   Mean      :  0.985
3rd Qu.   :  36.00   3rd Qu.   :  7.000   3rd Qu.   :  2.00   3rd Qu.   :  1.150
Max.      :9999.00   Max.      :13.000   Max.      :  9.00   Max.      :50.000
                        NA's      :2728
      m8c15b      m8c16      m8c17a      m8c17b
Min.      :  3.00   Min.      :    -1   Min.      : -2.000   Min.      :    -2
1st Qu.   :  5.00   1st Qu.   :     0   1st Qu.   :  2.000   1st Qu.   : 2006
Median    :  5.00   Median    :   180   Median    :  6.000   Median    : 2007
Mean      :  5.34   Mean      :  2488   Mean      :  5.591   Mean      : 1717
3rd Qu.   :  5.00   3rd Qu.   :  1200   3rd Qu.   :10.000   3rd Qu.   : 2007
Max.      :  8.00   Max.      :715040   Max.      :12.000   Max.      :2016
NA's      :1139
      ID      wt      xaid
Length:4987   Min.    : 467.2   Length:4987
Class :character 1st Qu.:1647.8   Class :character
Mode  :character Median :1986.1   Mode  :character
                        Mean  :2070.0
                        3rd Qu.:2394.8
                        Max.   :4637.7

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#### ttchung #####
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      tinh      huyen      xa      diaban
Length:9189   Length:9189   Length:9189   Length:9189
Class :character Class :character Class :character Class :character
Mode  :character Mode  :character Mode  :character Mode  :character

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      hoso      quyen      ttnt      dantoc
Min.      :13.00   Min.      :1   Min.      :1.000   Min.      : 1.000
1st Qu.   :13.00   1st Qu.   :1   1st Qu.   :1.000   1st Qu.   : 1.000
Median    :14.00   Median    :1   Median    :2.000   Median    : 1.000
Mean      :14.59   Mean      :1   Mean      :1.749   Mean      : 2.144
3rd Qu.   :15.00   3rd Qu.   :1   3rd Qu.   :2.000   3rd Qu.   : 1.000
Max.      :25.00   Max.      :1   Max.      :2.000   Max.      :56.000

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      phdich      dtv      dt      tinh04
Min.      :1.000   Min.      : 1.00   Min.      : 1.00   Min.      : 0.0
1st Qu.   :2.000   1st Qu.   : 7.00   1st Qu.   : 3.00   1st Qu.   : 0.0

```

Median :2.000	Median :15.00	Median : 7.00	Median : 0.0
Mean :1.959	Mean :18.53	Mean :10.07	Mean :211.7
3rd Qu.:2.000	3rd Qu.:24.00	3rd Qu.:10.00	3rd Qu.:405.0
Max. :2.000	Max. :87.00	Max. :81.00	Max. :823.0

huyen04	xa04	diaban04	ttnt04
Min. : 1.00	Min. : 1.00	Min. : 1.00	Min. :1.000
1st Qu.: 5.00	1st Qu.: 7.00	1st Qu.: 4.00	1st Qu.:2.000
Median : 9.00	Median :15.00	Median : 8.00	Median :2.000
Mean :10.59	Mean :18.16	Mean : 10.51	Mean :1.766
3rd Qu.:15.00	3rd Qu.:25.00	3rd Qu.: 14.00	3rd Qu.:2.000
Max. :51.00	Max. :85.00	Max. :105.00	Max. :2.000
NA's :4891	NA's :4891	NA's :4891	NA's :4891

hoso04	ghepho	ngaydt	thangdt
Min. : 1.00	Min. :0.0000	Min. : 1.00	Min. : 5.000
1st Qu.:13.00	1st Qu.:0.0000	1st Qu.: 9.00	1st Qu.: 6.000
Median :14.00	Median :0.0000	Median :16.00	Median : 9.000
Mean :14.47	Mean :0.4947	Mean :15.91	Mean : 7.764
3rd Qu.:15.00	3rd Qu.:1.0000	3rd Qu.:23.00	3rd Qu.: 9.000
Max. :21.00	Max. :9.0000	Max. :31.00	Max. :11.000
NA's :4891			

tsnguai	m1c1	m2act	m2atn
Min. : 1.000	Min. :1.000	Min. : 0	Min. : 0.00
1st Qu.: 3.000	1st Qu.:1.000	1st Qu.: 0	1st Qu.: 0.00
Median : 4.000	Median :2.000	Median : 496	Median : 0.00
Mean : 4.252	Mean :1.532	Mean : 1398	Mean : 72.72
3rd Qu.: 5.000	3rd Qu.:2.000	3rd Qu.: 1575	3rd Qu.: 0.00
Max. :17.000	Max. :2.000	Max. :32000	Max. :19200.00

m3ac6	m3ac16	m3ac17	m3ac18
Min. :1.000	Min. : 0.0	Min. : 0.00	Min. : 0.00
1st Qu.:1.000	1st Qu.: 50.0	1st Qu.: 0.00	1st Qu.: 0.00
Median :1.000	Median : 136.0	Median : 0.00	Median : 0.00
Mean :1.235	Mean : 308.8	Mean : 20.94	Mean : 49.31
3rd Qu.:1.000	3rd Qu.: 300.0	3rd Qu.: 10.00	3rd Qu.: 60.00
Max. :2.000	Max. :25000.0	Max. :9490.00	Max. :4500.00

m3ac19	m3act1	m3act2	m3act
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.: 185
Median : 0.0	Median : 81.0	Median : 0.0	Median : 470
Mean : 298.2	Mean : 517.9	Mean : 496.9	Mean : 1394
3rd Qu.: 150.0	3rd Qu.: 400.0	3rd Qu.: 0.0	3rd Qu.: 1240
Max. :96780.0	Max. :106680.0	Max. :60000.0	Max. :116560

m3fc15	m3fc16	m3fc17	m3fc18
Min. :1.000	Min. :1.00	Min. :1.00	Min. : 0.0
1st Qu.:2.000	1st Qu.:1.50	1st Qu.:2.00	1st Qu.: 0.0
Median :2.000	Median :3.00	Median :2.00	Median : 10.0
Mean :1.996	Mean :2.41	Mean :1.99	Mean : 109.3
3rd Qu.:2.000	3rd Qu.:3.00	3rd Qu.:2.00	3rd Qu.: 99.0
Max. :2.000	Max. :4.00	Max. :2.00	Max. :1500.0
	NA's :9150		NA's :9095

m4atn1	m4atn2	m4atn3	m4atn4
Min. : 0	Min. : 0.0	Min. : 0.0	Min. : 0.00
1st Qu.: 0	1st Qu.: 0.0	1st Qu.: 0.0	1st Qu.: 0.00

Median :	0	Median :	0.0	Median :	0.0	Median :	0.00
Mean :	8817	Mean :	957.4	Mean :	690.2	Mean :	15.97
3rd Qu. :	13000	3rd Qu. :	300.0	3rd Qu. :	0.0	3rd Qu. :	0.00
Max. :	490800	Max. :	121230.0	Max. :	43600.0	Max. :	4202.00

m4atn5		m4atn		m4b0c1		m4b0t1	
Min. :	0.00	Min. :	0	Min. :	1.000	Min. :	0.00
1st Qu. :	0.00	1st Qu. :	0	1st Qu. :	1.000	1st Qu. :	0.00
Median :	0.00	Median :	3650	Median :	1.000	Median :	0.00
Mean :	69.27	Mean :	10550	Mean :	1.277	Mean :	96.76
3rd Qu. :	0.00	3rd Qu. :	14500	3rd Qu. :	2.000	3rd Qu. :	0.00
Max. :	14100.00	Max. :	496800	Max. :	2.000	Max. :	40000.00

m4b0t2		m4b1		m4b11t		m4b12t	
Min. :	0.0	Min. :	1.000	Min. :	0	Min. :	0
1st Qu. :	0.0	1st Qu. :	1.000	1st Qu. :	0	1st Qu. :	0
Median :	0.0	Median :	1.000	Median :	1220	Median :	0
Mean :	88.4	Mean :	1.315	Mean :	4518	Mean :	1412
3rd Qu. :	0.0	3rd Qu. :	2.000	3rd Qu. :	5280	3rd Qu. :	1053
Max. :	44000.0	Max. :	2.000	Max. :	383600	Max. :	104352

m4b13t		m4b14t		m4b15t		m4b1t	
Min. :	0	Min. :	0	Min. :	0.0	Min. :	0
1st Qu. :	0	1st Qu. :	0	1st Qu. :	0.0	1st Qu. :	0
Median :	0	Median :	0	Median :	20.0	Median :	4528
Mean :	2399	Mean :	1100	Mean :	197.7	Mean :	9626
3rd Qu. :	250	3rd Qu. :	270	3rd Qu. :	291.0	3rd Qu. :	10431
Max. :	816000	Max. :	2000000	Max. :	15000.0	Max. :	2000000

m4b1c		m4b1tn		m4b21		m4b2t	
Min. :	0	Min. :	-1636	Min. :	1.000	Min. :	0
1st Qu. :	0	1st Qu. :	0	1st Qu. :	1.000	1st Qu. :	0
Median :	1410	Median :	2798	Median :	1.000	Median :	668
Mean :	3847	Mean :	5779	Mean :	1.443	Mean :	4843
3rd Qu. :	3477	3rd Qu. :	6848	3rd Qu. :	2.000	3rd Qu. :	4821
Max. :	1652110	Max. :	661650	Max. :	2.000	Max. :	668300

m4b2c		m4b2tn		m4b31		m4b3t	
Min. :	0	Min. :	-8330	Min. :	1.000	Min. :	0.0
1st Qu. :	0	1st Qu. :	710	1st Qu. :	2.000	1st Qu. :	0.0
Median :	240	Median :	1651	Median :	2.000	Median :	0.0
Mean :	3090	Mean :	3146	Mean :	1.972	Mean :	328.8
3rd Qu. :	2630	3rd Qu. :	3462	3rd Qu. :	2.000	3rd Qu. :	0.0
Max. :	567970	Max. :	209738	Max. :	2.000	Max. :	471240.0

NA's :4068

m4b3c		m4b3tn		m4b41		m4b4t	
Min. :	0.0	Min. :	80	Min. :	1.000	Min. :	0.0
1st Qu. :	0.0	1st Qu. :	1500	1st Qu. :	2.000	1st Qu. :	0.0
Median :	0.0	Median :	3344	Median :	2.000	Median :	0.0
Mean :	177.7	Mean :	5405	Mean :	1.751	Mean :	445.7
3rd Qu. :	0.0	3rd Qu. :	6700	3rd Qu. :	2.000	3rd Qu. :	0.0
Max. :	437895.0	Max. :	62264	Max. :	2.000	Max. :	133800.0

NA's :8932

m4b4c		m4b41tn		m4b42tn		m4b51	
Min. :	0.00	Min. :	0	Min. :	0.00	Min. :	1.000
1st Qu. :	0.00	1st Qu. :	390	1st Qu. :	0.00	1st Qu. :	1.000

Median : 0.00	Median : 760	Median : 0.00	Median : 2.000
Mean : 43.27	Mean : 1615	Mean : 28.22	Mean : 1.736
3rd Qu. : 0.00	3rd Qu. : 1729	3rd Qu. : 0.00	3rd Qu. : 2.000
Max. : 16500.00	Max. : 120140	Max. : 6880.00	Max. : 2.000
	NA's : 6899	NA's : 6899	
m4b5t	m4b5c	m4b5tn	m4c1
Min. : 0	Min. : 0	Min. : -90840	Min. : 1.000
1st Qu. : 0	1st Qu. : 0	1st Qu. : 290	1st Qu. : 1.000
Median : 0	Median : 0	Median : 730	Median : 2.000
Mean : 3484	Mean : 2107	Mean : 5219	Mean : 1.617
3rd Qu. : 120	3rd Qu. : 10	3rd Qu. : 2380	3rd Qu. : 2.000
Max. : 3289755	Max. : 2763394	Max. : 526361	Max. : 2.000
		NA's : 6765	
m4ctt	m4ct	m4cct	m4cc
Min. : 0	Min. : 0	Min. : 0	Min. : 0
1st Qu. : 0	1st Qu. : 0	1st Qu. : 0	1st Qu. : 0
Median : 0	Median : 0	Median : 0	Median : 0
Mean : 19042	Mean : 18633	Mean : 11576	Mean : 11363
3rd Qu. : 10500	3rd Qu. : 10500	3rd Qu. : 2400	3rd Qu. : 2380
Max. : 6996000	Max. : 6996000	Max. : 5956800	Max. : 5956800
m4ctnt	m4ctn	m4d1tn	m4d2t
Min. : -1170	Min. : -1170	Min. : 0	Min. : 0
1st Qu. : 0	1st Qu. : 0	1st Qu. : 250	1st Qu. : 0
Median : 0	Median : 0	Median : 1280	Median : 0
Mean : 7466	Mean : 7270	Mean : 5836	Mean : 8801
3rd Qu. : 6710	3rd Qu. : 6696	3rd Qu. : 6000	3rd Qu. : 5800
Max. : 1039200	Max. : 1039200	Max. : 600000	Max. : 1200000
tongthu_01	tongthu_02	tongthu_03	tongthu_04
Min. : 1318	Min. : 0.00	Min. : 0.0	Min. : 0
1st Qu. : 22760	1st Qu. : 0.00	1st Qu. : 0.0	1st Qu. : 0
Median : 37352	Median : 0.00	Median : 0.0	Median : 3650
Mean : 63192	Mean : 72.72	Mean : 298.2	Mean : 10550
3rd Qu. : 63520	3rd Qu. : 0.00	3rd Qu. : 150.0	3rd Qu. : 14500
Max. : 6997500	Max. : 19200.00	Max. : 96780.0	Max. : 496800
tongthu_05	tongthu_06	tongthu_07	tongthu_08
Min. : 0	Min. : 0	Min. : 0.0	Min. : 0.000
1st Qu. : 0	1st Qu. : 0	1st Qu. : 0.0	1st Qu. : 0.000
Median : 4528	Median : 668	Median : 0.0	Median : 0.000
Mean : 9626	Mean : 4843	Mean : 328.8	Mean : 8.319
3rd Qu. : 10431	3rd Qu. : 4821	3rd Qu. : 0.0	3rd Qu. : 0.000
Max. : 2000000	Max. : 668300	Max. : 471240.0	Max. : 9600.000
tongthu_09	tongthu_10	tongthu_11	tongthu_12
Min. : 0.0	Min. : 0	Min. : 0	Min. : 0
1st Qu. : 0.0	1st Qu. : 0	1st Qu. : 0	1st Qu. : 250
Median : 0.0	Median : 0	Median : 0	Median : 1280
Mean : 445.7	Mean : 3484	Mean : 18633	Mean : 5836
3rd Qu. : 0.0	3rd Qu. : 120	3rd Qu. : 10500	3rd Qu. : 6000
Max. : 133800.0	Max. : 3289755	Max. : 6996000	Max. : 600000
tongthu_13	tongthu_14	tongthu_15	m6ac8
Min. : 0	Min. : 0.0	Min. : 0.0	Min. : 0.0
1st Qu. : 0	1st Qu. : 0.0	1st Qu. : 0.0	1st Qu. : 0.0

Median :	0	Median :	0.0	Median :	0.0	Median :	0.0
Mean :	8801	Mean :	177.7	Mean :	88.4	Mean :	127.4
3rd Qu. :	5800	3rd Qu. :	0.0	3rd Qu. :	0.0	3rd Qu. :	0.0
Max. :	1200000	Max. :	100000.0	Max. :	44000.0	Max. :	60000.0

m6ac9	m6bc7	m8c7	chisxkd_1
Min. : 0	Min. : 0	Min. : 1.000	Min. : 0
1st Qu. : 0	1st Qu. : 0	1st Qu. : 1.000	1st Qu. : 1740
Median : 0	Median : 0	Median : 2.000	Median : 5694
Mean : 1346	Mean : 2133	Mean : 1.563	Mean : 20628
3rd Qu. : 0	3rd Qu. : 1500	3rd Qu. : 2.000	3rd Qu. : 13563
Max. : 520000	Max. : 464000	Max. : 2.000	Max. : 5956800

chisxkd_2	chisxkd_3	chisxkd_4	chisxkd_5
Min. : 0	Min. : 0	Min. : 0.0	Min. : 0.000
1st Qu. : 0	1st Qu. : 0	1st Qu. : 0.0	1st Qu. : 0.000
Median : 1410	Median : 240	Median : 0.0	Median : 0.000
Mean : 3847	Mean : 3090	Mean : 177.7	Mean : 1.286
3rd Qu. : 3477	3rd Qu. : 2630	3rd Qu. : 0.0	3rd Qu. : 0.000
Max. : 1652110	Max. : 567970	Max. : 437895.0	Max. : 2720.000

chisxkd_6	chisxkd_7	chisxkd_8	chikhac_01
Min. : 0.00	Min. : 0	Min. : 0	Min. : 1180
1st Qu. : 0.00	1st Qu. : 0	1st Qu. : 0	1st Qu. : 14509
Median : 0.00	Median : 0	Median : 0	Median : 23711
Mean : 43.27	Mean : 2107	Mean : 11363	Mean : 35917
3rd Qu. : 0.00	3rd Qu. : 10	3rd Qu. : 2380	3rd Qu. : 39373
Max. : 16500.00	Max. : 2763394	Max. : 5956800	Max. : 2018034

chikhac_02	chikhac_03	chikhac_04	chikhac_05
Min. : 0	Min. : 0	Min. : 0	Min. : 540.3
1st Qu. : 0	1st Qu. : 185	1st Qu. : 554	1st Qu. : 5989.0
Median : 496	Median : 470	Median : 882	Median : 8505.0
Mean : 1398	Mean : 1394	Mean : 1081	Mean : 10028.3
3rd Qu. : 1575	3rd Qu. : 1240	3rd Qu. : 1390	3rd Qu. : 12331.0
Max. : 32000	Max. : 116560	Max. : 12100	Max. : 102405.0

chikhac_06	chikhac_07	chikhac_08	chikhac_09
Min. : 25	Min. : 0	Min. : 0	Min. : 0
1st Qu. : 1122	1st Qu. : 776	1st Qu. : 522	1st Qu. : 0
Median : 1981	Median : 1380	Median : 1095	Median : 100
Mean : 2838	Mean : 2210	Mean : 2440	Mean : 5746
3rd Qu. : 3579	3rd Qu. : 2555	3rd Qu. : 2290	3rd Qu. : 3120
Max. : 57000	Max. : 85000	Max. : 362530	Max. : 1313476

chikhac_10	chikhac_11	chikhac_12	chikhac_13
Min. : 0.0	Min. : 0	Min. : 0	Min. : 0
1st Qu. : 0.0	1st Qu. : 0	1st Qu. : 0	1st Qu. : 0
Median : 0.0	Median : 0	Median : 0	Median : 0
Mean : 127.4	Mean : 1346	Mean : 2133	Mean : 4336
3rd Qu. : 0.0	3rd Qu. : 0	3rd Qu. : 1500	3rd Qu. : 0
Max. : 60000.0	Max. : 520000	Max. : 464000	Max. : 1200000

chikhac_14	thunhap	thubq	chitieu
Min. : 0.0	Min. : -64	Min. : -1.0	Min. : 1180
1st Qu. : 250.0	1st Qu. : 15577	1st Qu. : 330.0	1st Qu. : 12460

Median : 480.0	Median : 24971	Median : 518.0	Median : 19188
Mean : 840.1	Mean : 33762	Mean : 707.5	Mean : 24362
3rd Qu. : 936.0	3rd Qu. : 40440	3rd Qu. : 837.0	3rd Qu. : 29842
Max. : 54120.0	Max. : 1040700	Max. : 28908.0	Max. : 583104

chids	chibq	chidsbq	m5a1ct
Min. : 1136	Min. : 51.0	Min. : 49.0	Min. : 0
1st Qu. : 11413	1st Qu. : 267.0	1st Qu. : 244.0	1st Qu. : 554
Median : 17387	Median : 397.0	Median : 357.0	Median : 882
Mean : 21922	Mean : 512.8	Mean : 456.4	Mean : 1081
3rd Qu. : 27045	3rd Qu. : 615.0	3rd Qu. : 554.0	3rd Qu. : 1390
Max. : 575918	Max. : 11279.0	Max. : 11204.0	Max. : 12100

m5a1c4	m5a1c5	m5a2ct	m5a2c11
Min. : 0.0	Min. : 0.0	Min. : 540.3	Min. : 0
1st Qu. : 401.0	1st Qu. : 0.0	1st Qu. : 5989.0	1st Qu. : 3338
Median : 680.0	Median : 90.0	Median : 8505.0	Median : 6275
Mean : 881.2	Mean : 199.9	Mean : 10028.3	Mean : 8062
3rd Qu. : 1132.0	3rd Qu. : 272.0	3rd Qu. : 12331.0	3rd Qu. : 10736
Max. : 11095.0	Max. : 5090.0	Max. : 102405.0	Max. : 101045

m5a2c12	m5b1ct	m5b1c6	m5b1c7
Min. : 0	Min. : 25	Min. : 0	Min. : 0.0
1st Qu. : 54	1st Qu. : 1122	1st Qu. : 757	1st Qu. : 0.0
Median : 1476	Median : 1981	Median : 1644	Median : 100.0
Mean : 1966	Mean : 2838	Mean : 2572	Mean : 265.5
3rd Qu. : 3160	3rd Qu. : 3579	3rd Qu. : 3379	3rd Qu. : 388.0
Max. : 15093	Max. : 57000	Max. : 57000	Max. : 5760.0

m5b2ct	m5b2c4	m5b2c5	m5b3ct
Min. : 0	Min. : 0	Min. : 0.00	Min. : 0
1st Qu. : 776	1st Qu. : 750	1st Qu. : 0.00	1st Qu. : 522
Median : 1380	Median : 1350	Median : 0.00	Median : 1095
Mean : 2210	Mean : 2147	Mean : 62.77	Mean : 2440
3rd Qu. : 2555	3rd Qu. : 2511	3rd Qu. : 0.00	3rd Qu. : 2290
Max. : 85000	Max. : 85000	Max. : 46200.00	Max. : 362530

m5b4c	ID	wt	xaid
Min. : 0	Length:9189	Min. : 467.2	Length:9189
1st Qu. : 0	Class :character	1st Qu. :1656.7	Class :character
Median : 100	Mode :character	Median :2019.9	Mode :character
Mean : 5746		Mean :2136.2	
3rd Qu. : 3120		3rd Qu. :2494.2	
Max. : 1313476		Max. :4637.7	

>

5.2 Frequency table of categorical variables

Data check of categorical variables

```

> # file.names: Rnames[j]
> # file.list: lss2006[[j]]
> # list of column numbers of categorical variables
> check.list<-list()
> check.list[[1]]<-c(5:9, 12:14)
> check.list[[2]]<-c(7, 8, 10:13, 16)
> check.list[[3]]<-c(6:19)
> check.list[[4]]<-c(6:8, 11:15, 17, 18)
> check.list[[5]]<-c(6:12, 15:19, 22:26, 29:31)
> check.list[[6]]<-c(6:19)
> check.list[[7]]<-c(6:16)
> check.list[[8]]<-c(6:8, 11, 12)
> check.list[[9]]<-c(6, 8:10, 17, 18)
> check.list[[10]]<-c(6:41, 44:51, 54:61, 64:71, 74:81, 84:91)
> check.list[[11]]<-c(6, 7, 9, 10, 12, 13, 17)
> check.list[[12]]<-c(6:15)
> check.list[[13]]<-c(6:9, 11)
> check.list[[14]]<-c(6:11, 17:28)
> check.list[[15]]<-c(6, 8, 11:17, 21, 24:26, 28)
> check.list[[16]]<-c(6, 8, 12:19, 23, 26, 28:31)
> check.list[[17]]<-c(6, 7, 10:13, 16)
> check.list[[18]]<-c(6:11, 21, 22, 30, 40, 48, 49, 51)
> check.list[[19]]<-c(6, 9:11, 14, 15)
> check.list[[20]]<-c(6, 10, 13)
> check.list[[21]]<-c(6)
> check.list[[22]]<-c(6)
> check.list[[23]]<-c(6)
> check.list[[24]]<-c(6)
> check.list[[25]]<-c(6)
> check.list[[26]]<-c(6)
> check.list[[27]]<-c(6)
> check.list[[28]]<-c(6)
> check.list[[29]]<-c(6)
> check.list[[30]]<-c(6)
> check.list[[31]]<-c(6)
> check.list[[32]]<-c(6)
> check.list[[33]]<-c(6)
> check.list[[34]]<-c(6)
> check.list[[35]]<-c(6, 11, 14:16, 22, 23, 26, 28, 30)
> check.list[[36]]<-c(6, 7)
> check.list[[37]]<-c()
> check.list[[38]]<-c(6)
> check.list[[39]]<-c(6, 12)
> check.list[[40]]<-c(6)
> check.list[[41]]<-c(6)
> check.list[[42]]<-c()
> check.list[[43]]<-c()
> check.list[[44]]<-c()
> check.list[[45]]<-c()
> check.list[[46]]<-c(6, 8, 10:13, 18, 19, 24, 28, 33:38, 40:42, 44, 45, 48, 49)
> check.list[[47]]<-c(6:37)

```

```

> check.list[[48]]<-c(6, 7, 14, 15, 17)
> check.list[[49]]<-c(7:9, 16, 18, 22, 25, 33:35, 43, 46, 55, 59, 63, 68, 72, 99)

> for(j in 1:49){
+ if(length(check.list[[j]])==0){ next }
+ cat(c("\n\n", "#### FREQUENCY OF VARIABLES IN", Rnames[j],
+ "#####"), "\n\n")
+ for(k in check.list[[j]]){
+ variable.name<-colnames(lss2006[[j]])[k]
+ cat(c("-----", variable.name, "-----"))
+ print(table(lss2006[[j]][k], useNA="ifany"))
+ }}

```

FREQUENCY OF VARIABLES IN muc1a

```

----- hoso -----
  13   14   15   19   20   21   22   23   24   25
11695 11797 11548 2310 1542   40   28   3   89   19

----- matv -----
  1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17
9189 8845 7917 6379 3598 1748  752  331  158  84   31   16   9   6   4   2   2

----- m1ac2 -----
  1   2
19157 19914

----- m1ac3 -----
  1   2   3   4   5   6   7   9
9189  7348 18275  952  45  2203 1057   2

----- m1ac4a -----
 -2   1   2   3   4   5   6   7   8   9   10   11   12
1273 2349 3317 3090 3472 3733 3677 3168 3500 2906 3896 2456 2234

----- m1ac6 -----
  1   2   3   4   5 <NA>
10880 18029 2028  265  135  7734

----- m1ac7 -----
  0   1   2   3   4   5   6   7   8   9   10   11   12
  6  195  300  316  219  100  257  137  201  183  256  198 36703

----- m1ac8 -----
  1   2   3   4
38371  501  190   9

```

FREQUENCY OF VARIABLES IN muc1b

```

----- m1bc3 -----
  1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17
4295 4146 3755 3101 1817 898  421  193  81  44  17   9   4   4   1   1   1
  18  19  20  31
  1   1   1   1

----- m1bc4 -----
  1   2
9327 9465

----- m1bc6 -----
  1   2

```

```

17076 1716
----- m1bc7 -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16 <NA>
4281 4026 3454 2746 1463  644  272  101  46   24    8    6    2    1    1    1 1716
----- m1bc8 -----
  1    2    3 <NA>
1430  190   96 17076
----- m1bc9 -----
  1    2    3    4    5    6 <NA>
390   352  512   40   76   65 17357
----- ghep -----
  0    1    9 <NA>
671 17039   37  1045

```

FREQUENCY OF VARIABLES IN muc2a

```

----- matv -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17
9189 8845 7917 6379 3598 1748  752  331  158  84   31   16    9    6    4    2    2
----- m2ac1 -----
  0    1    2    3    4    5    6    7    8    9   10   11   12
5615 1085 1697 2200 2383 3507 2539 2373 2155 6692 1320 1274 6231
----- m2ac2 -----
  1    2 <NA>
7120  5860 26091
----- m2ac3a -----
 -1    0    1    2    3    7    8    9   10   11 <NA>
  1   241 10503  9206  4954   345   801   22    6   12 12980
----- m2ac3b -----
  0    4    5    6 <NA>
23539  803   418  1331 12980
----- m2ac4 -----
  1    2    3    4    5    9 <NA>
25274  486   154   130   46    1 12980
----- m2ac5 -----
  1    2    3
6409  4408 28254
----- m2ac6 -----
  1    2 <NA>
610 27644 10817
----- m2ac7 -----
  1    2    3    4    5    9 <NA>
 48    1   79   110  2225    2 36606
----- m2ac8 -----
 -1    0    1    2    3    4    5    6    7    8    9   11 <NA>
  1   971  3293  3497  2193   81   102   349   255   635   11   39 27644
----- m2ac9 -----
  1    2    3    4    5    9 <NA>
10453  561   252   106   53    2 27644
----- m2ac10 -----
  1    2 <NA>
4754  6673 27644
----- m2ac11a -----
  0    1    2    3    4    5    6    7    8    9 <NA>
 69   516   511    9   226   620   79  2286   285  153 34317

```

```
----- m2ac11b -----
  0    1    2    3    4    5    6    8    9 <NA>
2976  505  508    4   81  380   82   62  156 34317
```

FREQUENCY OF VARIABLES IN muc2b

```
----- matv -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17
9189 8845 7917 6379 3598 1748  752  331  158  84   31   16    9    6    4    2    2

----- m2bc1 -----
  0    1    2
5615 10360 23096

----- m2bc2 -----
  1    2 <NA>
9040 1320 28711

----- m2bc4 -----
  1    2    3    4    5 <NA>
1155 3143 4574 101   67 30031

----- m2bc5 -----
  1    2    3    4    5 <NA>
785  4304 3264  41   646 30031

----- m2bc6a -----
  1    2    3    4    5    6    7 <NA>
1459 1541  76  2456  407  100  3001 30031

----- m2bc6b -----
  0    1    2    3    4    5    6    7 <NA>
1942  535  963  104  1452  747  46   150 33132

----- m2bc6c -----
  0    1    2    3    4    5    6    7 <NA>
2098  245  298  52   376  487  47   198 35270

----- m2bc8 -----
  1    2    3    4    5 <NA>
23361 278  188  340  249 14655

----- m2bc9 -----
  1    2 <NA>
1974 31482 5615
```

FREQUENCY OF VARIABLES IN muc2c

```
----- matv -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17
9189 8845 7917 6379 3598 1748  752  331  158  84   31   16    9    6    4    2    2

----- m2cc1 -----
  1    2
10455 28616

----- m2cc2 -----
  0    1    2    3    4    5    6    7    8    9   10   11   12   13
5016  885  960  889  672  531  444  328  222  138  181   70   96   15
 14   15   17   18   20 <NA>
  2    2    2    1    1 28616

----- m2cc3 -----
  1    2 <NA>
4099 1340 33632

----- m2cc4a -----
```

```

      1      2      3      4      9 <NA>
2851 1123    26    89    10 34972
----- m2cc4b -----
      0      1      2      3      4 <NA>
3872   15    94    17    12 35061
----- m2cc4c -----
      0      1      3      4 <NA>
116    1      8      1 38945
----- m2cc7a -----
      1      2      3      4      9 <NA>
3795  273     6    19     6 34972
----- m2cc7b -----
      0      1      2      3      4 <NA>
3731   56   254    22    11 34997
----- m2cc7c -----
      0      1      2      3      4 <NA>
311   11      1      7      2 38739
----- m2cc8 -----
      1      2 <NA>
2423 3016 33632
----- m2cc9 -----
      1      2      3      4 <NA>
1237 1084    29    73 36648
----- m2cc12a -----
      1      2      3      4 <NA>
2081  299    18    25 36648
----- m2cc12b -----
      0      1      2      3      4 <NA>
2176   44   160    13     5 36673
----- m2cc12c -----
      0      1      2      3 <NA>
205    5      1      6 38854
----- m2cc13 -----
      0      1      2      3      4      5      6      7      8      9      10      11      12 <NA>
10133  73   132   40    24     9     8     8     8     4    10     2     4 28616
----- m2cc14 -----
      1      2 <NA>
119   203 38749
----- m2cc17a -----
      1      2      3      4 <NA>
66    22     9    22 38952
----- m2cc17b -----
      0      1      2      3 <NA>
105    1    12     1 38952
----- m2cc17c -----
      0 <NA>
14 39057

```

FREQUENCY OF VARIABLES IN muc2d

```

----- matv -----
      1      2      3      4      5      6      7      8      9      10      11      12      13      14      15      16      17
9189 8845 7917 6379 3598 1748  752  331  158   84   31   16    9    6    4    2    2
----- m2dc1 -----
      0      1      2      3

```

5524	10627	13715	9205		
----- m2dc2 -----					
0	1	2	4	<NA>	
9077	119	8	1	29866	
----- m2dc3a -----					
1	2	4	5	<NA>	
33	69	14	12	38943	
----- m2dc3b -----					
0	1	2	4	5	<NA>
104	2	5	1	4	38955
----- m2dc3c -----					
0	<NA>				
8	39063				
----- m2dc4 -----					
0	1	2	3	6	<NA>
22488	387	40	4	1	16151
----- m2dc5a -----					
1	2	3	4	5	9 <NA>
112	202	8	53	52	5 38639
----- m2dc5b -----					
0	1	2	3	4	5 <NA>
298	26	25	6	8	12 38696
----- m2dc5c -----					
0	1	2	3	4	5 <NA>
56	1	3	2	2	1 39006
----- m2dc6 -----					
0	1	2	3	4	5 <NA>
32312	1010	183	34	6	2 5524
----- m2dc7a -----					
1	2	3	4	5	9 <NA>
491	363	28	131	214	8 37836
----- m2dc7b -----					
0	1	2	3	4	5 <NA>
736	57	118	17	33	52 38058
----- m2dc7c -----					
0	1	2	3	4	5 <NA>
178	7	8	7	4	21 38846

FREQUENCY OF VARIABLES IN muc2e

----- matv -----																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
9189	8845	7917	6379	3598	1748	752	331	158	84	31	16	9	6	4	2	2
----- m2ec1 -----																
1	2	<NA>														
2560	31266	5245														
----- m2ec2a -----																
1	2	3	4	<NA>												
813	491	1243	13	36511												
----- m2ec2b -----																
0	1	2	3	4	<NA>											
2519	16	6	5	1	36524											
----- m2ec2c -----																
0	1	3	<NA>													
25	1	1	39044													


```

----- m2ec3a1 -----
  0   1   2   3   4 <NA>
594 459 1068 426 13 36511
----- m2ec3a2 -----
  0   1   2   3   4   5   6   7   8   9  10  11 <NA>
1443 27 47 154 46 20 627 11 53 103 23 6 36511
----- m2ec3b1 -----
  0   1   2   3 <NA>
20   6   2   1 39042
----- m2ec3b2 -----
  0   1   2   3   5   6   8   9  10 <NA>
5   4   1   2   1  11   1   3   1 39042
----- m2ec3c1 -----
  0   2 <NA>
2   1 39068
----- m2ec3c2 -----
  0   6 <NA>
1   2 39068

```

FREQUENCY OF VARIABLES IN muc3a1

```

----- matv -----
  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17
9189 8845 7917 6379 3598 1748 752 331 158 84 31 16 9 6 4 2 2
----- m3ac1 -----
  1   2
7290 31781
----- m3ac2 -----
  1   2 <NA>
12962 18819 7290
----- m3ac4 -----
  1   2   3
15471 6097 17503
----- m3ac5 -----
  1   2   3   4   5   6   7   8 <NA>
1253 2176 1105 3231 427 5702 1554 23 23600

```

FREQUENCY OF VARIABLES IN muc3a2

```

----- matv -----
  1   2   3   4   5   6   7   8   9  10  11  12  13  14  17
5444 5109 2802 2365 1472 755 304 136 71 39 16 5 2 3 1
----- m3ac8a -----
  1   2   3   4   5
14943 2987 519 70 5
----- m3ac8b -----
  1   2   3   4   5   6   7   8   9  10  11  12
481 4685 700 3530 2636 622 254 365 38 4326 384 503
----- m3ac9 -----
  1   2   3   4
377 560 2461 15126
----- m3ac14 -----
  1   2   3
16237 1477 810

```

```
----- m3ac15 -----
  0    1    2    3    4    5    6    7    8    9 <NA>
  3  198   31  535  197   4   30  678  473  138 16237
```

FREQUENCY OF VARIABLES IN muc3b

```
----- matv -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17
9189 8845 7917 6379 3598 1748  752  331  158  84   31   16    9    6    4    2    2

----- m3bc1 -----
  1    2    3    4    5    6    7    8    9   10   11   12   13   15
16885 12936 3505 1877  877  341  140  88   31   12    2    3    1    1
  16   17 <NA>
  1    1  2370

----- m3bc2 -----
  0    1    2    3 <NA>
32646 3538  443  74  2370

----- m3bc3 -----
  1    2    3    9 <NA>
 683 3245 32680  19  2444

----- m3bc4a -----
  0    1    2    3    9 <NA>
34129 1954  373  169  2  2444

----- m3bc4b -----
  0    1    2    3    9 <NA>
34885 1378  313  49  2  2444

----- m3bc5 -----
  0    1    2    3 <NA>
35515  915  215  56  2370

----- m3bc6 -----
  1    2    3    9 <NA>
 23   47 36548  27  2426

----- m3bc7a -----
  0    1    2    3    9 <NA>
36077  428  128  3    9  2426

----- m3bc7b -----
  0    1    2    3    9 <NA>
35671  675  263  27  9  2426

----- m3bc8 -----
  0    1    2    3 <NA>
35029 1248  294  130  2370

----- m3bc9 -----
  0    1    2    3 <NA>
35309  984  266  12  2500

----- m3bc10 -----
  0    1    2    3 <NA>
35527  757  273  14  2500

----- m3bc11 -----
  0    1    2    3 <NA>
34563 1499  464  175  2370

----- m3bc12a -----
  0    1    2    3    9 <NA>
34863 1183  415  64  1  2545

----- m3bc12b -----
  0    1    2    3    9 <NA>
```

34615	1324	491	92	4	2545								
----- m3bc12c -----													
0	1	2	3	9	<NA>								
34800	1263	404	58	1	2545								
----- m3bc13 -----													
0	1	2	3	8	<NA>								
35998	396	152	150	5	2370								
----- m3bc14a -----													
0	1	2	3	<NA>									
36302	190	56	3	2520									
----- m3bc14b -----													
0	1	2	3	<NA>									
36273	215	59	4	2520									
----- m3bc14c -----													
0	1	2	3	8	<NA>								
35485	225	69	6	766	2520								
----- m3bc14d -----													
0	1	2	3	8	<NA>								
35342	222	83	12	892	2520								
----- m3bc14e -----													
0	1	2	3	<NA>									
36294	194	60	3	2520									
----- m3bc14f -----													
0	1	2	3	<NA>									
36274	220	55	2	2520									
----- m3bc15 -----													
1	2	9	<NA>										
294	36231	26	2520										
----- m3bc16 -----													
0	1	2	3	<NA>									
35715	643	219	124	2370									
----- m3bc17 -----													
0	1	2	3	<NA>									
35802	570	201	4	2494									
----- m3bc18 -----													
0	1	2	3	<NA>									
35800	546	214	17	2494									
----- m3bc19 -----													
0	1	2	3	<NA>									
32646	3538	443	74	2370									
----- m3bc20a -----													
0	1	2	3	5	6	7	9	10	11	12	13	<NA>	
2	2704	74	14	9	52	82	588	41	163	325	1	35016	
----- m3bc20b -----													
0	1	2	3	5	6	7	8	9	10	11	12	<NA>	
3562	124	41	9	6	5	8	1	227	32	13	25	35018	
----- m3bc20c -----													
0	1	2	3	6	9	10	11	12	<NA>				
443	6	3	1	1	19	7	5	6	38580				
----- m3bc20d -----													
0	9	10	11	12	<NA>								
43	1	1	2	1	39023								
----- m3bc20e -----													
0	10	11	<NA>										
3	1	1	39066										
----- m3bc20f -----													

0	11	<NA>											
1	1	39069											
----- m3bc20g -----													
0	<NA>												
1	39070												
----- m3bc22 -----													
0	1	2	3	<NA>									
35515	915	215	56	2370									
----- m3bc23a -----													
0	1	2	3	4	5	6	7	9	10	11	12	<NA>	
9	742	69	12	2	6	14	74	199	2	18	39	37885	
----- m3bc23b -----													
0	1	2	3	4	5	7	9	10	11	12	<NA>		
980	52	21	4	1	3	4	87	7	6	12	37894		
----- m3bc23c -----													
0	1	3	6	9	11	12	<NA>						
176	2	1	1	8	6	3	38874						
----- m3bc23d -----													
0	2	9	12	<NA>									
18	1	1	1	39050									
----- m3bc23e -----													
0	10	<NA>											
2	1	39068											
----- m3bc23f -----													
0	<NA>												
1	39070												
----- m3bc23g -----													
<NA>													
39071													
----- m3bc25 -----													
0	1	2	3	<NA>									
35029	1248	294	130	2370									
----- m3bc26a -----													
0	1	2	3	5	6	7	8	9	10	11	12	<NA>	
2	932	48	37	17	19	149	4	340	48	29	47	37399	
----- m3bc26b -----													
0	1	2	3	4	5	6	7	9	10	11	12	<NA>	
1354	70	14	9	1	4	3	6	129	51	14	15	37401	
----- m3bc26c -----													
0	1	2	6	7	9	10	11	12	<NA>				
278	3	5	1	1	13	8	5	2	38755				
----- m3bc26d -----													
0	7	10	11	<NA>									
34	1	1	2	39033									
----- m3bc26e -----													
0	12	<NA>											
3	1	39067											
----- m3bc26f -----													
0	<NA>												
1	39070												
----- m3bc26g -----													
<NA>													
39071													
----- m3bc28 -----													
0	1	2	3	<NA>									
34563	1499	464	175	2370									

----- m3bc29a -----												
0	1	2	3	5	6	7	9	10	11	12	<NA>	
2	1200	78	16	54	44	90	567	3	38	46	36933	
----- m3bc29b -----												
0	1	2	3	5	6	7	8	9	10	11	12	<NA>
1704	122	23	8	6	4	6	1	229	7	14	12	36935
----- m3bc29c -----												
0	1	2	3	6	7	9	10	11	12	<NA>		
403	1	3	1	1	2	9	2	5	5	38639		
----- m3bc29d -----												
0	7	9	11	12	<NA>							
25	1	1	1	1	39042							
----- m3bc29e -----												
0	12	<NA>										
3	1	39067										
----- m3bc29f -----												
0	<NA>											
1	39070											
----- m3bc29g -----												
<NA>												
39071												
----- m3bc31 -----												
0	1	2	3	8	<NA>							
35998	396	152	150	5	2370							
----- m3bc32a -----												
0	1	2	3	5	6	7	9	11	12	<NA>		
2	336	23	17	24	32	61	164	25	19	38368		
----- m3bc32b -----												
0	1	2	3	5	6	7	9	10	11	12	<NA>	
550	36	6	6	2	2	2	79	2	12	4	38370	
----- m3bc32c -----												
0	1	2	3	7	9	10	11	12	<NA>			
138	2	1	1	1	3	1	2	2	38920			
----- m3bc32d -----												
0	6	<NA>										
12	1	39058										
----- m3bc32e -----												
0	<NA>											
1	39070											
----- m3bc32f -----												
<NA>												
39071												
----- m3bc32g -----												
<NA>												
39071												
----- m3bc34 -----												
0	1	2	3	<NA>								
35715	643	219	124	2370								
----- m3bc35a -----												
0	1	2	3	5	6	7	8	9	10	11	12	<NA>
7	491	24	32	16	12	136	1	185	36	28	18	38085
----- m3bc35b -----												
0	1	2	3	5	6	7	9	10	11	12	<NA>	
726	36	12	3	2	2	8	108	56	21	5	38092	
----- m3bc35c -----												
0	1	2	3	6	7	9	10	11	12	<NA>		

```

216      3      1      1      1      3      10      14      2      2 38818
----- m3bc35d -----
0        3      9      11      12 <NA>
31       1      1      3      1 39034
----- m3bc35e -----
0        2      12 <NA>
4        1      1 39065
----- m3bc35f -----
0 <NA>
2 39069
----- m3bc35g -----
<NA>
39071

```

FREQUENCY OF VARIABLES IN muc3c

```

----- matv -----
1      2      3      4      5      6      7      8      9      10     11     12     13     14     15     16     17
9189 8845 7917 6379 3598 1748 752 331 158 84 31 16 9 6 4 2 2
----- m3cc1 -----
1      2 <NA>
154 2742 36175
----- m3cc3 -----
1      2 <NA>
750 2146 36175
----- m3cc4 -----
1      2 <NA>
456 294 38321
----- m3cc6 -----
1      2 <NA>
90 2806 36175
----- m3cc7 -----
1      2 <NA>
6311 29864 2896
----- m3cc11 -----
1      2 <NA>
3140 33035 2896

```

FREQUENCY OF VARIABLES IN muc3d

```

----- matv -----
1      2      3      4      5      6      7      8      9      10     11     12     13     15     16     17
574 4694 421 484 201 122 65 41 19 15 3 3 1 2 1 1
----- m3dc1 -----
1      2      3
287 570 5790
----- m3dc2 -----
1      2      3 <NA>
318 5532 510 287
----- m3dc3 -----
1      2 <NA>
4950 1092 605
----- m3dc4a -----
1      2      3      4      5      6      7      8      9      10     11 <NA>

```

```

535 2715 55 2 4 529 287 15 549 242 17 1697
----- m3dc4b -----
0 1 2 3 4 6 8 9 10 11 <NA>
3884 114 7 6 1 247 1 302 383 5 1697
----- m3dc5 -----
1 2
6218 429
----- m3dc6 -----
1 2 3 4 5 6 7 8 9 10 <NA>
1171 2503 1423 645 274 116 45 24 13 4 429
----- m3dc7a -----
0 1 2 3 4 5 6 7 <NA>
1189 2874 1615 394 121 15 8 2 429
----- m3dc7b -----
0 1 2 3 4 5 6 7 <NA>
1584 2736 1273 422 150 39 10 4 429

```

FREQUENCY OF VARIABLES IN muc3e

```

----- matv -----
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
9189 8787 6859 4745 2447 1060 421 168 81 37 14 5 3 2 4 2 2
----- m3ec1 -----
1 2
8868 24958
----- m3ec2 -----
1 2 <NA>
8230 638 24958
----- m3ec3 -----
1 2 3 <NA>
5873 1203 1154 25596
----- m3ec5 -----
1 2 <NA>
6611 465 26750

```

FREQUENCY OF VARIABLES IN muc3f

```

----- matv -----
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
9189 8845 7917 6379 3598 1748 752 331 158 84 31 16 9 6 4 2 2
----- m3fc1 -----
1 2 3 4
8192 7256 6097 17526
----- m3fc2 -----
1 2 3 4 5 6 7 8 9 10 <NA>
2141 409 690 731 2970 452 8 76 693 22 30879
----- m3fc3 -----
1 2 <NA>
121 8071 30879
----- m3fc4a -----
1 2 3 4 5 6 7 8 <NA>
3933 1781 463 913 142 108 32 5 31694
----- m3fc4b -----
0 1 2 3 4 7 8 <NA>

```

```

7309      4      43      1      3      5      7 31699
----- m3fc8a -----
1        2 <NA>
12412 1877 24782
----- m3fc8b -----
1        2 <NA>
6250 1127 31694
----- m3fc9a -----
1        2      3      4      5      6      7      8      10      11 <NA>
3060 522 3072 1194 123 125 1 14 35 46 30879
----- m3fc9b -----
1        2      3      4      5      6      7      8      9      10      11 <NA>
1826 581 3456 1219 52 63 2 21 3 101 53 31694
----- m3fc9c -----
1        2      3      4      5      6      8      10      11 <NA>
3976 421 1437 198 8 13 1 5 38 32974
----- m3fc10 -----
1        2      3 <NA>
7264 4913 9368 17526
----- m3fc11a -----
1        2      3 <NA>
606 4743 51 33671
----- m3fc11b -----
1        2      3 <NA>
287 1575 50 37159
----- m3fc12 -----
1        2      3      4      5      6 <NA>
142 444 583 1078 340 2326 34158
----- m3fc13a -----
1        2      3      4      5      6      7      8      9      10      11      12 <NA>
5454 578 110 815 3343 1957 1060 1554 466 775 916 498 21545
----- m3fc13b -----
0        1      2      3      4      5      6      7      8      9      10      11      12 <NA>
12036 564 124 14 438 592 686 502 857 250 210 161 128 22509
----- m3fc14 -----
1        2      9 <NA>
5518 10705 30 22818

```

FREQUENCY OF VARIABLES IN muc3g

```

----- m3gma -----
1        2      3      4      5      6      7      8      9      10      11      13      14      99
1814 1558 747 675 443 236 97 40 19 10 2 1 2 5414
----- m3gc1d -----
-1       1      2      3      4      5      6      7      8      9      10      11      12 <NA>
5 158 1666 204 985 592 111 70 69 14 1479 153 138 5414
----- m3gc4a -----
-1       1      2      3      4      5      6      7      8      9      10      11      12 <NA>
26 219 1074 3262 54 16 84 71 8 18 715 33 64 5414
----- m3gc4b -----
0        1      2      3      4      5      6      7      8      9      10      11      12 <NA>
4969 76 70 186 1 1 6 5 1 1 248 29 25 5440
----- m3gc4c -----
0        1      2      3      10      11      12 <NA>
523 28 2 24 51 16 5 10409

```


----- m3gc5a -----																									
0	1	2	3	4	5	7	8	9	<NA>																
43	3638	1322	283	10	35	151	16	20	5540																
----- m3gc5b -----																									
0	1	2	3	4	5	7	8	9	<NA>																
4197	63	741	375	8	64	11	5	11	5583																
----- m3gc5c -----																									
0	1	2	3	4	5	6	7	9	<NA>																
1087	5	11	113	5	39	1	12	5	9780																
----- m3gc6 -----																									
1	2	<NA>																							
185	5323	10	5540																						
----- m3gc10 -----																									
1	2	<NA>																							
668	4850	5540																							
----- m3gc13 -----																									
1	2	9	<NA>																						
1666	3827	25	5540																						
----- m3gc14 -----																									
1	2	9	<NA>																						
1131	4372	15	5540																						
----- m3gc15 -----																									
1	2	<NA>																							
279	5239	5540																							
----- m3gc17 -----																									
1	2	<NA>																							
154	5364	5540																							

FREQUENCY OF VARIABLES IN muc3h

----- m3hma -----														
1	2	3	4	5	6	7	8	9	10	11	13	17	99	
836	732	411	349	200	101	45	21	9	10	4	1	1	6494	
----- m3hc1d -----														
-1	1	2	3	4	5	6	7	8	9	10	11	12	<NA>	
5	8	225	95	1011	948	267	70	47	14	18	4	8	6494	
----- m3hc5a -----														
1	2	3	4	5	6	7	8	9	<NA>					
616	1297	138	51	92	131	280	110	5	6494					
----- m3hc5b -----														
0	1	2	3	4	5	6	7	8	9	<NA>				
2275	36	107	1	4	8	96	7	23	158	6499				
----- m3hc5c -----														
0	1	2	3	5	6	7	8	9	<NA>					
216	8	14	2	6	18	2	5	11	8932					
----- m3hc6a -----														
0	1	2	3	4	5	6	7	8	9	<NA>				
12	2439	189	36	20	1	5	11	2	5	6494				
----- m3hc6b -----														
0	1	2	3	4	5	6	7	8	9	<NA>				
601	63	1442	505	62	6	11	12	1	5	6506				
----- m3hc6c -----														
0	1	2	3	4	5	6	7	8	9	<NA>				
1113	12	30	769	87	34	26	9	5	22	7107				
----- m3hc7 -----														

```

      1      2      9 <NA>
239 2415      7 6553
----- m3hc8 -----
      1      2      9 <NA>
290 2364      7 6553
----- m3hc12 -----
      1      2 <NA>
368 1456 7390
----- m3hc15 -----
      1      2 <NA>
692 1969 6553
----- m3hc17 -----
      1      2 <NA>
119 2542 6553
----- m3hc18 -----
      1      2 <NA>
108 11 9095
----- m3hc19 -----
      2      4 <NA>
      7      4 9203
----- m3hc20 -----
      1      2 <NA>
      58 2603 6553

```

FREQUENCY OF VARIABLES IN muc3i

```

----- matv -----
      1      2      3      4      5      6      7      8      9      10     11     12     13     16     99
3524 3163 2426 1867 1053  465  189   74   39   21    4    3    2    1 8791
----- m3ic1 -----
      1      2 <NA>
1751 19627  244
----- m3ic3 -----
      1      2 <NA>
3665 17713  244
----- m3ic4a -----
      0      1      2      3      4      5      6      7      8      10     11     12     13     14
29 128 371  30  28  2  4  3  6 252 73 75 2604  9
15 <NA>
51 17957
----- m3ic4b -----
      0      1      2      3      4      5      8      10     11     12     13     14     15 <NA>
3343 27 55  5  6  2  2 36 26 26 102  4  2 17986
----- m3ic4c -----
      0      1      2      3      4      10     11     12     13     15 <NA>
246  1  7  2  8  5  3  4 16  1 21329
----- m3ic6 -----
      1      2      3      4      9 <NA>
104 1356  47 19706 165  244

```

FREQUENCY OF VARIABLES IN muc4a

```

----- matv -----
      1      2      3      4      5      6      7      8      9      10     11     12     13     14     15     16     17

```

9189	8845	7917	6379	3598	1748	752	331	158	84	31	16	9	6	4	2	2
----- m4ac1a -----																
1	2	<NA>														
9447	26728	2896														
----- m4ac1b -----																
1	2	<NA>														
15044	21131	2896														
----- m4ac1c -----																
1	2	<NA>														
5550	30625	2896														
----- m4ac2 -----																
1	2	<NA>														
22895	13280	2896														
----- m4ac3 -----																
1	2	3	4	5	6	7	<NA>									
9441	916	1980	234	328	227	154	25791									
----- m4ac10a -----																
1	2	3	4	5	6	7	<NA>									
73	15731	3344	2266	131	982	368	16176									
----- m4ac10b -----																
1	2	<NA>														
1443	823	36805														
----- m4ac13 -----																
1	2	<NA>														
9138	13757	16176														
----- m4ac20 -----																
1	2	3	4	5	6	7	<NA>									
30	6745	1900	244	44	145	30	29933									
----- m4ac23 -----																
1	2	<NA>														
2307	6831	29933														
----- m4ac24 -----																
1	2	<NA>														
425	1882	36764														
----- m4ac26 -----																
1	2	<NA>														
24631	11544	2896														

FREQUENCY OF VARIABLES IN muc4b0

----- m4b0ma -----																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
6645	5188	3781	2744	1884	1286	891	593	407	277	162	97	62	38	25		
----- m4b0c4 -----																
1	2	3	4	5	6	7	8									
17946	1949	709	602	37	2785	24	28									
----- m4b0c5 -----																
1	2	3	4	9	<NA>											
7956	6311	1549	4071	8	4185											
----- m4b0c6 -----																
1	2	3	4	5	6	7	8	9	10							
13640	2510	3080	560	1622	1661	21	490	433	63							
----- m4b0c9 -----																
1	2															
22787	1293															

```
----- m4b0c10 -----
      1      2      3      4      5 <NA>
    567    298    12    263    153 22787
```

FREQUENCY OF VARIABLES IN muc4b11

```
----- m4b11ma -----
      1      2      3      4      5      6      7
    3810 1524 3035    115 4747 1563    167
```

```
----- m4b11c6 -----
      1      2
    7770 7191
```

```
----- m4b11c9 -----
      1      2      3      4      5      9 <NA>
     19    11 6049 1660    23     8 7191
```

FREQUENCY OF VARIABLES IN muc4b12

```
----- m4b12ma -----
      8      9     10     11     12     13     14     15     16     17     18     19     20     21
    1973 1151 1218     79    284 2149    887    914 2069    783    273    920 2210    589
```

FREQUENCY OF VARIABLES IN muc4b13

```
----- m4b13ma -----
     22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38
    516 926 103 251    74   39   17   15 127 366 285   44 224 592   27 217 109
```

FREQUENCY OF VARIABLES IN muc4b14

```
----- m4b14ma -----
     39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55
    1106 199 2247 999 121     6 273 819 1082 213 509 920   10 960 263   14   50
```

FREQUENCY OF VARIABLES IN muc4b15

```
----- m4b15ma -----
      1      2      3      4      5      6      7      8      9
    3177 1228 1311   374 121    18    21 1440   689
```

FREQUENCY OF VARIABLES IN muc4b16

```
----- m4b16ma -----
      1      2      3      4      5      6      7      8      9     10     11     12     13     14     15     16     17
    5323 2329 5894 3252   593 5144 4091 5451 1699   760 2564   626 3607 1040 2858 3611   94
      18     19
     488 3089
```

FREQUENCY OF VARIABLES IN muc4b161

```
----- m4b161ma -----
  1   2   3   4   5
5211 3158 3354 3887 982
```

FREQUENCY OF VARIABLES IN muc4b21

```
----- m4b21ma -----
  1   2   3   4   5   6   7   8   9   10  11  12  13  14  15  16  17
2943 352   2  72 3928 1089  28 1298 324 244 716 2574  11  27  35  17 112
  18
2805
```

FREQUENCY OF VARIABLES IN muc4b22

```
----- m4b22ma -----
  1   2   3   4   5   6   7   8   9  10
3513 662   2  80 3958 1133  51  32  27 764
```

FREQUENCY OF VARIABLES IN muc4b31

```
----- m4b31ma -----
  1   2   3   4   5
164 17   4  71  23
```

FREQUENCY OF VARIABLES IN muc4b32

```
----- m4b31ma -----
  1   2   3   4   5
163 17   4  70  23
```

FREQUENCY OF VARIABLES IN muc4b41

```
----- m4b41ma -----
  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15
  8  20  18   8   2  251 507  32  36 127 2119  39 599  55 111
```

FREQUENCY OF VARIABLES IN muc4b42

```
----- m4b42ma -----
  1   2   3
2139 43 101
```

FREQUENCY OF VARIABLES IN muc4b51

```
----- m4b51ma -----
  1   2   3  11  12  13  14  21  22  23
  7   3   4 1368 251  39 188 1052 127 614
```

FREQUENCY OF VARIABLES IN muc4b52

```
----- m4b52ma -----
      1      2      3
1461 1241      4
```

FREQUENCY OF VARIABLES IN muc4c

```
----- m4c1ma -----
      1      2      3      4
3523  745  100   11

----- m4c1c6 -----
      1      2
4326   53

----- m4c1c9a -----
      1      2      3      4      5      6      7      9
2481   13   20  701  101  416  646   1

----- m4c1c9b -----
      0      1      2      3      4      5      6      7 <NA>
4029   87   5   3   91   6   59   98   1

----- m4c1c9c -----
      0      1      2      3      4      5      6      7 <NA>
282    7   2   1   7   2   21   27 4030

----- m4c1c15 -----
      1      2      3
91    931 3357

----- m4c1c16 -----
      1      2 <NA>
2374  109 1896

----- m4c1c19 -----
      1      2 <NA>
31   2343 2005

----- m4c1c21 -----
      1      2 <NA>
810 1673 1896

----- m4c1c23 -----
      1      2
746 3633
```

FREQUENCY OF VARIABLES IN muc4c2

```
----- m4c1ma -----
      1      2      3      4
23978 4678  609   68

----- m4c2c26 -----
      1      2      3      4      5      6      7      8      9     10     11     12     13     14     15     16
2018 3559 2125  703 2394 1486 2489  414  798  469  391 1561  176 1992 4379 4379
```

FREQUENCY OF VARIABLES IN muc5a1

```
----- m5a1c1 -----
101  102  110  111  112  113  114  115  116  118  120  121  124  134  139  140  144
```

3990 7399 9028 3252 262 7796 2725 573 5614 5935 912 7660 6973 8657 8024 8829 7991
 145 146 151 153 154 156 157
 3626 3364 2857 7776 6706 3884 7893

FREQUENCY OF VARIABLES IN muc5a2

----- m5a2c1 -----
 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117
 9099 4794 2930 2294 4197 3736 6627 5771 3024 9068 4351 801 6983 4589 2097 3478 8974
 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134
 8877 5041 4395 7929 7582 4977 4438 5753 8420 5124 7589 7454 8536 5438 7208 5491 7636
 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151
 8623 9021 5171 8931 8468 5083 3520 2461 1201 6389 2861 1689 988 604 692 1330 1126
 152 153 154 155 156 157
 757 6705 5719 708 6951 4865
 ----- m5a2c7 -----
 1 2 <NA>
 41357 240256 6951

FREQUENCY OF VARIABLES IN muc5b1

----- m5b1c1 -----
 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217
 3680 6844 3266 3397 5377 3854 8091 9141 7707 8515 6513 2429 8776 6595 1646 2378 1141
 218 219 220 221 299
 2287 6880 8152 4989 2456

FREQUENCY OF VARIABLES IN muc5b2

----- m5b2c1 -----
 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317
 5637 8935 2000 8303 5215 6650 5171 9000 7836 6758 5659 4816 1457 1971 2688 537 2463
 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 399
 5208 4336 2902 4383 1505 281 1062 4794 208 44 897 38 1709 649 61 1135 644

FREQUENCY OF VARIABLES IN muc7

----- m7c1 -----
 0 1 2 3 11
 9 8944 225 9 2
 ----- m7c3 -----
 1 2 3 4 5 <NA>
 18 855 1119 5580 1608 9
 ----- m7c5 -----
 1 2 3 4 5 9 <NA>
 9 53 76 819 1246 2 6984
 ----- m7c6 -----
 1 2 3 <NA>
 8796 150 234 9
 ----- m7c7 -----
 1 2 <NA>
 76 9104 9

----- m7c8 -----														
1	2	3	4 <NA>											
48	3	24	1 9113											
----- m7c13 -----														
1	2	<NA>												
820	8360	9												
----- m7c14 -----														
1	2	<NA>												
124	696	8369												
----- m7c19 -----														
1	2	<NA>												
1016	8164	9												
----- m7c22 -----														
1	2	<NA>												
427	8753	9												
----- m7c26 -----														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1465	214	255	2030	2286	386	209	203	1334	17	14	4	693	79	
----- m7c27 -----														
1	2	<NA>												
888	5012	3289												
----- m7c28 -----														
1	2	3	4	5	9									
7045	801	726	357	259	1									
----- m7c29 -----														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1336	179	226	2713	2637	444	201	197	141	2	12	1	1032	68	
----- m7c30 -----														
1	2	<NA>												
1137	6167	1885												
----- m7c31 -----														
1	2													
2111	7078													
----- m7c33 -----														
1	2	3	4	5	6	9								
2811	434	1809	1003	1995	1136	1								
----- m7c34 -----														
1	2	3	4											
8727	65	306	91											
----- m7c35 -----														
1	2													
8705	484													
----- m7c37 -----														
1	2	3	4	9										
2291	458	3491	2948	1										
----- m7c38 -----														
1	2													
2186	7003													
----- m7c41 -----														
1	2													
628	8561													
----- m7c42 -----														
1	2	<NA>												
110	518	8561												

FREQUENCY OF VARIABLES IN muc8

```

----- m8c1a -----
  1    2
1072 8117
----- m8c1b -----
  1    2
1142 8047
----- m8c1c -----
  1    2
1310 7879
----- m8c2a -----
  1    2 <NA>
 995 521 7673
----- m8c2b -----
  1    2 <NA>
1066 450 7673
----- m8c2c -----
  1    2 <NA>
1168 348 7673
----- m8c3a_1 -----
  1    2    3 <NA>
 495 955 66 7673
----- m8c3a_2 -----
  1    2    3 <NA>
 977 508 31 7673
----- m8c3a_3 -----
  1    2    3 <NA>
 670 758 88 7673
----- m8c3a_4 -----
  1    2    3 <NA>
  49 1312 155 7673
----- m8c3a_5 -----
  1    2    3 <NA>
 60 1291 165 7673
----- m8c3a_6 -----
  1    2    3 <NA>
286 1082 148 7673
----- m8c3a_7 -----
  1    2    3 <NA>
153 1284 79 7673
----- m8c3a_8 -----
  1    2    3 <NA>
186 1247 83 7673
----- m8c3b_1 -----
  1    2    3 <NA>
 520 924 72 7673
----- m8c3b_2 -----
  1    2    3 <NA>
1115 372 29 7673
----- m8c3b_3 -----
  1    2    3 <NA>
 720 706 90 7673
----- m8c3b_4 -----
  1    2    3 <NA>
 56 1298 162 7673

```

----- m8c3b_5 -----						
1	2	3	<NA>			
55	1292	169	7673			
----- m8c3b_6 -----						
1	2	3	<NA>			
301	1063	152	7673			
----- m8c3b_7 -----						
1	2	3	<NA>			
152	1278	86	7673			
----- m8c3b_8 -----						
1	2	3	<NA>			
189	1238	89	7673			
----- m8c4a_1 -----						
1	2	3	<NA>			
449	970	97	7673			
----- m8c4a_2 -----						
1	2	3	<NA>			
54	1314	148	7673			
----- m8c4a_3 -----						
1	2	3	<NA>			
278	1083	155	7673			
----- m8c4b_1 -----						
1	2	3	<NA>			
478	938	100	7673			
----- m8c4b_2 -----						
1	2	3	<NA>			
67	1298	151	7673			
----- m8c4b_3 -----						
1	2	3	<NA>			
288	1067	161	7673			
----- m8c5 -----						
1	2	3	4			
3320	4500	924	445			
----- m8c6a -----						
1	2	3	4	5	<NA>	
238	502	178	26	425	7820	
----- m8c6b -----						
0	1	2	3	4	5	<NA>
367	74	88	92	40	283	8245
----- m8c6c -----						
0	1	2	3	4	5	<NA>
185	21	4	20	7	57	8895

FREQUENCY OF VARIABLES IN muc8_vayvon

----- m8ma -----												
1	2	3	4	5	6	7						
4019	763	151	38	7	6	3						
----- m8c8 -----												
1	2	3	4	5	6	7	8	9				
858	1732	156	56	191	326	384	1152	132				
----- m8c13 -----												
1	2	3	4	5	6	7	8	9	10	11	12	13
1366	893	401	624	79	227	330	509	28	224	18	40	248
----- m8c14 -----												

```

      1      2      3      4      9 <NA>
1677 313 118 148      3 2728

```

```
----- m8c15b -----
```

```

      3      4      5      6      7      8 <NA>
11      9 3263 165      24 376 1139

```

```
#### FREQUENCY OF VARIABLES IN ttchung #####
```

```
----- ttnt -----
```

```

      1      2
2307 6882

```

```
----- dantoc -----
```

```

      1      2      3      4      5      6      7      8      9      10      12      13      14      15      16      17      18
7745 308 182 60 124 145 118 103 53 48 22 27 25 28 14 12 16
      19      20      21      22      23      24      25      26      27      28      29      30      31      32      33      34      35
      12      5      24      11      7      8      14      1      9      9      11      3      6      4      3      5      3
      36      37      38      41      42      48      56
      3      10      1      3      3      3      1

```

```
----- phdich -----
```

```

      1      2
381 8808

```

```
----- ttnt04 -----
```

```

      1      2 <NA>
1007 3291 4891

```

```
----- ghepho -----
```

```

      0      1      9
4891 4267      31

```

```
----- m1c1 -----
```

```

      1      2
4298 4891

```

```
----- m3ac6 -----
```

```

      1      2
7031 2158

```

```
----- m3fc15 -----
```

```

      1      2
39 9150

```

```
----- m3fc16 -----
```

```

      1      2      3      4 <NA>
10      9      14      6 9150

```

```
----- m3fc17 -----
```

```

      1      2
94 9095

```

```
----- m4b0c1 -----
```

```

      1      2
6645 2544

```

```
----- m4b1 -----
```

```

      1      2
6291 2898

```

```
----- m4b21 -----
```

```

      1      2
5121 4068

```

```
----- m4b31 -----
```

```

      1      2
257 8932

```

```
----- m4b41 -----
```

1	2
2290	6899
-----	m4b51 -----
1	2
2424	6765
-----	m4c1 -----
1	2
3523	5666
-----	m8c7 -----
1	2
4019	5170

- ✓ Created data files with the original names.

```

> # file.names: Rnames[j]
> # file.list: lss2006[[j]]
> for(j in 1:49) {
+ cmd<-paste(Rnames[j], "<-lss2006[[", j, "]]", sep="")
+ eval(parse(text=cmd))
+ }
> ls()
[1] "cmd"           "file.names"    "j"             "lss2006"
[5] "lss2006.old"   "muc1a"         "muc1b"         "muc2a"
[9] "muc2b"         "muc2c"         "muc2d"         "muc2e"
[13] "muc3a1"        "muc3a2"        "muc3b"         "muc3c"
[17] "muc3d"         "muc3e"         "muc3f"         "muc3g"
[21] "muc3h"         "muc3i"         "muc4a"         "muc4b0"
[25] "muc4b11"       "muc4b12"       "muc4b13"       "muc4b14"
[29] "muc4b15"       "muc4b16"       "muc4b161"      "muc4b21"
[33] "muc4b22"       "muc4b31"       "muc4b32"       "muc4b41"
[37] "muc4b42"       "muc4b51"       "muc4b52"       "muc4c"
[41] "muc4c2"        "muc4d"         "muc5a1"        "muc5a2"
[45] "muc5b1"        "muc5b2"        "muc5b3_4"      "muc6"
[49] "muc6a"         "muc6b"         "muc7"          "muc8"
[53] "muc8_vayvon"   "Rnames"        "ttchung"       "weight_by_xa06"
[57] "wt"

```

6. Household summary file TTCHUNG

6.1 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 4-th column hold for the data set provided.

No	Variable name in the dataset	Description	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	TTNT	Urban/Rural			
8	DANTOC	Household head's ethnicity			
9	PHDICH	Interpretation			
10	DTV	Surveyor's ID code			
11	DT	Team leader' ID code			
12	TINH04	Province code in 2004?			
13	HUYEN04	District code in 2004			
14	XA04	Commune code in 2004			
15	DIABAN04	EA code in 2004			
16	TTNT04	Urban/Rural in 2004			
17	HOSO04	Household code in 2004			
18	GHEPHO	Matched with VHLSS2004			
19	NGAYDT	Date of survey			
20	THANGDT	Month of survey			
21	TSNGUOI	Hosehold size	Number of records within hh	MUC1A	Yes
22	M1C1	HH surveyed in 2004?			
23	M2ACT	Education expenditure: 2CT	Sum of (M2AC13K + M2AC16) within hh	MUC2A	Yes
24	M2ATN	Education income: 2TN	Sum of (M2AC14 + M2AC15) within hh	MUC2A	Yes
25	M3AC6	Q6 section 3: went to health centres...		Section 3a	

26	M3AC16	Health Expend. on medicine for self-treatment	M3AC16 at hh level (Data file not available)	Section 3a	
27	M3AC17	Health Expend. on medical tools	M3AC17 at hh level (Data file not available)	Section 3a	
28	M3AC18	Health Expend. on insurance	M3AC18 at hh level (Data file not available)	Section 3a	
29	M3AC19	Subsidy received for sick members	M3AC19 at hh level (Data file not available)	Section 3a	
30	M3ACT1	Expend. on outpatient treatment Total of Q10-section 3	Sum of M3AC10B within hh	MUC3A2	Yes
31	M3ACT2	Expend. on inpatient treatment Total of Q12 section 3	Sum of M3AC12B within hh	MUC3A2	Yes
32	M3ACT	Total of health expend.	=M3ACT1 + M3ACT2 + M3AC16 + M3AC17 + M3AC18		Yes
33	M3FC15	Exemption due to costly user-fees last 12 months			
34	M3FC16	Result of exemption			
35	M3FC17	Enjoyed charity, fee exemption/reduction health service			
36	M3FC18	Payment for access to charity services			
37	M4ATN1	Wage/salary from main work, Total of Q11-section 4A	Sum of M4AC11 within hh	MUC4A	Yes
38	M4ATN2	Allowances from main work, Total of Q12f-section 4A	Sum of M4AC12F within hh	MUC4A	Yes
39	M4ATN3	Wage/salary from secondary work, Total of Q21-section 4A	Sum of M4AC21 within hh	MUC4A	Yes
40	M4ATN4	Allowances from secondary work, Total of Q22f section 4A: 4ATN4	Sum of M4AC22F within hh	MUC4A	Yes
41	M4ATN5	Wage from third and so on work, Total of Q25 section 4A: 4ATN5	Sum of M4AC25 within hh	MUC4A	Yes
42	M4ATN	Total income from wages	=M4ATN1 + M4ATN2 + M4ATN3 + M4ATN4 + M4ATN5		Yes
43	M4B0C1	Used or managed land for agri&forestry or water surface aquaculture			
44	M4B0T1	Payment for land rent or contracting, Total of Q7-section 4B0	Sum of M4B0C7 within hh	MUC4B0	No (9 errs)

45	M4B0T2	Revenue from land rental Total of Q11-section 4B0	Sum of M4B0C11 within hh	MUC4B0	No (1 err)
46	M4B1	Harvested in past 12 month?			
47	M4B11T	Revenue from rice products, Total of Q15 section 4B1.1	Sum of M4B11C15 with rice code (M4B11MA) = 5, 6 and 7 within hh	MUC4B11	Yes
48	M4B12T	Revenue from other starchy, vegetable, Total of Q8 section 4B1.2	Sum of M4B12C8 within hh	MUC4B12	Yes
49	M4B13T	Revenue from annual and perennial industrial crops, Total of Q8 section 4B1.3	Sum of M4B13C8 within hh	MUC4B13	Yes
50	M4B14T	Revenue from fruit crops Total of Q8 section 4B1.4	Sum of M4B14C8 within hh	MUC4B14	Yes
51	M4B15T	Revenue from crop by-products Total of Q5 section 4B1.5	Sum of M4B15C5 within hh	MUC4B15	Yes
52	M4B1T	Total revenues from crops	= M4B11T + M4B12T + M4B13T + M4B14T + M4B15T		Yes
53	M4B1C	Total cost of crops	Sum of M4B16C2E within hh	MUC4B16	Yes
54	M4B1TN	Income from crops	= M4B1T - M4B1C		Yes
55	M4B21	Raised livestock in past 12 month?			
56	M4B2T	Total revenue from Livestock	Sum of M4B21C6B within hh	MUC4B21	Yes
57	M4B2C	Total expense on Livestock	Sum of M4B22C18 within hh	MUC4B22	Yes
58	M4B2TN	Income from Livestock	= M4B2T - M4B2C		Yes
59	M4B31	Agricul. services in past 12 months?			
60	M4B3T	Total revenue from Agri Services	Sum of M4B31C5 within hh	MUC4B31	Yes
61	M4B3C	Total expense on Agri Services	Sum of M4B32C17 within hh	MUC4B32	Yes
62	M4B3TN	Income from Agri services	= M4B3T - M4B3C		Yes
63	M4B41	Revenue from forestry activities?			
64	M4B4T	Total revenue from Forestry	Sum of M4B41C3F within hh Forestry product code (M4B41MA) ≤14	MUC4B41	Yes
65	M4B4C	Total expense on Forestry	Sum of M4B42C14 Forestry activity code (M4B42MA) ≤2	MUC4B42	Yes
66	M4B41TN	Income from Forestry	= M4B4T - M4B4C		Yes
67	M4B42TN	Income from hunting, trapping,... forest animals,...	= M4B41C3F with M4B41MA=15 minus M4B42C14 with M4B42MA=3	MUC4B41 and MUC4B42	Yes

68	M4B51	Aquatic activities in past 12 months?			
69	M4B5T	Total revenue from Aquaculture	Sum of M4B51C6B within hh	MUC4B51	Yes
70	M4B5C	Total expense on Aquaculture	Sum of M4B52C19 within hh	MUC4B52	Yes
71	M4B5TN	Income from Aquaculture	= M4B5T - M4B5C		Yes
72	M4C1	Non-farm activities?			
73	M4CTT	Total revenue from non-farm	Sum of M4C1C25 within hh	MUC4C	Yes
74	M4CT	Total revenue belongs to household	Sum of M4C1C25A within hh	MUC4C	Yes
75	M4CCT	Total expense on non-farm	Sum of M4C2C28 with M4C2C26=15 within hh	MUC4C2	Yes
76	M4CC	Total expense on non-farm allocated for HH	Sum of M4C2C28 with M4C2C26=16 within hh	MUC4C2	Yes
77	M4CTNT	Income from non-farm	= M4CTT - M4CCT		Yes
78	M4CTN	Income from non-farm HH received	= M4CT - M4CC		Yes
79	M4D1TN	Income from other sources	Sum of M4D1C2_01 to M4D1C2_12	MUC4D	Yes
80	M4D2T	Money received but not considered as income	Sum of M4D2C2_1 to M4D2C2_5	MUC4D	Yes
81	TONGTHU_01	Total of household revenue	= Sum of TONGTHU_02 to TONGTHU_15		Yes
82	TONGTHU_02	Income from subsidies,scholarship	=M2ATN		Yes
83	TONGTHU_03	Income from health subsidies	=M3AC19		Yes
84	TONGTHU_04	Income from wage	=M4ATN		Yes
85	TONGTHU_05	revenue from crops	=M4B1T		Yes
86	TONGTHU_06	Revenue from livestock	=M4B2T		Yes
87	TONGTHU_07	Revenue from Agricultural Services	=M4B3T		Yes
88	TONGTHU_08	Revenue from hunting, trapping	Question 6 (M4B41C3F) Code (M4B41MA) 15	MUC4B41	
89	TONGTHU_09	Revenue from forestry	=M4B4T		Yes
90	TONGTHU_10	Revenue from aquaculture	=M4B5T		Yes
91	TONGTHU_11	Revenue from non-farm business	=M4CT		Yes
92	TONGTHU_12	Other income	=M4D1TN		Yes
93	TONGTHU_13	Other money received, not considered as income	=M4D2T		Yes

94	TONGTHU_14	Income from house and land renting out	Q15 (M7C15)	MUC7	No (3 errs)
95	TONGTHU_15	Income from business land renting	=M4B0T2	MUC4B0	Yes
96	M6AC8	Spending on major repairs of fixed assets	(Data file not available)	Section 6a Fixed assets	
97	M6AC9	Total of spending on purchased fixed assets	Sum of M6AC5*M6AC7/100 for the past 12 months	MUC6A	Yes
98	M6BC7	Total of spending on purchased durable goods	Sum of M6BC5 for the past 12 months	MUC6B	Yes
99	M8C7	Borrowed in the past 12 month?			
100	CHISXKD_1	Expenditure on business	= Sum of CHISXKD_2 to CHISXKD_8		Yes
101	CHISXKD_2	Expenditure on crops	=M4B1C		Yes
102	CHISXKD_3	Expenditure on livestock	=M4B2C		Yes
103	CHISXKD_4	Expenditure on agricultural services	=M4B3C		Yes
104	CHISXKD_5	Expenditure on hunting, trapping..	Question 14 (M4B42C14) Line 3	MUC4B42	Yes
105	CHISXKD_6	Expenditure on forestry	=M4B4C		Yes
106	CHISXKD_7	Expenditure on aquaculture	=M4B5C		Yes
107	CHISXKD_8	Expenditure on non-farm business	=M4CC		Yes
108	CHIKHAC_01	Expenditure and other expenditure	=Sum of CHIKHAC_02 to CHIKHAC_14		Yes
109	CHIKHAC_02	Expenditure on education	=M2ACT		Yes
110	CHIKHAC_03	Expenditure on health	=M3ACT		Yes
111	CHIKHAC_04	Expenditure on foods and drinks during holidays	=M5A1CT		Yes
112	CHIKHAC_05	Daily expenditure on foods and drinks	=M5A2CT		Yes
113	CHIKHAC_06	Daily expenditure on non-food	=M5B1CT		Yes
114	CHIKHAC_07	Yearly Non-food expenditure	=M5B2CT		Yes
115	CHIKHAC_08	Other expenditure considered as household expenditure, but not as consumption expenditure	=M5B3CT		Yes
116	CHIKHAC_09	Other expenditure not considered as household expenditure	=M5B4C		Yes
117	CHIKHAC_10	Expenditure on major repairs of fixed assets	=M6AC8		Yes

118	CHIKHAC_11	Expenditure on purchased fixed assets	=M6AC9		Yes
119	CHIKHAC_12	Expenditure on purchased durable goods	=M6BC7		Yes
120	CHIKHAC_13	Expenditure on purchased/ repaired house/ land	=M7C21 + M7C23A + M7C24	MUC7	Yes
121	CHIKHAC_14	Expenditure on housing, electricity, water and garbage collection	=M7C40 - (M7C21 + M7C23A + M7C24)	MUC7	Yes
122	THUNHAP	Total household income	=(TONGTHU_01 - TONGTHU_13) - CHISXKD_1 = Sum of TONGTHU_02 to 12, 14 and 15 minus CHISXKD_1		Yes
123	THUBQ	income per capita per month	=THUNHAP/TSNGUOI/12		Yes
124	CHITIEU	Total household expenditure	= Sum of CHIKHAC_02 to 08, 12 and 14		Yes
125	CHIDS	consumption expenditure	=CHITIEU - CHIKHAC_08 = Sum of CHIKHAC_02 to 07, 12 and 14		Yes
126	CHIBQ	expenditure per capita per month	=CHITIEU/TSNGUOI/12		Yes
127	CHIDSBQ	consumption expenditure per capita per month	=CHIDS/TSNGUOI/12		Yes
128	M5A1CT	Total of Q4 and Q5 section 5A1	= M5A1C4 + M5A1C5		Yes
129	M5A1C4	Expend. on foods & drinks during holidays (in cash), Total of Q2B section 5A1	Sum of M5A1C2B within hh	MUC5A1	Yes
130	M5A1C5	Expend. on foods & drinks during holidays (in-kind), Total of Q3B section 5A1	Sum of M5A1C3B within hh	MUC5A1	Yes
131	M5A2CT	Total of Q11 and Q12 section 5A2	= M5A2C11 + M5A2C12		Yes
132	M5A2C11	Daily expend. on foods & drinks (in cash), Total of Q6 section 5A2	Sum of M5A2C6 within hh	MUC5A2	Yes
133	M5A2C12	Daily expend. on foods & drinks (in-kind), Total of Q10 section 5A2	Sum of M5A2C10 within hh	MUC5A2	Yes
134	M5B1CT	Total of Q6 and Q7 section 5B1	= M5B1C6 + M5B1C6		Yes
135	M5B1C6	Daily non-food consumption (in cash), Total of Q4 section 5B1	Sum of M5B1C4 with M5B1C1<=221 within hh	MUC5B1	Yes

136	M5B1C7	Daily non-food consumption (in-kind), Total of Q5 section 5B1	Sum of M5B1C5 with M5B1C1<=221 within hh	MUC5B1	Yes
137	M5B2CT	Toatal of Q4 and Q5 section 5B2	= M5B2C4 + M5B2C5		Yes
138	M5B2C4	Annual non-food consumption (in cash), Total of Q2 section 5B2	Sum of M5B2C2 within hh	MUC5B2	No (641 errs)
139	M5B2C5	Annual non-food consumption (in-kind), Total of Q3 section 5B2	Sum of M5B2C3 within hh	MUC5B2	No (6 errs)
140	M5B3CT	Other spending considered as household expenditure, Total of Q2 section 5B3	Sum of M5B3C2_01 to M5B3C2_10	MUC5B3_4	No (65 errs)
141	M5B4C	Other spending not considered as household expenditure, Total of Q2 section 5B4	Sum of M5B4C2_1 to M5B4C2_8	MUC5B3_4	Yes

6.2 Summary of verifying TTCHUNG

Summary of data check of TTCHUNG: Relationship with other data files

The next inconsistencies are found regarding relationship with other data files.

Especially, the variable M5B2C4 (Annual consumption expenditure) have many inconsistencies with other data files, but are regarded as more reliable because they are in the summary file.

No	Variable	No of inconsistent records	Example of ID with inconsistency error
44	M4B0T1	9	105031300814
45	M4B0T2	1	111071101615
94	TONGTHU_14	3	207010500913
138	M5B2C4	641	101010301415
139	M5B2C5	6	101062101314
140	M5B3CT	65	103052702715

Note: Particular kind of data files need to be paid attention when aggregating

As for data file MUC4B11 (rice product), there are two cases of records within household.

Case I: There are values in code 1 to 4 and their total value in code 5.

Case II: Code 1 to 4 are empty but there is total value in code 5.

File	Description	Remarks
MUC4B11	Rice product	◆ Total value of rice harvested for the past 12 months is the sum of code 5, 6 and 7. ◆ It is equal to the value of M4B11T of the summary file TTCHUNG. ◆ Code 1 to 4 are the breakdown of code 5. ◆ There are cases that all codes 1 to 4 are empty regardless of code 5.
MUC4B41	Forestry and hunting	Forestry: M4B41MA<=14 Hunting: M4B41MA=15
MUC4B42	Forestry and hunting	Forestry: M4B42MA<=2 Hunting: M4B42MA=3

MUC4C2	Business	The data file MUC4C2 includes at most four business activities, which are indicated in the variable M4C1MA. For each activity, expenditure by expenditure code (code 1 to 14), as well as total expenditure (code 15 and 16) are recorded.
MU5B1	Daily consumption	The variable of expenditure item code M5B1C1 has code 299. It is "in which agricultural by product (straw, thatch, leaves of sugarcane, body of maize, jute, rush...)". However, it should be excluded when calculating total of Q4 and Q5 (M5B1C6 and M5B1C7).

Comments by Ms. Van, GSO

1) As for the gap between TTCHUNG and other data files;

“Yes, we know this gap. The gap exists because the interviewee sometimes does not remember the disaggregated amounts. They usually remember more exactly the total amounts. Therefore, the interviewer write down both the detail amounts and the total amount. Usually, he/she checked the equality of the sum of details and the total amounts.

For the cases with different values, we still keep such cases. But we use the total amounts because we know that interviewee remember it better.”

2) As for rice product;

“Yes, code 5 is the sum of code 1-4. In Vietnam, spring harvest season and winter harvest season are the main season of cultivating paddy. So, Code 1-4 is for the question of the harvest in the each season. Code 5 is for harvesting paddy within one year. Sometimes, the interviewee does not remember how much or the values in each season. Therefore, code 1-4 is empty for some cases.”

6.3 R scripts for verifying the contents of TTCHUNG

TTCHUNG: Relationship with other data files

No. 21

```
> table(ttchung$tsnguoi==tapply(muc1a$PID, muc1a$ID, length))
```

TRUE

9189

No. 23 & 24

```
> head(muc2a)
```

	tinh	huyen	xa	diaban	hoso	matv	m2ac1	m2ac2	m2ac3a	m2ac3b	m2ac4	m2ac5	m2ac6	m2ac7
1	101	01	03	014	15	1	9	NA	2	0	1	3	2	NA
2	101	01	03	014	15	2	12	NA	8	0	1	1	NA	NA
3	101	01	03	014	15	3	12	NA	8	0	1	3	2	NA
4	101	01	03	014	15	4	12	NA	3	0	1	3	2	NA
5	101	01	03	014	19	1	12	NA	3	6	1	3	2	NA
6	101	01	03	014	19	2	12	NA	8	0	1	3	2	NA

	m2ac8	m2ac9	m2ac10	m2ac11a	m2ac11b	m2ac12a	m2ac12b	m2ac13a	m2ac13b	m2ac13c	m2ac13d
1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	8	1	2	NA	NA	NA	NA	1150	0	150	0
3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

	m2ac13e	m2ac13f	m2ac13g	m2ac13h	m2ac13i	m2ac13k	m2ac14	m2ac15	m2ac16	ID
1	NA	NA	NA	NA	NA	NA	NA	NA	0	101010301415
2	0	200	100	0	250	1850	0	0	400	101010301415
3	NA	NA	NA	NA	NA	NA	NA	NA	0	101010301415
4	NA	NA	NA	NA	NA	NA	NA	NA	0	101010301415
5	NA	NA	NA	NA	NA	NA	NA	NA	0	101010301419
6	NA	NA	NA	NA	NA	NA	NA	NA	0	101010301419

	wt	xaid	PID
1	3107.318	1010103	10101030141501
2	3107.318	1010103	10101030141502
3	3107.318	1010103	10101030141503

```

4 3107.318 1010103 10101030141504
5 3107.318 1010103 10101030141901
6 3107.318 1010103 10101030141902
> d<-muc2a[, 31:34]
> d[is.na(d)]<-0
> muc2a[, 31:34]<-d
> table(abs(ttchung$m2act-tapply((muc2a$m2ac13k+muc2a$m2ac16), muc2a$ID, sum, na.rm=T))<=1)
TRUE
9189
> table(abs(ttchung$m2atn-tapply((muc2a$m2ac14+muc2a$m2ac15), muc2a$ID, sum, na.rm=T))<=1)
TRUE
9189

```

No. 30

```

> head(muc3a2)
  tinh huyen xa diaban hoso matv  m3ac7 m3ac8a m3ac8b m3ac9 m3ac10a m3ac10b m3ac11
1  101    01 03    014   19    1  Nh ư m      1      6      3      3     850      1
2  101    01 03    014   24    1  Nh ư xec      1      6      4      8    2250      0
3  101    01 09    019   13    2  Th ư n      1      6      4      2    1000      0
4  101    01 09    019   19    2  Xu ư n      1      5      3      1     200      0
5  101    01 15    027   13    1  Chanh      1      7      4      3     200     NA
6  101    01 17    002   14    1   thu      1      9      4     12      0     12
  m3ac12a m3ac12b m3ac13 m3ac14 m3ac15      ID      wt      xaid      PID
1      0      NA      NA      1      NA 101010301419 3107.318 1010103 10101030141901
2      0      NA      NA      1      NA 101010301424 3107.318 1010103 10101030142401
3      0      NA      NA      1      NA 101010901913 3092.521 1010109 10101090191302
4      0      NA      NA      1      NA 101010901919 3092.521 1010109 10101090191902
5      0      NA      NA      1      NA 101011502713 3085.123 1010115 10101150271301
6      2    1100      2      1      NA 101011700214 3099.920 1010117 10101170021401
> ct<-tapply(muc3a2$m3ac10b, muc3a2$ID, sum, na.rm=T)
> length(ct)
[1] 7031
> df<-data.frame(ID=names(ct), ct)
> head(df)
      ID      ct
101010301419 101010301419 850

```



```

101010301424 101010301424 2250
101010901913 101010901913 1000
101010901919 101010901919 200
101011502713 101011502713 200
101011700214 101011700214 0
> df.old<-df
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> table(is.na(df$ct))
FALSE TRUE
7031 2158
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(is.na(df$ct))
FALSE
9189
> table(abs(df$m3act1-df$ct)<=1)
TRUE
9189

```

No. 31

```

> ct<-tapply(muc3a2$m3ac12b, muc3a2$ID, sum, na.rm=T)
> length(ct)
[1] 7031
> df<-data.frame(ID=names(ct), ct)
> df.old<-df
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> table(is.na(df$ct))
FALSE TRUE
7031 2158
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(is.na(df$ct))
FALSE
9189

```

```
> table(abs(df$m3act2-df$ct) <=1)
```

```
TRUE
```

```
9189
```

No. 37

```
> table(ttchung$m4atn1==tapply(muc4a$m4ac11, muc4a$ID, sum, na.rm=T))
```

```
TRUE
```

```
9189
```

No. 38

```
> table(ttchung$m4atn2==tapply(muc4a$m4ac12f, muc4a$ID, sum, na.rm=T))
```

```
TRUE
```

```
9189
```

No. 39

```
> table(ttchung$m4atn3==tapply(muc4a$m4ac21, muc4a$ID, sum, na.rm=T))
```

```
TRUE
```

```
9189
```

No. 40

```
> table(ttchung$m4atn4==tapply(muc4a$m4ac22f, muc4a$ID, sum, na.rm=T))
```

```
TRUE
```

```
9189
```

No. 41

```
> table(ttchung$m4atn5==tapply(muc4a$m4ac25, muc4a$ID, sum, na.rm=T))
```

```
TRUE
```

```
9189
```

No. 44 & 45

Land for agriculture

```
> head(muc4b0)
```

```

tinh huyen xa diaban hoso m4b0ma m4b0c3a m4b0c3b m4b0c4 m4b0c5 m4b0c6 m4b0c7 m4b0c8
1 101 06 01 010 14 1 2 1113 1 2 1 NA 2001
2 101 06 01 010 15 1 4 1620 1 3 1 NA 1981
3 101 06 25 005 13 2 1 360 1 3 5 NA 1999
```

```

4 101 06 25 005 13 1 1 720 1 4 6 NA 2000
5 101 06 25 005 15 1 1 720 1 2 9 NA 2004
6 101 06 27 002 13 3 1 200 1 3 2 NA 2000

```

```

      m4b0c9 m4b0c10 m4b0c11      ID      wt      xaid
1      1      NA      NA 101060101014 2988.944 1010601
2      1      NA      NA 101060101015 2988.944 1010601
3      1      NA      NA 101062500513 2996.343 1010625
4      1      NA      NA 101062500513 2996.343 1010625
5      1      NA      NA 101062500515 2996.343 1010625
6      1      NA      NA 101062700213 3003.741 1010627

```

```
> ct<-tapply(muc4b0$m4b0c7, muc4b0$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 6645
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df.old<-df
```

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

```
[1] 9189 145
```

```
> table(is.na(df$ct))
```

```
FALSE TRUE
```

```
6645 2544
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(is.na(df$ct))
```

```
FALSE
```

```
9189
```

```
> table(abs(df$m4b0t1-df$ct)<=1)
```

```
FALSE TRUE
```

```
9 9180
```

✓ 9 inconsistencies are found regarding M4B0T1 in TTCHUNG.

ID	m4b0t1 in TTCHUNG	Aggregates from data file
105031300814	0	880
111030700713	0	546
111030700714	0	600

111093700314	0	80
401290900414	0	304
401290900415	0	58
401351500913	0	500
401394900915	0	800
401434100115	0	1300

```
> ct<-tapply(muc4b0$m4b0c11, muc4b0$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 6645
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df.old<-df
```

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

```
[1] 9189 145
```

```
> table(is.na(df$ct))
```

```
FALSE TRUE
```

```
6645 2544
```

```
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(is.na(df$ct))
```

```
FALSE
```

```
9189
```

```
> table(abs(df$m4b0t2-df$ct)<=1)
```

```
FALSE TRUE
```

```
1 9188
```

```
> df[abs(df$m4b0t2-df$ct)>1, c("ID", "ct", "m4b0t2")]
```

```
ID ct m4b0t2
```

```
984 111071101615 630 0
```

✓ One inconsistency is found regarding M4B0T2 in TTCHUNG.

ID	m4b0t2 in TTCHUNG	Aggregates from data file
111071101615	0	630

No. 47

Rice

✓ Sum of m4b11c15 within household is not always equal to m4b11t of TTCHUNG.

```
> ct<- tapply(muc4b11$m4b11c15, muc4b11$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 4824
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df.old<-df
```

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

```
[1] 9189 145
```

```
> table(is.na(df$ct))
```

```
FALSE TRUE
```

```
4824 4365
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(is.na(df$ct))
```

```
FALSE
```

```
9189
```

```
> table(abs(df$m4b11t-df$ct)<=1)
```

```
FALSE TRUE
```

```
4279 4910
```

Example of inconsistency

```
> head(df[abs(df$m4b0t2-df$ct)>1, c("ID", "ct", "m4b11t")])
```

	ID	ct	m4b11t
1	101060101014	5120	2560
2	101060101015	10080	5040
3	101062500513	3840	1920
4	101062500515	4340	2170
5	101150301913	10764	5532
6	101150301915	6120	3060

Example: records of household with inconsistency

It suggested that record (1) + (2) = (3)

```

> muc4b11[muc4b11$ID=="101060101014",]
  tinh huyen xa diaban hoso m4b11ma m4b11c3 m4b11c4 m4b11c5 m4b11c6 m4b11c7 m4b11c8
1  101    06 01    010  14      1   1113    450    100      2    NA    NA
2  101    06 01    010  14      3   1113    350     70      2    NA    NA
3  101    06 01    010  14      5   2226    800    170      2    NA    NA
  m4b11c9 m4b11c10 m4b11c11 m4b11c12 m4b11c13 m4b11c14 m4b11c15      ID      wt
1      NA      20      230      0      0      100      1440 101060101014 2988.944
2      NA      20      160      0      0      100      1120 101060101014 2988.944
3      NA      40      390      0      0      200      2560 101060101014 2988.944
  xaid
1 1010601
2 1010601
3 1010601

```

✓ 4,824 sample households have revenue from rice products.

```

> rice<-ttchung[c("ID", "m4b11t")]
> dim(rice)
[1] 9189    2
> table(rice$m4b11t>0)
FALSE TRUE
4365  4824

```

✓ Transformed data file MUC4B11 to data frame with household-level record and variables of code 1 to 7.

It suggested; (1) code 5 = sum of code 1 to 4.

(2) Sum of code 5 to 7 is equal to m4b11t of TTCHUNG.

```

> d<-muc4b11[c("ID", "m4b11ma", "m4b11c15")]
> colnames(d)<-c("ID", "code", "value")
> for(j in 1:7){
+ dj<-subset(d, code==j)
+ rice<-merge(rice, dj[c("ID", "value")], all=T)
+ colnames(rice)[ncol(rice)]<-paste("code", j, sep="")
+ }
> rice[is.na(rice)]<-0
> head(rice[rice[, 2]>0, ])

```

	ID	m4b11t	code1	code2	code3	code4	code5	code6	code7
47	101060101014	2560	1440	0	1120	0	2560	0	0
48	101060101015	5040	2880	0	2160	0	5040	0	0
58	101062500513	1920	960	0	960	0	1920	0	0
60	101062500515	2170	1120	0	1050	0	2170	0	0
166	101150301913	5532	1872	0	3360	0	5232	300	0
167	101150301915	3060	988	0	2072	0	3060	0	0

```
> table(rice[, 2]==rowSums(rice[, 7:9]))
```

```
TRUE
```

```
9189
```

✓ If sum of code 1 to 4 is non-zero, it is equal to code 5 with 28 exceptions.

```
> rice2<-subset(rice, rowSums(rice[, 3:6])>0)
```

```
> dim(rice2)
```

```
[1] 4279 9
```

```
> table(rice2[, 7]==rowSums(rice2[, 3:6]))
```

```
FALSE TRUE
```

```
28 4251
```

```
> head(rice2[rice2[, 7]!=rowSums(rice2[, 3:6]), ], )
```

	ID	m4b11t	code1	code2	code3	code4	code5	code6	code7
714	105193900415	1992	1000	0	912	0	1992	0	0
723	105211501115	3156	1650	0	1500	0	3156	0	0
1181	109061100314	6031	1974	0	3057	0	6031	0	0
1238	109110300215	17844	5120	0	2501	0	7856	3513	6475
1307	111050901114	5408	2008	0	2600	0	5408	0	0
1625	115030300915	3761	2105	0	1636	0	3761	0	0

✓ Among household with code 5 >0, there are 468 cases without disaggregation of code 1 to 4.

```
> rice3<-subset(rice, rowSums(rice[, 3:6])==0&code5>0)
```

```
> dim(rice3)
```

```
[1] 468 9
```

Summary: MUC4B11 of rice products

In the section 4B1.1 of the questionnaire, there are 7 lines as follows;

Code	Type of rice	Remarks
1	Winter-spring ordinary rice	
2	Summer-autumn ordinary rice	
3	Tenth-month or autumn winter rice	
4	Ordinary rice planted in terraced field	
5	Year-round ordinary rice	If (sum of code 1 to 4) >0, it is filled in here. The cases that code 1 to 4 are empty and code 5 >0 are also found.
6	Year-round glutinous rice	
7	Year-round specialty rice	

- ◆ Total value of rice harvested for the past 12 months is the sum of code 5, 6 and 7.
- ◆ It is equal to the value of M4B11T of the summary file TTCHUNG.
- ◆ Code 1 to 4 are the breakdown of code 5.
- ◆ There are cases that all codes 1 to 4 are empty regardless of code 5.

No. 48

```
> ct<-tapply(muc4b12$m4b12c8, muc4b12$ID, sum, na.rm=T)
> length(ct)
[1] 4314
> df<-data.frame(ID=names(ct), ct)
> df.old<-df
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> table(is.na(df$ct))
FALSE TRUE
4314 4875
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(is.na(df$ct))
FALSE
9189
> table(abs(df$m4b12t-df$ct)<=1)
TRUE
9189
```


No. 49

```
> ct<-tapply(muc4b13$m4b13c8, muc4b13$ID, sum, na.rm=T)
> length(ct)
[1] 2849
> df<-data.frame(ID=names(ct), ct)
> df.old<-df
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> table(is.na(df$ct))
FALSE TRUE
2849 6340
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(is.na(df$ct))
FALSE
9189
> table(abs(df$m4b13t-df$ct)<=1)
TRUE
9189
```

No. 50

```
> ct<-tapply(muc4b14$m4b14c8, muc4b14$ID, sum, na.rm=T)
> length(ct)
[1] 3762
> df<-data.frame(ID=names(ct), ct)
> df.old<-df
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> table(is.na(df$ct))
FALSE TRUE
3762 5427
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(is.na(df$ct))
FALSE
```

9189

```
> table(abs(df$m4b14t-df$ct)<=1)
```

TRUE

9189

No. 51

```
> ct<-tapply(muc4b15$m4b15c5, muc4b15$ID, sum, na.rm=T)
```

```
> length(ct)
```

[1] 4637

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df.old<-df
```

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

[1] 9189 145

```
> table(is.na(df$ct))
```

FALSE TRUE

4637 4552

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(is.na(df$ct))
```

FALSE

9189

```
> table(abs(df$m4b15t-df$ct)<=1)
```

TRUE

9189

No. 53

```
> ct<-tapply(muc4b16$m4b16c2e, muc4b16$ID, sum, na.rm=T)
```

```
> length(ct)
```

[1] 6208

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df.old<-df
```

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

[1] 9189 145

```
> table(is.na(df$ct))
```

FALSE TRUE

6208 2981

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(is.na(df$ct))
```

FALSE

9189

```
> table(abs(df$m4b1c-df$ct)<=1)
```

TRUE

9189

No. 56

```
> ct<-tapply(muc4b21$m4b21c6b, muc4b21$ID, sum, na.rm=T)
```

```
> length(ct)
```

[1] 6208

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4b2t-df$ct)<=1)
```

TRUE

9189

No. 57

```
> ct<-tapply(muc4b22$m4b22c18, muc4b22$ID, sum, na.rm=T)
```

```
> length(ct)
```

[1] 5105

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4b2c-df$ct)<=1)
```

TRUE

9189

No. 60

```
> ct<-tapply(muc4b31$m4b31c5, muc4b31$ID, sum, na.rm=T)
```

```
> length(ct)
```

[1] 257

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m4b3t-df$ct)<=1)
TRUE
9189
```

No. 61

```
> ct<-tapply(muc4b32$m4b32c17, muc4b32$ID, sum, na.rm=T)
> length(ct)
[1] 255
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m4b3c-df$ct)<=1)
TRUE
9189
```

No. 64 & 65

Forestry

```
> d<-subset(muc4b41, m4b41ma<=14)
> ct<-tapply(d$m4b41c3f, d$ID, sum, na.rm=T)
> length(ct)
[1] 2271
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m4b4t-df$ct)<=1)
TRUE
9189
```

```
> d<-subset(muc4b42, m4b42ma<=2)
> ct<-tapply(d$m4b42c14, d$ID, sum, na.rm=T)
> length(ct)
[1] 2146
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
```

```
> df[“ct”]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4b4c-df$ct)<=1)
```

```
TRUE
```

```
9189
```

No. 67

Hunting

```
> hunt<-ttchung[c(“ID”, “m4b42tn”)]
```

```
> nrow(subset(hunt, m4b42tn>0))
```

```
[1] 111
```

```
> d<-subset(muc4b41, m4b41ma==15)
```

```
> head(d)
```

	tin	huyen	xa	diaban	hoso	m4b41ma	m4b41c3a	m4b41c3b	m4b41c3c	m4b41c3d
28	115	07	95	013	15	15	NA	NA	NA	NA
176	201	17	33	004	13	15	NA	NA	NA	NA
304	203	13	31	001	13	15	NA	NA	NA	NA
317	203	15	11	001	14	15	NA	NA	NA	NA
336	203	15	39	001	14	15	NA	NA	NA	NA
385	203	21	31	003	13	15	NA	NA	NA	NA

	m4b41c3e	m4b41c3f	m4b41c4	ID	wt	xaid
28	NA	500	500	115079501315	2551.385	1150795
176	NA	385	385	201173300413	1589.478	2011733
304	NA	117	117	203133100113	1122.741	2031331
317	NA	90	90	203151100114	1116.924	2031511
336	NA	700	700	203153900114	1233.270	2031539
385	NA	100	100	203213100313	1244.905	2032131

```
> d<-subset(muc4b41, m4b41ma==15)[c(“ID”, “m4b41c3f”)]
```

```
> hunt<-merge(hunt, d, all=T)
```

```
> head(hunt[!is.na(hunt$m4b42tn)&hunt$m4b42tn>0,])
```

	ID	m4b42tn	m4b41c3f
1710	115079501315	340	500
2014	201173300413	385	385
2101	203133100113	106	117
2105	203151100114	85	90
2117	203153900114	670	700
2134	203213100313	72	100

```

> d<-subset(muc4b42, m4b42ma==3)
> dim(d)
[1] 101 23
> head(d)
      tinh huyen xa diaban hoso m4b42ma m4b42c1 m4b42c2 m4b42c3 m4b42c4
18   115    07 95    013  15      3    NA    NA    60    0
171  203    13 31    001  13      3    NA    NA    4    7
176  203    15 11    001  14      3    NA    NA    5    0
186  203    15 39    001  14      3    NA    NA    30   0
204  203    21 31    003  13      3    NA    NA    28   0
330  209    03 21    011  13      3    NA    NA    0    0
      m4b42c5 m4b42c6 m4b42c7 m4b42c8 m4b42c9 m4b42c10 m4b42c11 m4b42c12
18          0      0      0      0      0      0      0      0
171         0      0      0      0      0      0      0      0
176         0      0      0      0      0      0      0      0
186         0      0      0      0      0      0      0      0
204         0      0      0      0      0      0      0      0
330         0      0      0      0      0      0      0      0
      m4b42c13 m4b42c14      ID      wt      xaid
18         100      160 115079501315 2551.385 1150795
171          0      11 203133100113 1122.741 2031331
176          0       5 203151100114 1116.924 2031511
186          0      30 203153900114 1233.270 2031539
204          0      28 203213100313 1244.905 2032131
330         50      50 209032101113 1515.878 2090321
> d<-subset(muc4b42, m4b42ma==3) [c("ID", "m4b42c14")]
> hunt<-merge(hunt, d, all=T)
> head(hunt[!is.na(hunt$m4b42tn)&hunt$m4b42tn>0,])
      ID m4b42tn m4b41c3f m4b42c14
1710 115079501315    340    500    160
2014 201173300413    385    385    NA
2101 203133100113    106    117    11
2105 203151100114     85     90     5
2117 203153900114    670    700    30
2134 203213100313     72    100    28
> table(hunt$m4b42tn==hunt$m4b41c3f-hunt$m4b42c14)

```

TRUE

9189

No. 69

```
> ct<-tapply(muc4b51$m4b51c6b, muc4b51$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 2424
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4b5t-df$ct)<=1)
```

TRUE

9189

No. 70

```
> ct<-tapply(muc4b52$m4b52c19, muc4b52$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 2401
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4b5c-df$ct)<=1)
```

TRUE

9189

No. 73

```
> ct<-tapply(muc4c$m4c1c25, muc4c$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 3523
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m4ctt-df$ct)<=1)
```

TRUE

9189

No. 74

```
> ct<-tapply(muc4c$m4c1c25a, muc4c$ID, sum, na.rm=T)
> length(ct)
[1] 3523
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m4ct-df$ct)<=1)
TRUE
9189
```

No. 75 & 76

Business: MUC4C2

The data file MUC4C2 includes at most four business activities, which are indicated in the variable M4C1MA. For each activity, expenditure by expenditure code (code 1 to 14), as well as total expenditure (code 15 and 16) are recorded.

Next is an example of records within a household;

	tin	huyen	xa	diaban	hoso	m4c1ma	m4c2c26	m4c2c27	m4c2c28	ID
3350	106	09	05	003	19	1	1	2	24	106090500319
3339	106	09	05	003	19	1	2	10	120	106090500319
3359	106	09	05	003	19	1	3	8	96	106090500319
3361	106	09	05	003	19	1	5	10	120	106090500319
3343	106	09	05	003	19	1	7	25	300	106090500319
3341	106	09	05	003	19	1	15	NA	660	106090500319
3363	106	09	05	003	19	1	16	NA	660	106090500319
3352	106	09	05	003	19	2	1	1280	15360	106090500319
3353	106	09	05	003	19	2	2	10	120	106090500319
3349	106	09	05	003	19	2	3	8	96	106090500319
3344	106	09	05	003	19	2	5	100	1200	106090500319
3342	106	09	05	003	19	2	7	32	384	106090500319
3358	106	09	05	003	19	2	15	NA	17160	106090500319
3360	106	09	05	003	19	2	16	NA	17160	106090500319
3340	106	09	05	003	19	3	2	62	372	106090500319

3347	106	09	05	003	19	3	3	168	1008	106090500319
3345	106	09	05	003	19	3	7	60	360	106090500319
3357	106	09	05	003	19	3	15	NA	1740	106090500319
3355	106	09	05	003	19	3	16	NA	1740	106090500319
3362	106	09	05	003	19	4	1	5	50	106090500319
3351	106	09	05	003	19	4	2	4	40	106090500319
3346	106	09	05	003	19	4	7	2	20	106090500319
3354	106	09	05	003	19	4	11	20	200	106090500319
3356	106	09	05	003	19	4	15	NA	310	106090500319
3348	106	09	05	003	19	4	16	NA	310	106090500319

✓ Selected records with M4C1MA (code) =15 and aggregate M4C2C28 by household.

```
> d<-subset(muc4c2, m4c2c26==15)
```

```
> dim(d)
```

```
[1] 4379 12
```

```
> ct<-tapply(d$m4c2c28, d$ID, sum, na.rm=T)
```

```
> dim(ct)
```

```
[1] 3523
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> head(df)
```

	ID	ct
101010301415	101010301415	4440
101010301424	101010301424	2364
101010901915	101010901915	26700
101011502715	101011502715	18000
101011700213	101011700213	22524
101011700219	101011700219	13608

```
> df<-merge(df, ttchung, all=T)
```

```
> dim(df)
```

```
[1] 9189 145
```

```
> df[is.na(df)]<-0
```

```
> table(df$m4cct==df$ct)
```

```
TRUE
```

```
9189
```

```

> d<-subset(muc4c2, m4c2c26==16)
> dim(d)
[1] 4379 12
> ct<-tapply(d$m4c2c28, d$ID, sum, na.rm=T)
> dim(ct)
[1] 3523
> df<-data.frame(ID=names(ct), ct)
> head(df)
              ID      ct
101010301415 101010301415 4440
101010301424 101010301424 2364
101010901915 101010901915 26700
101011502715 101011502715 18000
101011700213 101011700213 22524
101011700219 101011700219 13608
> df<-merge(df, ttchung, all=T)
> dim(df)
[1] 9189 145
> df[is.na(df)]<-0
> table(df$m4cc==df$ct)
TRUE
9189

```

No. 79

```

> table(abs(ttchung$m4d1tn-rowSums(muc4d[, 6:17]))<=1)
TRUE
9189

```

No. 80

```

> table(abs(ttchung$m4d2t-rowSums(muc4d[, 18:22]))<=1)
TRUE
9189

```

No. 88 Hunting

```

> df<-subset(muc4b41, m4b41ma==15) [c("ID", "m4b41c3f")]

```

```
> colnames(df) <- c("ID", "ct")
> df <- merge(df, ttchung, all=T)
> df["ct"] <- ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$tongthu_08-df$ct) <= 1)
TRUE
9189
```

No. 94

```
> ct <- tapply(muc7$m7c15, muc7$ID, sum, na.rm=T)
> length(ct)
[1] 9189
> df <- data.frame(ID=names(ct), ct)
> df <- merge(df, ttchung, all=T)
> df["ct"] <- ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$tongthu_14-df$ct) <= 1)
FALSE TRUE
3 9186
```

✓ 3 inconsistencies are found as follows.

```
> df[abs(df$tongthu_14-df$ct) > 1, c("ID", "ct", "tongthu_14")]
      ID   ct tongthu_14
2230 207010500913 1350      1518
2248 207032500613  450         500
5683 603090302313 2000         500
```

No. 97

Total of spending on purchased fixed assets for the past 12 months

```
> d <- merge(muc6a, ttchung[, c("ID", "thangdt", "ngaydt")], by="ID", all.x=T)
> dim(d)
[1] 15897 17
> head(d)
      ID tinh huyen xa diaban hoso m6ama m6ac3 m6ac4a m6ac4b m6ac5 m6ac6
1 101011502715 101 01 15 027 15 20 1 0 2004 22000 19000
2 101011700213 101 01 17 002 13 47 1 0 1998 5000 4000
3 101011700219 101 01 17 002 19 21 1 0 2000 300 150
```

```

4 101011700219 101 01 17 002 19 48 1 0 2001 3000 1600
5 101030301414 101 03 03 014 14 14 1 0 1993 30000 50000
6 101031100915 101 03 11 009 15 14 1 0 1999 12000 28000

```

```

      m6ac7      wt      xaid thangdt ngaydt
1  100 3085.123 1010115      6      15
2  100 3099.920 1010117      9      18
3  100 3099.920 1010117      9      23
4  100 3099.920 1010117      9      23
5  100 2988.944 1010303      5      27
6  100 3003.741 1010311      6      18

```

```

# m6ac4a: Purchased month
# m6ac4b: Purchased year
# m6ac5: Value when purchasing or receiving
# m6ac7: The percentage of the household ownership
# thangdt: Month of survey

```

```

# Purchased fixed assets for the past 12 months
> d<-subset(d, (2006-m6ac4b)*12+(thangdt-m6ac4a)<=12)
> dim(d)
[1] 1320 17
> ct<-tapply(d$m6ac5*d$m6ac7/100, d$ID, sum, na.rm=T)
> length(ct)
[1] 1029
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung[,c("ID", "m6ac9")], all=T)
> df[is.na(df)]<-0
> table(df$ct==df$m6ac9, useNA="ifany")
TRUE
9189

```

No. 98

Total of spending on purchased durable for the past 12 months

```

> d<-merge(muc6b, ttchung[,c("ID", "thangdt", "ngaydt")], by="ID", all.x=T)

```

```

> dim(d)
[1] 85890    16
> head(d)
      ID tinh huyen xa diaban hoso m6bma m6bc3 m6bc4a m6bc4b m6bc5 m6bc6
1 101010301415 101    01 03    014 15    34    2    0    2004 3000    500
2 101010301415 101    01 03    014 15    45    2    0    2002 2500    800
3 101010301415 101    01 03    014 15    43    2    0    2002 8000 2000
4 101010301415 101    01 03    014 15    51    4    0    1995 1500    400
5 101010301415 101    01 03    014 15    57    1    0    1997 1800    300
6 101010301415 101    01 03    014 15    20    1    0    1997 18000 8000

      wt    xaid thangdt ngaydt
1 3107.318 1010103    6    16
2 3107.318 1010103    6    16
3 3107.318 1010103    6    16
4 3107.318 1010103    6    16
5 3107.318 1010103    6    16
6 3107.318 1010103    6    16

# m6bc4a: Purchased month
# m6bc4b: Purchased year
# m6bc5: Value when purchasing or receiving
# thangdt: Month of survey

# Purchased durable for the past 12 months
> d<-subset(d, (2006-m6bc4b)*12+(thangdt-m6bc4a)<=12)
> dim(d)
[1] 7224    16
> ct<-tapply(d$m6bc5, d$ID, sum, na.rm=T)
> length(ct)
[1] 3856
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung[c("ID", "m6bc7")], all=T)
> df[is.na(df)]<-0
> table(df$ct==df$m6bc7, useNA="ifany")
TRUE
9189

```

No. 104

```
> df<-subset(muc4b42, m4b42ma==3) [c("ID", "m4b42c14")]
> colnames(df)<-c("ID", "ct")
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$chisxd_5-df$ct)<=1)
```

TRUE

9189

No. 120 & 121

Housing (Accommodation) in Section 7

```
> dim(muc7)
[1] 9189 54
> dim(ttchung)
[1] 9189 144
> table(muc7$ID==ttchung$ID)
TRUE
9189
> df<-cbind(muc7, ttchung[c("chikhac_13", "chikhac_14")])
> df[is.na(df)]<-0
> table(abs(df$chikhac_13-(df$m7c21+df$m7c23a+df$m7c24))<=1)
```

TRUE

9189

```
> table(abs(df$chikhac_14-(df$m7c40-df$m7c21-df$m7c23a-df$m7c24))<=1)
```

TRUE

9189

No. 129

```
> ct<-tapply(muc5a1$m5a1c2b, muc5a1$ID, sum, na.rm=T)
> length(ct)
[1] 9178
```

```

> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m5a1c4-df$ct)<=1)
TRUE
9189

```

No. 130

```

> ct<-tapply(muc5a1$m5a1c3b, muc5a1$ID, sum, na.rm=T)
> length(ct)
[1] 9178
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m5a1c5-df$ct)<=1)
TRUE
9189

```

No. 132

```

> ct<-tapply(muc5a2$m5a2c6, muc5a2$ID, sum, na.rm=T)
> length(ct)
[1] 9189
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m5a2c11-df$ct)<=1)
TRUE
9189

```

No. 133

```

> ct<-tapply(muc5a2$m5a2c10, muc5a2$ID, sum, na.rm=T)
> length(ct)
[1] 9189
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df["ct"]<-ifelse(is.na(df$ct), 0, df$ct)

```

```
> table(abs(df$m5a2c12-df$ct)<=1)
```

```
TRUE
```

```
9189
```

No. 135 & 136

MUC5B1: Daily non-food expenditure

- ✓ The variable of expenditure item code M5B1C1 of data file MUC5B1 has out-of-range value 299, which is excluded when calculating total of Q4 and Q5 (M5B1C6 and M5B1C7).

```
> table(muc5b1$m5b1c1)
```

```
201 202 203 204 205 206 207 208 209 210 211 212 213 214 215
3680 6844 3266 3397 5377 3854 8091 9141 7707 8515 6513 2429 8776 6595 1646
```

```
216 217 218 219 220 221 299
2378 1141 2287 6880 8152 4989 2456
```

```
> d<-subset(muc5b1, m5b1c1<=221)
```

```
> dim(d)
```

```
[1] 111658 13
```

```
> ct<-tapply(d$m5b1c4, d$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 9189
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m5b1c6-df$ct)<=1)
```

```
TRUE
```

```
9189
```

```
> ct<-tapply(d$m5b1c5, d$ID, sum, na.rm=T)
```

```
> length(ct)
```

```
[1] 9189
```

```
> df<-data.frame(ID=names(ct), ct)
```

```
> df<-merge(df, ttchung, all=T)
```

```
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
```

```
> table(abs(df$m5b1c7-df$ct)<=1)
```

```
TRUE
```


9189

No. 138

```

> ct<-tapply(muc5b2$m5b2c2, muc5b2$ID, sum, na.rm=T)
> length(ct)
[1] 9187
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m5b2c4-df$ct)<=1)
FALSE TRUE
 641 8548
> head(df[abs(df$m5b2c4-df$ct)>1, c("ID", "ct", "m5b2c4")])
      ID      ct m5b2c4
1 101010301415 10045   7345
2 101010301419 12699   8249
7 101011502713  1367    967
8 101011502714 27200  24800
9 101011502715  1987   1387
11 101011700214  2750   1910

```

No. 139

```

> ct<-tapply(muc5b2$m5b2c3, muc5b2$ID, sum, na.rm=T)
> length(ct)
[1] 9187
> df<-data.frame(ID=names(ct), ct)
> df<-merge(df, ttchung, all=T)
> df[,"ct"]<-ifelse(is.na(df$ct), 0, df$ct)
> table(abs(df$m5b2c5-df$ct)<=1)
FALSE TRUE
  6 9183
> head(df[abs(df$m5b2c5-df$ct)>1, c("ID", "ct", "m5b2c5")])
      ID      ct m5b2c5
56 101062101314 2040   1240
373 103170700713 6600   4800
4218 405053701115  660    610

```

```
5666 603052300414 950 550
6453 705011500215 4320 2520
7217 717010702215 7200 3600
```

No. 140

```
> table(abs(ttchung$m5b3ct-rowSums(muc5b3_4[, 6:15])) <= 1)
```

```
FALSE TRUE
```

```
65 9124
```

```
> head(ttchung[abs(ttchung$m5b3ct-rowSums(muc5b3_4[, 6:15])) > 1, c("ID", "m5b3ct")])
```

```
      ID m5b3ct
297 103052702715 4230
423 103214300315 3670
492 104054300315 2733
600 105050300715 700
770 105270500314 25237
796 106011700513 2865
```

No. 141

```
> table(abs(ttchung$m5b4c-rowSums(muc5b3_4[, 16:23])) <= 1)
```

```
TRUE
```

```
9189
```

TTCHUNG: Relationship between variables within ttchung

```
> d<-ttchung
```

```
> d<-d[, c(2:145, 1)]
```

```
> colnames(d)
```

```
[1] "tinh"      "huyen"     "xa"        "diaban"    "hoso"
[6] "quyen"     "ttnt"      "dantoc"    "phdich"    "dtv"
[11] "dt"        "tinh04"    "huyen04"   "xa04"      "diaban04"
[16] "ttnt04"    "hoso04"    "ghepho"    "ngaydt"    "thangdt"
[21] "tsnguai"   "m1c1"      "m2act"     "m2atn"     "m3ac6"
[26] "m3ac16"    "m3ac17"    "m3ac18"    "m3ac19"    "m3act1"
[31] "m3act2"    "m3act"     "m3fc15"    "m3fc16"    "m3fc17"
```

[36]	"m3fc18"	"m4atn1"	"m4atn2"	"m4atn3"	"m4atn4"
[41]	"m4atn5"	"m4atn"	"m4b0c1"	"m4b0t1"	"m4b0t2"
[46]	"m4b1"	"m4b11t"	"m4b12t"	"m4b13t"	"m4b14t"
[51]	"m4b15t"	"m4b1t"	"m4b1c"	"m4b1tn"	"m4b21"
[56]	"m4b2t"	"m4b2c"	"m4b2tn"	"m4b31"	"m4b3t"
[61]	"m4b3c"	"m4b3tn"	"m4b41"	"m4b4t"	"m4b4c"
[66]	"m4b41tn"	"m4b42tn"	"m4b51"	"m4b5t"	"m4b5c"
[71]	"m4b5tn"	"m4c1"	"m4ctt"	"m4ct"	"m4cct"
[76]	"m4cc"	"m4ctnt"	"m4ctn"	"m4d1tn"	"m4d2t"
[81]	"tongthu_01"	"tongthu_02"	"tongthu_03"	"tongthu_04"	"tongthu_05"
[86]	"tongthu_06"	"tongthu_07"	"tongthu_08"	"tongthu_09"	"tongthu_10"
[91]	"tongthu_11"	"tongthu_12"	"tongthu_13"	"tongthu_14"	"tongthu_15"
[96]	"m6ac8"	"m6ac9"	"m6bc7"	"m8c7"	"chisxkd_1"
[101]	"chisxkd_2"	"chisxkd_3"	"chisxkd_4"	"chisxkd_5"	"chisxkd_6"
[106]	"chisxkd_7"	"chisxkd_8"	"chikhac_01"	"chikhac_02"	"chikhac_03"
[111]	"chikhac_04"	"chikhac_05"	"chikhac_06"	"chikhac_07"	"chikhac_08"
[116]	"chikhac_09"	"chikhac_10"	"chikhac_11"	"chikhac_12"	"chikhac_13"
[121]	"chikhac_14"	"thunhap"	"thubq"	"chitieu"	"chids"
[126]	"chibq"	"chidsbq"	"m5a1ct"	"m5a1c4"	"m5a1c5"
[131]	"m5a2ct"	"m5a2c11"	"m5a2c12"	"m5b1ct"	"m5b1c6"
[136]	"m5b1c7"	"m5b2ct"	"m5b2c4"	"m5b2c5"	"m5b3ct"
[141]	"m5b4c"	"wt"	"hhsze"	"hhszwt"	"hhid"

```
> table(d[, 32]==rowSums(d[, c(30:31, 26:28)]))
```

```
TRUE
```

```
9189
```

```
> table(d[, 42]==rowSums(d[, c(37:41)]))
```

```
TRUE
```

```
9189
```

```
> table(d[, 52]==rowSums(d[, c(47:51)]))
```

```
TRUE
```

```
9189
```

```
> table(d[, 54]==d[, 52]-d[, 53])
```

TRUE

9189

```
> table(d[, 58]==d[, 56]-d[, 57], useNA="ifany")
```

TRUE <NA>

5121 4068

```
> head(d[, 56:58])
```

	m4b2t	m4b2c	m4b2tn
1	0	0	NA
2	0	0	NA
3	0	0	NA
4	0	0	NA
5	0	0	NA
6	0	0	NA

```
> d[is.na(d[, 58]), 58]<-0
```

```
> table(d[, 58]==d[, 56]-d[, 57], useNA="ifany")
```

TRUE

9189

```
> table(d[, 62]==d[, 60]-d[, 61], useNA="ifany")
```

TRUE <NA>

257 8932

```
> head(d[, 60:62])
```

	m4b3t	m4b3c	m4b3tn
1	0	0	NA
2	0	0	NA
3	0	0	NA
4	0	0	NA
5	0	0	NA
6	0	0	NA

```
> d[is.na(d[, 62]), 62]<-0
```

```
> table(d[, 62]==d[, 60]-d[, 61], useNA="ifany")
```

TRUE

9189

```
> table(d[, 66]==d[, 64]-d[, 65], useNA="ifany")
```

TRUE <NA>

2290 6899

```
> d[is.na(d[, 66]), 66] <- 0
```

```
> table(d[, 66] == d[, 64] - d[, 65], useNA = "ifany")
```

TRUE

9189

```
> table(d[, 71] == d[, 69] - d[, 70], useNA = "ifany")
```

TRUE <NA>

2424 6765

```
> table(d[, 77] == d[, 73] - d[, 75], useNA = "ifany")
```

TRUE

9189

```
> table(d[, 78] == d[, 74] - d[, 76], useNA = "ifany")
```

TRUE

9189

```
> table(abs(d[, 81] - rowSums(d[, 82:95])) <= 1, useNA = "ifany")
```

TRUE

9189

```
> table(d[, 82] == d[, 24], useNA = "ifany")
```

TRUE

9189

```
> table(d[, 83] == d[, 29])
```

TRUE

9189

```
> table(d[, 84] == d[, 42], useNA = "ifany")
```

TRUE

9189

```
> table(d[, 85] == d[, 52], useNA = "ifany")
```

TRUE

9189

```
> table(d[, 86]==d[, 56], useNA="ifany")
```

TRUE

9189

```
> table(d[, 87]==d[, 60], useNA="ifany")
```

TRUE

9189

```
> table(d[, 89]==d[, 64], useNA="ifany")
```

TRUE

9189

```
> table(d[, 90]==d[, 69], useNA="ifany")
```

TRUE

9189

```
> table(d[, 91]==d[, 74], useNA="ifany")
```

TRUE

9189

```
> table(d[, 92]==d[, 79], useNA="ifany")
```

TRUE

9189

```
> table(d[, 93]==d[, 80], useNA="ifany")
```

TRUE

9189

```
> table(d[, 95]==d[, 45])
```

TRUE

9189

```
> table(abs(d[, 100]-rowSums(d[, 101:107]))<=1, useNA="ifany")
```

TRUE

9189

```
> table(d[, 101]==d[, 53], useNA="ifany")
```

TRUE

9189

```
> table(d[, 102]==d[, 57], useNA="ifany")
```

TRUE

9189

```
> table(d[, 103]==d[, 61], useNA="ifany")
```

TRUE

9189

```
> table(d[, 105]==d[, 65], useNA="ifany")
```

TRUE

9189

```
> table(d[, 106]==d[, 70], useNA="ifany")
```

TRUE

9189

```
> table(d[, 107]==d[, 76], useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 108]-rowSums(d[, 109:121]))<=1, useNA="ifany")
```

TRUE

9189

```
> table(d[, 109]==d[, 23], useNA="ifany")
```

TRUE

9189

```
> table(d[, 110]==d[, 32], useNA="ifany")
```

TRUE

9189

> table(d[, 111]==d[, 128], useNA="ifany")

TRUE

9189

> table(d[, 112]==d[, 131], useNA="ifany")

TRUE

9189

> table(d[, 113]==d[, 134], useNA="ifany")

TRUE

9189

> table(d[, 114]==d[, 137], useNA="ifany")

TRUE

9189

> table(d[, 115]==d[, 140], useNA="ifany")

TRUE

9189

> table(d[, 116]==d[, 141], useNA="ifany")

TRUE

9189

> table(d[, 117]==d[, 96], useNA="ifany")

TRUE

9189

> table(d[, 118]==d[, 97], useNA="ifany")

TRUE

9189

> table(d[, 119]==d[, 98], useNA="ifany")

TRUE

9189

```
> table(abs(d[, 122] - (d[, 81] - d[, 93] - d[, 100])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 123] - d[, 122] / d[, 21] / 12) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 124] - rowSums(d[, c(109:115, 119, 121)])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 125] - rowSums(d[, c(109:114, 119, 121)])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 126] - d[, 124] / d[, 21] / 12) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 127] - d[, 125] / d[, 21] / 12) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 128] - (d[, 129] + d[, 130])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 131] - (d[, 132] + d[, 133])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 134] - (d[, 135] + d[, 136])) <= 1, useNA="ifany")
```

TRUE

9189

```
> table(abs(d[, 137]-(d[, 138]+d[, 139]))<=1, useNA="ifany")
```

TRUE

9189

7. Income and Expenditure

7.1 Household income

- Household income is defined as revenue minus cost.
In summary file TTCHUNG, revenue is grouped into 14, that is, variables of tongthu_02 to tongthu_15, and cost is grouped into 7, that is, variables of chisxkd_2 to chisxkd_8, as in the next table. Out of 14 groups of revenue, the variable of tongthu_13 consist of selling means of production, houses, withdrawal from savings, and so on, as well as tongthu_15 of business land renting are not counted in household income. Therefore, the household income is grouped into 9 by income source;
 - 1) Wage
 - 2) Agricultural crops
 - 3) Livestock
 - 4) Farm services
 - 5) Forestry
 - 6) Hunting
 - 7) Aquaculture
 - 8) Household business
 - 9) Other income
- The reference period of revenue and cost for all items in the questionnaire is the past 12 months.
- Unit of records is individual only for wage and educational subsidies, and household for other income sources.
- Income includes monetary income (in cash) as well as non-monetary income (in-kind), such as consumption of own products and imputed rent.
- The average household income by source is taken over all household, regardless of whether they report income from that source. Therefore, it is decomposed into two parts;
 - 1) Share of household reporting income from each source, and
 - 2) Average household income conditional on reporting non-zero income.

Table Structure of income related data files and variables

Income by source		Revenue			Cost			Income
		Variable of TTCHUNG	Original data		Variable of TTCHUNG	Original data		
			File	Variable		File	Variable	
Wage		tongthu_04	MUC4A	m4ac11,12f,21,22f,25	-	-	-	tongthu_04
Agricultural crops								tongthu_05 - chisxkd_2
	Rice	tongthu_05	MUC4B11	m4b11c15	-	-	-	-
	Other food crops		MUC4B12	m4b12c8	-	-	-	-
	Annual and perennial industorial crops		MUC4B13	m4b13c8	-	-	-	-
	Fruit crops		MUC4B14	m4b14c8	-	-	-	-
	Crop by-production		MUC4B15	m4b15c5	-	-	-	-
	Crop planting expenditure	-	-	-	chisxkd_2	MUC4B16	m4b16c2e	-
Livestock		tongthu_06	MUC4B21	m4b21c6b	chisxkd_3	MUC4B22	m4b22c18	tongthu_06 - chisxkd_3
Farm services		tongthu_07	MUC4B31	m4b31c5	chisxkd_4	MUC4B32	m4b32c17	tongthu_07 - chisxkd_4
Forestry		tongthu_09	MUC4B41	m4b41c3f line<15	chisxkd_6	MUC4B42	m4b42c14 line 1&2	tongthu_09 - chisxkd_6
Hunting		tongthu_08	MUC4B41	m4b41c3f line=15	chisxkd_5	MUC4B42	m4b42c14 line 3	tongthu_08 - chisxkd_5
Aquaculture		tongthu_10	MUC4B51	m4b51c6b	chisxkd_7	MUC4B52	m4b52c19	tongthu_10 - chisxkd_7
Household business		tongthu_11	MUC4C	m4c1c25a	chisxkd_8	MUC4C2	m4c2c28 line 16	tongthu_11 - chisxkd_8

Other income								Sum of tonguthu_02, 03, 12, 14 & 15
	Remittance, pension, retirement allowance, interest, etc.	tongthu_12	MUC4D	Sum of m4d1c2_01 to 12	-	-	-	tongthu_12
	Scholarship subsidies	tongthu_02	MUC2A	m2ac14 + m2ac15	-	-	-	tongthu_02
	Health subsidies	tongthu_03	section 3a	Q19	-	-	-	tongthu_03
	House and land rent	tongthu_14	MUC7	m7c15	-	-	-	tongthu_14
	Business land renting	tongthu_15	MUC4B0	m4b0t2	-	-	-	tongthu_15
Other money received not considered as income, such as selling means of production, houses, withdrawal from savings. (*)		tongthu_13	MUC4D	Sum of m4d2c2_1 to 5				
Note: (*) is not included in household income								
Household income		thunhap	=Revenue - Cost = (Sum of tongthu_02 to 12, 14 & 15) - (Sum of chisxkd_2 to 8) = (tongthu_01 - tongthu_13) - chisxkd_1					

7.2 Household income by income source

- ✓ Generated data frame consist of variables of income and revenue by source.

```
> d<-ttchung
> d[["ttinc"]]<-d$thunhap
> d[["wage"]]<-d$tongthu_04
> d[["agri. crops"]]<-d$tongthu_05-d$chisxkd_2
> d[["livestock"]]<-d$tongthu_06-d$chisxkd_3
> d[["farm. service"]]<-d$tongthu_07-d$chisxkd_4
> d[["forestry"]]<-d$tongthu_09-d$chisxkd_6
> d[["hunting"]]<-d$tongthu_08-d$chisxkd_5
> d[["aquareculture"]]<-d$tongthu_10-d$chisxkd_7
> d[["hh. business"]]<-d$tongthu_11-d$chisxkd_8
> d[["other"]]<-d$tongthu_02+d$tongthu_03+d$tongthu_12+d$tongthu_14+d$tongthu_15
> d<-d[, c(145:154, 84:87, 89, 88, 90, 91, 154, 1:22, 142:144)]
> colnames(d)

[1] "ttinc"      "wage"      "agri. crops" "livestock" "farm. service" "forestry"
[7] "hunting"    "aquareculture" "hh. business" "other"      "tongthu_04"    "tongthu_05"
[13] "tongthu_06" "tongthu_07" "tongthu_09" "tongthu_08" "tongthu_10"    "tongthu_11"
[19] "other. 1"    "tinh"      "huyen"      "xa"        "diaban"      "hoso"
[25] "quyen"      "ttnt"      "dantoc"     "phdich"    "dtv"         "dt"
[31] "tinh04"     "huyen04"   "xa04"       "diaban04"  "ttnt04"      "hoso04"
[37] "ghepho"     "ngaydt"    "thangdt"    "tsnguai"   "m1c1"        "ID"
[43] "wt"         "xaid"

> summary(d[, 1:10])

      ttinc      wage      agri. crops      livestock      farm. service
Min.   :   -64  Min.   :    0  Min.   : -1636  Min.   : -8330  Min.   :    0.0
1st Qu.: 15577  1st Qu.:    0  1st Qu.:    0  1st Qu.:    0  1st Qu.:    0.0
Median : 24971  Median : 3650  Median : 2798  Median :   311  Median :    0.0
Mean    : 33762  Mean    :10550  Mean    : 5779  Mean    : 1753  Mean    : 151.2
3rd Qu.: 40440  3rd Qu.: 14500  3rd Qu.: 6848  3rd Qu.: 1930  3rd Qu.:    0.0
Max.    :1040700  Max.   :496800  Max.    :661650  Max.    :209738  Max.    :62264.0

      forestry      hunting      aquareculture      hh. business      other
Min.   :    0.0  Min.   :  0.000  Min.   : -90840  Min.   : -1170  Min.   :    0
1st Qu.:    0.0  1st Qu.:  0.000  1st Qu.:    0  1st Qu.:    0  1st Qu.:   400
```

Median : 0.0 Median : 0.000 Median : 0 Median : 0 Median : 1720
Mean : 402.5 Mean : 7.032 Mean : 1377 Mean : 7270 Mean : 6473
3rd Qu.: 0.0 3rd Qu.: 0.000 3rd Qu.: 83 3rd Qu.: 6696 3rd Qu.: 6875
Max. :120140.0 Max. :6880.000 Max. :526361 Max. :1039200 Max. :602012

Remarks:

Income by source might have negative values. How to treat negative value is one issue when discussing household income. Here in this manual, we have treated as it was.

✓ Weighted average household income by source

Income source	Average income per household	Share of sample household with non-zero revenue (%)	Average income conditional on reporting non-zero revenue
Total	35,602		
Wage	11,618	61.2	18,727
Agricultural crops	5,394	68.5	8,255
Livestock	1,721	55.7	3,255
Farm services	148	2.8	5,514
Forestry	313	24.7	1,533
Hunting	6	1.2	6,26
Aquaculture	1,300	26.4	5,299
Household business	7,895	38.3	20,096
Other	7,207	96.3	7,459

```
> av.income<-rep(0,10)
> NHH<-sum(d$wt)
> for(j in 1:10) av.income[j]<-sum(d[,j]*d$wt)/NHH
> income.name<-c("Wage","Agricultural crops","Livestock","Farm services","Forestry",
+ "Hunting","Aquaculture","Household business","Other income")
> names(av.income)<-c("Total income",income.name)
> round(av.income)
```

Total income	Wage	Agricultural crops	Livestock	Farm services
35602	11618	5394	1721	148
Forestry	Hunting	Aquaculture	Household business	Other income
313	6	1300	7895	7207

Number of sample household reporting non-zero revenue by income source

```
> reporting.hh<-rep(0,9)
> for(j in 1:9) reporting.hh[j]<-nrow(subset(d,d[,j+10]>0))
> names(reporting.hh)<-income.name
> reporting.hh
```

Wage	Agricultural crops	Livestock	Farm services	Forestry
5624	6291	5121	257	2271
Hunting	Aquaculture	Household business	Other income	
111	2424	3523	8849	

```
> round(reporting.hh/nrow(d)*100,1)
```

Wage	Agricultural crops	Livestock	Farm services	Forestry
61.2	68.5	55.7	2.8	24.7
Hunting	Aquaculture	Household business	Other income	
1.2	26.4	38.3	96.3	

Average household income conditional on reporting non-zero revenue

```
> reporting.hh.av<-rep(0,9)
> for(j in 1:9){
+ df<-subset(d,d[,j+10]>0)
+ reporting.hh.av[j]<-sum(df[,j+1]*df$wt)/sum(df$wt)
+ }
> names(reporting.hh.av)<-income.name
> round(reporting.hh.av)
```

Wage	Agricultural crops	Livestock	Farm services	Forestry
18727	8225	3255	5514	1533
Hunting	Aquaculture	Household business	Other income	
626	5299	20096	7459	

Number of sample household with negative income by income source

```
> ne.income<-rep(0,10)
> for(j in 1:10) ne.income[j]<-nrow(subset(d,d[,j]<0))
```



```
> names(ne.income) <- c("Total", income.name)
```

```
> ne.income
```

Total	Wage	Agricultural crops	Livestock	Farm services
1	0	4	27	0
Forestry	Hunting	Aquaculture	Household business	Other income
0	0	11	1	0

Remarks: Negative income

According to the discussion at the Workshop 2014, the delegates from Vietnam explained that negative income is treated as zero income.

7.2.1 Wage

- Wage is captured at individual level. It is divided into three parts; the most time consuming job (main work), the second most time consuming job (secondary work) and the third and so on work.
- For the main work and the secondary work, wage is disaggregated as follows;
 - ✧ Wage/salary (in cash and in-kind)
 - ✧ Allowances (in cash and in-kind)
 - a. Public holidays
 - b. Social allowances
 - c. Maternity allowance
 - d. Allowance for domestic and overseas business trips
 - e. Other (bonuses, uniform, spending on lunches, ...)
- The main work and the secondary work have information on occupation and industry.
- ✓ Out of 39,071 records in MUC4A, those who received wage/salary from the main work is 7,091 and those who received wage/salary from the secondary work is 2,363. Then, those who received wage/salary from the third and so on is 425.

```
> d<-muc4a
```

```
> table(d$m4ac11>0, useNA="ifany")
```

TRUE <NA>

7091 31980

```
> table(d$m4ac21>0, useNA="ifany")
```

TRUE <NA>

2363 36708

```
> table(d$m4ac25>0, useNA="ifany")
```

TRUE <NA>

425 38646

- ✓ Average wage income per household by the main/secondary/other and wage items is summarized as the next.

Item		Average per household
Total wage income		11,618
Main work	Total	10,848
	Wage/salary (in cash and in-kind)	9,688
	Allowances (in cash and in-kind)	1,160
	a. Public holidays	448
	b. Social allowances	6
	c. Maternity allowance	15
	d. Allowance for domestic and overseas business trips	82
	e. Other (bonuses, uniform, spending on lunch, ...)	600
Secondary work	Total	706
	Wage/salary (in cash and in-kind)	690
	Allowances (in cash and in-kind)	16
	a. Public holidays	4
	b. Social allowances	0
	c. Maternity allowance	0
	d. Allowance for domestic and overseas business trips	1
	e. Other (bonuses, uniform, spending on lunch, ...)	12
Third and so on	Total	63

Number of wage variables in MUC4A

```
> no.wage<-c(23:29, 41:47, 50)
```

Weighted average per household

```
> av.wage<-rep(0, 15)
```

```
> for(j in 1:15) av.wage[j]<-sum(d[, no.wage[j]]*d$wt, na.rm=T)/NHH
> round(av.wage)
[1] 9688 448 6 15 82 600 1160 690 4 0 0 1 12 16 63
```

✓ Occupation of the main work and the secondary work is as follows.

Table Number of records by occupation code of the main work and the secondary work

Code	Occupation	Main work	Secondary work
11	Communist Party offices of all levels (professional)	24	5
13	Central Government	1	NA
14	People's Courts and People's Procuracies	4	NA
15	People's councils and People's committees at local level (including professional offices at local level, except legislative organs, mass organizations, hamlet chiefs)	163	84
16	Mass organizations	62	21
17	Charity organizations and specific organizations for other purposes	1	NA
18	Corporations, companies and equivalent which produce material goods and services	5	2
19	Firms, factories, manufacturers which create materials goods and services, and small schools	98	1
21	Natural sciences and Technical sciences	64	4
22	Life and Health sciences	32	5
23	Education and Training	225	29
24	Other professionals	227	8
31	Natural sciences and Technical sciences	55	4
32	Life and Health sciences	125	27
33	Education and Training	370	16
34	Other professionals	217	28
41	White-collar personnel	171	10
42	Customer service staff (directly contact with customers in terms of monetary management; transportation arrangement; information support; appointment and phone receptionists)	104	20
51	Personal services and protection services	266	55
52	Modelers, salesmen, product introducers/marketers	535	144
61	Skilled workers in agriculture, forestry, and aquaculture	612	206
71	Skilled miners and builders	528	138

72	Metal workers, mechanical workers and other workers related	318	29
73	Workers who make sophisticated goods, handicraftsmen, printing workers, and other related workers	127	15
74	Food processing, woodworking, textile and garment, leather and shoemaking workers	1104	314
79	Other handicraftsmen and workers related not elsewhere specified	262	82
81	Production machine operators	54	3
82	Assemblers and machine operators	103	11
83	Drivers and operators of motorized equipment	392	64
91	Sale and service unskilled workers	2548	575
92	Unskilled workers in agriculture, forestry, and aquaculture	12140	6125
93	Unskilled workers in mining, construction, manufacturing, and transportation industry and other unskilled workers	1895	1107
00	Armed forces	63	6

```

> occupation.code<-read.csv("occupation_code.csv")
> d<-muc4a
> occ1<-table(d$m4ac4)
> occ2<-table(d$m4ac14)
> df1<-data.frame(code=names(occ1), occ1=as.vector(occ1))
> df2<-data.frame(code=names(occ2), occ2=as.vector(occ2))
> df<-merge(df1, df2, by="code", all=T)
> df<-merge(occupation.code, df, by="code", all.y=T)
> write.csv(df, "work_by_occupation.csv")
> fix(df)

```

	code	occupation_name	occ1	occ2
1	0	Armed forces	63	6
2	11	Communist Party offices of all levels (profession>	24	5
3	13	Central Government	1	NA
4	14	People's Courts and People's Procuracies	4	NA
5	15	People's councils and People's committees at loca>	163	84
6	16	Mass organizations	62	21

✓ Industry of the main work and the secondary work is as follows.

Table Number of records by industry code of the main work and the secondary work

Code	Industry	Main work	Secondary work
1	Agriculture and services related (including livestock raising)	11925	5439
2	Forestry and services related	127	420
5	Catching and raising seaproducts, and relating services	746	507
10	Coal mining	49	4
11	Oil and gas drilling and services related (except: exploring/searching activities)	7	NA
12	Uranium and Thorium mining	1	1
13	Metal mining	9	20
14	Mining for rocks, stone, sand, salt, fertilizer...	105	62
15	Food and beverage production	639	471
16	Tobacco production	3	NA
17	Textile	101	40
18	Fur processing and fur products	494	61
19	Leather tanning and leather products including wallets, seats, suitcases and footwear	177	13
20	Wood processing and production of wood, bamboo and rattan products (excluding bed, wardrobe, table, chair); production of straw products	347	210
21	Paper and paper products	47	8
22	Printing and publishing (books, magazines, newspapers, and copies)	33	8
23	Coke, crude oil and nuclear processing	3	NA
24	Chemicals and chemical products	33	5
25	Plastic and Rubber production and products	58	5
26	Other non-metal mineral products production	213	77
27	Metal production and processing	22	NA
28	Metal products (except machines and equipment)	211	23
29	Other equipments and machinery not specified elsewhere	27	1
30	Office and computer equipment production	11	NA
31	Other electronic, electric equipments not specified elsewhere	25	4
32	Radio, TV, broadcasting and other communication equipment	12	2

33	Medical and laboratory equipment, precision instruments, and meters (clocks)	6	NA
34	Motor vehicles and spare parts	16	NA
35	Other means of transportation (boats, railroad, airplane)	28	2
36	Furniture production and other productions not specified elsewhere	272	77
37	Recycling, reprocessing	8	NA
40	Electricity, gas, water steam, hot water production and distribution	64	5
41	Water exploitation, purification, and distribution	14	4
45	Construction	1144	448
50	Vehicle sales, maintenance and repair; retail sales of fuel	170	17
51	Wholesale and agent sales (excluding motor vehicles and motorbikes)	311	66
52	Retail sales (excluding motor vehicles and motorbikes); repairs of family appliances	1948	449
55	Hotel and restaurant (including big and small restaurants, cafe, beverage and drink stands,...)	763	115
60	Road, railroad and pipeline transport	483	107
61	Waterway transport	44	9
62	Airline transport	5	1
63	Services in transport; tourist services	48	11
64	Post and telecommunications	57	3
65	Financial intermediary (excluding insurance and pensioner's social welfare)	28	4
66	Insurance and pensions (excluding compulsory social insurance)	19	11
67	Assistance in finance (including social insurance)	27	2
70	Science and technology activities	11	1
71	Activities relating real-estate	16	8
72	Rental of machines and equipment (excluding operators); rental of furnitures and household goods	13	10
73	Computer-related activities	7	6
74	Other business activities (accounting, tax, technical and legal consulting, architecture, advertising, protection, housecleaning, photography, packaging, etc.	80	11
75	Government administration and national defense; compulsory social insurance	500	126
80	Education and training	698	47
85	Health and social relief (hospitals, health centers, veterinary care, social relief,...)	171	42
90	Cultural and sport activities (broadcasting, television, cinema, recreation and entertainment, press, library, museum, sport,...)	77	22
91	Activities of the Communist party, mass organizations, professional associations	113	43
92	Disposal collection, public sanitation improvement, and similar activities	47	15

93	Other service activities (laundry, hairdressing, funerals,...)	183	45
95	Housework services provided at client's home	98	50
99	Activities of international organizations and international mass ones	1	NA

```

> industry.code<-read.csv("industry_code.csv")
> ind1<-table(d$m4ac5)
> ind2<-table(d$m4ac15)
> df1<-data.frame(code=names(ind1), ind1=as.vector(ind1))
> df2<-data.frame(code=names(ind2), ind2=as.vector(ind2))
> df<-merge(df1, df2, by="code", all=T)
> df<-merge(industry.code, df, by="code", all.y=T)
> write.csv(df, "work_by_industry.csv")
> fix(df)

```

	code	industry_name	ind1	ind2
1	1	Agriculture and services related (including lives>	11925	5439
2	2	Forestry and services related	127	420
3	5	Catching and raising seaproducts, and relating se>	746	507
4	10	Coal mining	49	4
5	11	Oil and gas drilling and services related (excep>	7	NA
6	12	Uranium and Thorium mining	1	1
7	13	Metal mining	9	20

7.2.2 Agricultural crops

Agricultural crops income is the sum of;

- Revenue from rice,
- Revenue from other food crops,
- Revenue from annual and perennial industrial crops,
- Revenue from fruit crops,
- Revenue from crop by-production

Minus

- Cost for agricultural production

The data of each item is a household-level value both in cash and in-kind for the past 12 months.

7.2.2.1 Rice

In Section 4B1.1 of the questionnaire, there are 7 types of rice to be filled in.

Code	Type of rice	Average value of production per household
1	Winter-spring ordinary rice	1,951
2	Summer-autumn ordinary rice	978
3	Tenth-month or autumn winter rice	1,017
4	Ordinary rice planted in terraced field	13
5	Year-round ordinary rice	4,185
6	Year-round glutinous rice	174
7	Year-round specialty rice	56
5+6+7	Total	4,415

As described earlier, the total value of rice production harvested for the past 12 months is the sum of code 5, 6 and 7.

Enumerators are requested to fill in all codes, but there are cases that the disaggregated value of code 1 to 4 are not available.

✓ Estimated the average value of production per household by type of rice.

```
> d<-muc4b11
```

```
> t<-tapply(d$m4b11c15*d$wt, d$m4b11ma, sum, na.rm=T)/NHH
```



```

> rice.type<-c("1 Winter-spring ordinary rice","2 Summer-autumn ordinary rice",
+ "3 Tenth-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")
> names(t)<-rice.type
> round(t)

      1 Winter-spring ordinary rice      2 Summer-autumn ordinary rice
      1951                             978
      3 Tenth-month or autumn winter rice 4 Ordinary rice planted in terraced field
      1017                             13
      5 Year-round ordinary rice          6 Year-round glutinous rice
      4185                             174
      7 Year-round specialty rice
      56

> round(sum(t[5:7]))
[1] 4416

```

- ✓ Made frequency table of records in MUC4B11 by type of rice and region. It shows that the harvest seasons of rice differ by region.

```

> t<-addmargins(table(d$m4b11ma, substr(d$tinh, 1, 1), useNA="ifany"))
> rownames(t)<-c(rice.type,"Total of 1 to 7")
> region.name<-c("Red River Delta","North East","North West","North Central",
+ "South Central Coast","Central Highlands","South East","Mekong River Delta")
> colnames(t)<-c(region.name,"Vietnam")
> t

```

	Red River Delta	North East	North West	North Central
1 Winter-spring ordinary rice	1188	641	98	650
2 Summer-autumn ordinary rice	7	5	4	357
3 Tenth-month or autumn winter rice	1171	734	137	262
4 Ordinary rice planted in terraced field	0	10	35	9
5 Year-round ordinary rice	1300	925	289	668
6 Year-round glutinous rice	558	522	241	191
7 Year-round specialty rice	130	16	6	5
Total of 1 to 7	4354	2853	810	2142

	South Central Coast	Central Highlands	South East
1 Winter-spring ordinary rice	430	165	86
2 Summer-autumn ordinary rice	400	72	121
3 Tenth-month or autumn winter rice	120	131	134
4 Ordinary rice planted in terraced field	19	36	4
5 Year-round ordinary rice	470	238	179
6 Year-round glutinous rice	8	26	1
7 Year-round specialty rice	0	0	0
Total of 1 to 7	1447	668	525

	Mekong River Delta Vietnam	
1 Winter-spring ordinary rice	552	3810
2 Summer-autumn ordinary rice	558	1524
3 Tenth-month or autumn winter rice	346	3035
4 Ordinary rice planted in terraced field	2	115
5 Year-round ordinary rice	678	4747
6 Year-round glutinous rice	16	1563
7 Year-round specialty rice	10	167
Total of 1 to 7	2162	14961

✓ Aggregated the value of production (m4b11c15) by type of rice and household.

```
> m<-tapply(d$m4b11c15, list(d$ID, d$m4b11ma), sum, na.rm=T)
> df<-data.frame(ID=rownames(m), m, row.names=NULL)
> df[is.na(df)]<-0
> colnames(df)[2:8]<-paste("code", 1:7, sep="")
> df["ttrice"]<-df$code5+df$code6+df$code7
> head(df)
```

	ID	code1	code2	code3	code4	code5	code6	code7	ttrice
1	101060101014	1440	0	1120	0	2560	0	0	2560
2	101060101015	2880	0	2160	0	5040	0	0	5040
3	101062500513	960	0	960	0	1920	0	0	1920
4	101062500515	1120	0	1050	0	2170	0	0	2170
5	101150301913	1872	0	3360	0	5232	300	0	5532
6	101150301915	988	0	2072	0	3060	0	0	3060

- ✓ Out of 4,747 sample household harvested ordinary rice for the past 12 months, 468 households do not have the disaggregated data.

```
> nrow(subset(df, code5>0))
```

```
[1] 4747
```

```
> nrow(subset(df, code5>0 & (code1+code2+code3+code4)==0))
```

```
[1] 468
```

- ✓ Grouped household by rice harvest seasons pattern and region as below.
Three-digit patterns show the production of code 1,2 and 3. For example, “+0+” means that code1>0, code2=0 and code3>0.

In Northern provinces, rice is cultivated in two seasons, but in Southern provinces, there are three rice crops.

Region	Number of sample households harvesting rice in the below pattern								Planted terraced field
	+++	++0	+0+	0++	+00	0+0	00+	Total	
Red River Delta		6	1,152	1	30		18	1,207	
North East		3	626		12	2	108	751	10
North West		3	82		13	1	55	154	35
North Central		353	249		47	3	12	665	9
South Central Coast	97	299	18		16	4	5	439	19
Central Highlands	3	46	102		14	23	26	215	36
South East	43	26	15	44	2	8	32	170	4
Mekong River Delta	239	271	21	37	21	11	49	649	2
Vietnam	383	1,007	2,265	82	155	52	305	4,249	115

```
> df<-merge(df, ttchung[c("ID", "tinh")], all=T)
```

```
> df[is.na(df)]<-0
```

```
# Example of pattern "+0+"
```

```
> m1<-tapply(df$ID, list(substr(df$tinh, 1, 1), df$code1>0 & df$code2==0 & df$code3>0), length)
```

```
> addmargins(m1)
```

	FALSE	TRUE	Sum
1	792	1152	1944
2	691	626	1317
3	347	82	429
4	765	249	1014
5	834	18	852
6	480	102	582
7	1173	15	1188
8	1842	21	1863
Sum	6924	2265	9189

Example of pattern “+++”

```
> m2<-tapply(df$ID, list(substr(df$tinh, 1, 1), df$code1>0&df$code2>0&df$code3>0), length)
> addmargins(m2)
```

	FALSE	TRUE	Sum
1	1944	NA	NA
2	1317	NA	NA
3	429	NA	NA
4	1013	1	1014
5	755	97	852
6	579	3	582
7	1145	43	1188
8	1624	239	1863
Sum	8806	NA	NA

7.2.2.2 Other starchy, vegetable

Code	Description	Average value of the output harvested per household
	Total	1,281
8	Maize/corn	333
9	Sweet potatoes	41
10	Cassava/manioc	237
11	Other starchy plants	8
12	Potatoes	18
13	Water spinach	60
14	Kohlrabi	20
15	Cabbage, cauliflower	46
16	Mustard greens of all kinds	104
17	Fresh beans of all kinds	24
18	Tomatoes	25
19	Spiced herbs	55
20	Other vegetables, tubers, fruits	187
21	Other annual crops (bonsai..)	122

```
> d<-muc4b12
```

```
> t<-tapply(d$m4b12c8*d$wt, d$m4b12ma, sum, na.rm=T)/NHH
```

```
> round(addmargins(t))
```

8	9	10	11	12	13	14	15	16	17	18	19	20	21	Sum
333	41	237	8	18	60	20	46	104	24	25	55	187	122	1281

7.2.2.3 Annual and perennial industrial crops

Code	Description	Average value of the output harvested per household
	Total	2,083
22	Soybeans	38
23	Peanuts	111
24	Sesame seeds	15
25	Suga cane	286
26	Tobacco	28
27	Cotton	5
28	Jute, ramie	2
29	Rush	16
30	Other annual industrial crops	19
31	Tea	78
32	Coffee	723
33	Rubber	335
34	Pepper	130
35	Coconut	92
36	Mulberry	6
37	Cashew	184
38	Other perennial industrial crops	15

```
> d<-muc4b13
```

```
> t<-tapply(d$m4b13c8*d$wt, d$m4b13ma, sum, na.rm=T)/NHH
```

```
> round(addmargins(t))
```

22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	Sum
38	111	15	286	28	5	2	16	19	78	723	335	130	92	6	184	15	2083

7.2.2.4 Fruit crops

Code	Description	Average value of the output harvested per household
	Total	
39	Citrus fruits	
40	Pineapples	
41	Bananas	
42	Mangoes	
43	Apples	
44	Grapes	
45	Plums	
46	Papayas	
47	Longans, litchis, rambutans	
48	Sapodillas	
49	Custard apples	
50	Jackfruits, durians	
51	Mangosteens	
52	Other fruit trees	
53	Other perennial trees	
54	Breeding trees	
55	Bonsai	

```
> d<-muc4b14
```

```
> t<-tapply(d$m4b14c8*d$wt, d$m4b14ma, sum, na.rm=T)/NHH
```

```
> round(addmargins(t))
```

```

  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55 Sum
143  12  72  92  13   6  15  12 187  10  18  61   2 123  15   8 355 1144
```

7.2.2.5. Crop by-product

Code	Description	Average value of the output harvested per household
	Total	196
1	Straw, thatch	82
2	Sweet potato leaves and stems	24
3	Cassava and maize stems	15
4	Stems of beans of all kinds	4
5	Sugarcane leaves and tops	8
6	Jute, ramie stems	0
7	Mulberry plant stems	1
8	Firewood (from agricultural plants)	48
9	Other crop by-products	14

```

> d<-muc4b15
> t<-tapply(d$m4b15c5*d$wt, d$m4b15ma, sum, na.rm=T)/NHH
> round(addmargins(t))
  1   2   3   4   5   6   7   8   9 Sum
82 24 15  4  8  0  1 48 14 196

```


7.2.2.6 Crop planting expenditure

Cost for growing crops is disaggregated by 19 kinds of expenditure and 4 types of crops.

It includes those purchased, self-generated and given.

Code	Kind of expenses	Cost for the following crops				
		Rice	Starchy	Industrial crop	Fruit	Total
	Total cost	2,022	423	801	476	3,726
1	Seeds	186	42	17	1	246
2	Saplings	0	30	22	258	311
3	Chemical fertilizers (nitrogenous, phosphat, potassium, NPK, etc)	717	150	318	71	1258
4	Organic fertilizers (self-provided)	56	21	17	7	102
5	Organic fertilizers (bought)	6	15	27	11	59
6	Pesticides	169	25	25	27	246
7	Herbicides	62	5	12	2	81
8	Small, non-durable tools (sickles, shears, shovels, bamboo baskets...)	30	14	11	6	61
9	Energy, fuel (electricity, petrol, oil, lubricant, burning fuel...)	39	12	45	16	112
10	Minor repairs, maintenance	5	2	4	2	13
11	Depreciation of fixed assets	36	11	103	30	181
12	Land rental or contracting	52	9	11	2	74
13	Rental of asset, mechninery, equipment and means of transport	254	20	28	6	308
14	Rental of cattle for ployghing	28	4	5	0	38
15	Expense for outside hired laborers	219	46	133	26	424
16	Irrigational fee	94	3	4	1	102
17	Agricultural taxes	1	0	0	0	2
18	Payment for cultivation loan interest	27	3	11	7	49
19	Other costs (postage, advertisement, marketing, production insurance contributions to Plant Protection Fund, field improvement, extension, administrative management, food for working cattle)	40	9	8	4	61

```

> d<-muc4b16
> colnames(d)
[1] "tinh"      "huyen"     "xa"        "diaban"    "hoso"      "m4b16ma"   "m4b16c2a"  "m4b16c2b"
[9] "m4b16c2c" "m4b16c2d" "m4b16c2e" "ID"        "wt"        "xaid"
> m<-matrix(0,nrow=19,ncol=5)
> for(j in 1:5) m[,j]<-tapply(d[,j+6]*d$wt,d$m4b16ma,sum,na.rm=T)/NHH
> round(addmargins(m,1))
      [,1] [,2] [,3] [,4] [,5]
[1,]  186   42   17    1  246
[2,]    0   30   22  258  311
[3,]  717  150  318   71 1258
      :
[18,]   27    3   11    7   49
[19,]   40    9    8    4   61
[20,] 2022  423  801  476 3726

```

✓ Therefore, the income from agricultural crops is decomposed as follows.

Item	Total agricultural crop	Rice	Starchy and other food crops	Industrial crops	Fruit crops and others	By-products
Income	5,393	2,393	858	1,282	668	196
Revenue	9,119	4,415	1,281	2,083	1,144	196
Cost	3,726	2,022	423	801	476	

7.2.3 Livestock breeding

- ✓ Revenue is grouped into 19 kinds of products.

Total revenue from livestock breeding is consist of three parts;

- The amount sold, bartered, used as payment for wage or given as gift,
- The amount retained for consumption,
- The amount used for other purpose.

No	Kind of products	The amount of revenue per household			
		Sold	Consumption	Other	Total
	Total	4,177	361	139	4,780
1	Live pig pork	2,474	22	4	2,500
2	Live buffalo and cow meat	256	2	2	260
3	Horses	0	0	0	0
4	Sheep, goats	27	0	0	27
5	Chickens	207	224	2	433
6	Ducks, Thai ducks, geese	84	34	0	119
7	Other poultry	1	1	0	2
8	Pigs for breed	547	28	85	661
9	Buffaloes, oxen, cows for breed	182	6	16	205
10	Other cattle for breed	65	1	4	70
11	Other livestock (bears, deer, rabbits)	28	5	0	34
12	Poultry eggs (chickens, ducks...)	196	35	26	257
13	Fresh milk	60	0	0	60
14	Silkworm cocoons	13	0	0	13
15	Bee's honey (house-raising)	15	1	0	16
16	Other livestock (non-slaughtered)	3	0	0	3
17	Other livestock from breeding	17	1	0	19
18	Livestock breeding by-products	0	0	0	102

> d<-muc4b21

> colnames(d)

[1] "tinh" "huyen" "xa" "diaban" "hoso" "m4b21ma" "m4b21c3a" "m4b21c3b"

[9] "m4b21c4a" "m4b21c4b" "m4b21c5a" "m4b21c5b" "m4b21c6a" "m4b21c6b" "ID" "wt"

[17] "xaid"

```

> m<-matrix(0,nrow=18,ncol=4)
> for(j in 1:4) m[,j]<-tapply(d[,j*2+6]*d$wt,d$m4b21ma,sum,na.rm=T)/NHH
> round(addmargins(m,1))
      [,1] [,2] [,3] [,4]
[1,] 2474   22    4 2500
[2,]  256    2    2  260
[3,]    0    0    0    0
[4,]   27    0    0   27
[5,]  207  224    2  433
[6,]   84   34    0  119
[7,]    1    1    0    2
[8,]  547   28   85  661
[9,]  182    6   16  205
[10,]   65    1    4   70
[11,]   28    5    0   34
[12,]  196   35   26  257
[13,]   60    0    0   60
[14,]   13    0    0   13
[15,]   15    1    0   16
[16,]    3    0    0    3
[17,]   17    1    0   19
[18,]    0    0    0  102
[19,] 4177  361  139 4780

```

✓ Cost for livestock breeding is disaggregated by kinds of livestock and kind of expenditure

Kind of expenditure	Average amount of expenditure per household										
	Pigs	Buffalo, cows	Horses	Sheep, goat	Chickens	Ducks, geese	Other poultry	Bees	Silkworms	Other	Total
Total	2,292	243	0	18	255	200	5	11	7	27	3,059
Livestock breeds	592	115	0	9	45	28	0	5	1	6	802
Feed	1,481	92	0	6	187	155	5	6	5	18	1,955
Medicine for cattle, poultry	46	5	0	0	8	4	0	0	0	1	64
Energy, fuel	78	3	0	0	3	2	0	0	0	0	86
Depreciation of fixed assets	62	19	0	1	5	3	0	0	0	1	92
Land rental and contracting	0	0	0	0	0	1	0	0	0	0	1
Rental of assets, machinery, equipment, means of production	0	0	0	0	0	1	0	0	0	0	1
Payment for hired laborers	2	2	0	0	0	4	0	0	0	0	9
Payment for loan interest for breeding	10	3	0	0	0	0	0	0	0	0	14
Business taxes	0	0	0	0	0	0	0	0	0	0	0
Other expenses	21	3	0	0	6	2	0	0	0	0	34

```

> d<-muc4b22
> colnames(d)
[1] "tinh"      "huyen"     "xa"        "diaban"    "hoso"      "m4b21ma"   "m4b21c3a" "m4b21c3b"
[9] "m4b21c4a" "m4b21c4b" "m4b21c5a" "m4b21c5b" "m4b21c6a" "m4b21c6b" "ID"        "wt"
[17] "xaid"
> m<-matrix(0,nrow=10,ncol=12)
> for(j in 1:12) m[,j]<-tapply(d[,j+6]*d$wt,d$m4b22ma,sum,na.rm=T)/NHH
> mt<-t(round(addmargins(m,1)))
> mt
      [,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10] [,11]
[1,]  592  115    0    9   45   28    0    5    1    6   802
[2,] 1481   92    0    6  187  155    5    6    5   18  1955
[3,]   46    5    0    0    8    4    0    0    0    1    64
[4,]   78    3    0    0    3    2    0    0    0    0    86
[5,]   62   19    0    1    5    3    0    0    0    1    92
[6,]    0    0    0    0    0    1    0    0    0    0    1
[7,]    0    0    0    0    0    1    0    0    0    0    1
[8,]    2    2    0    0    0    4    0    0    0    0    9
[9,]   10    3    0    0    0    0    0    0    0    0   14
[10,]    0    0    0    0    0    0    0    0    0    0    0
[11,]   21    3    0    0    6    2    0    0    0    0   34
[12,] 2292  243    0   18  255  200    5   11    7   27  3059

```

7.2.4 Agricultural service

Agricultural service is divided into 5 activities;

- 1) Soil preparation,
- 2) Irrigation,
- 3) Pest and disease control,
- 4) Rice plucking, semi-processing,
- 5) Other service(artificial insemination, castration)

Item		Average amount per household					
		Soil preparation	Irrigation	Pest and disease control	Rice plucking, semi-processing	Other services	Total
Income		83	7	2	42	13	147
Revenue		161	14	2	126	19	322
Cost	Total	78	7	0	84	6	175
	Materials	2	0	0	29	3	35
	Small, non-durable items	2	0	0	1	0	3
	Energy, fuel	48	6	0	19	1	74
	Minor repairs, maintenance	5	0	0	4	0	10
	Fixed assets depreciation	11	1	0	5	1	17
	Rental of houses, workshops, machines, transportation means	0	0	0	0	0	0
	Payment for hired outside laborers	8	0	0	20	0	29
	Payment for loan interest for business and production	1	0	0	2	0	3
	Business taxes	0	0	0	1	0	1
	Other expenditure	0	0	0	1	0	2

```

> d<-muc4b31
> colnames(d)
[1] "tinh"    "huyen"   "xa"      "diaban"  "hoso"    "m4b31ma" "m4b31c3" "m4b31c4" "m4b31c5"
[10] "ID"      "wt"      "xaid"
> revenue<-round(addmargins(tapply(d$m4b31c5*d$wt, d$m4b31ma, sum, na.rm=T)/NHH))
> revenue
  1   2   3   4   5 Sum
161 14   2 126 19 322

> d<-muc4b32
> colnames(d)
[1] "tinh"    "huyen"   "xa"      "diaban"  "hoso"    "m4b31ma" "m4b32c7" "m4b32c8"
[9] "m4b32c9" "m4b32c10" "m4b32c11" "m4b32c12" "m4b32c13" "m4b32c14" "m4b32c15" "m4b32c16"
[17] "m4b32c17" "ID"      "wt"      "xaid"
> m<-matrix(0, nrow=5, ncol=11)

```

```
> for(j in 1:11) m[,j]<-tapply(d[,j+6]*d$wt,d$m4b31ma,sum,rm.na=T)/NHH
```

```
> mt<-t(round(addmargins(m,1)))
```

```
> mt
```

```
      [,1] [,2] [,3] [,4] [,5] [,6]
[1,]    2    0    0   29    3   35
[2,]    2    0    0    1    0    3
[3,]   48    6    0   19    1   74
[4,]    5    0    0    4    0   10
[5,]   11    1    0    5    1   17
[6,]    0    0    0    0    0    0
[7,]    8    0    0   20    0   29
[8,]    1    0    0    2    0    3
[9,]    0    0    0    1    0    1
[10,]   0    0    0    1    0    2
[11,]   78    7    0   84    6  175
```

```
> inc<-revenue-mt[11,]
```

```
> inc
```

```
  1  2  3  4  5 Sum
83  7  2 42 13 147
```

7.2.5 Forestry

- Average amount of revenue from forestry per household by kind of trees and type of revenue

```
> d<-subset(muc4b41,m4b41ma<=14)
```

```
> dim(d)
```

```
[1] 3821  16
```

```
> head(d)
```

```
  tinh huyen xa diaban hoso m4b41ma m4b41c3a m4b41c3b m4b41c3c m4b41c3d
1  103   19 09   001   14    11      0      0      0      0
2  104   02 13   006   14    11      0      0      0      0
3  104   03 11   010   13    11      0      0      0      0
4  104   03 11   010   14    11      0      0      0      0
5  104   03 11   010   15    11      0      0      0      0
```



```

6 104 03 29 004 13 11 0 0 0 0
m4b41c3e m4b41c3f m4b41c4 ID wt xaid
1 130 130 0 103190900114 1880.380 1031909
2 250 250 0 104021300614 1798.728 1040213
3 200 200 0 104031101013 1931.557 1040311
4 180 180 0 104031101014 1931.557 1040311
5 260 260 0 104031101015 1931.557 1040311
6 250 250 0 104032900413 2064.387 1040329
> table(d$m4b41ma)
1 2 3 4 5 6 7 8 9 10 11 12 13 14
8 20 18 8 2 251 507 32 36 127 2119 39 599 55
> NHH<-sum(d$wt)
> m<-matrix(0,nrow=14,ncol=7)
> for(j in 1:7){
+ m[,j]<-tapply(d[,j+6]*d$wt,d$m4b41ma,sum,rm.na=T)/NHH
+ }
> colnames(m)<-c("3a","3b","3c","3d","3e","3f(Total)","4")
> rownames(m)<-c("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",
+ "13 Trees for breeding","14 Other forestry services")
> round(addmargins(m,1),1)

```

	3a	3b	3c	3d	3e	3f(Total)	4
1 Mu oil trees	0.2	0.1	0.0	0.5	0.2	0.9	0.8
2 Cinnamon	9.0	0.0	0.0	0.0	0.0	9.0	9.0
3 Anise	7.1	0.0	0.0	0.0	0.1	7.2	7.0
4 Pine	0.8	0.2	2.3	1.8	0.7	5.7	5.6
5 Vamish trees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 Trees for wood	130.7	3.4	1.5	11.2	64.9	211.7	174.9
7 Bamboo	52.9	4.3	5.6	4.4	51.0	118.2	93.0
8 Fan palm trees	2.8	0.0	0.1	0.1	0.5	3.5	2.3
9 Water coconut	1.0	0.0	0.0	0.0	4.4	5.4	3.1
10 Other forestry trees	32.6	2.8	14.2	1.1	30.2	81.7	70.1
11 Wood	107.4	18.8	19.9	23.1	315.4	484.7	72.8
12 Forest plantation, protection	7.7	2.2	0.6	0.0	2.6	13.2	6.1
13 Trees for breeding	48.1	3.0	4.8	4.9	69.4	130.2	91.4

14 Other forestry services	1.3	0.0	5.5	0.4	1.5	8.7	0.3
Sum	401.7	34.8	54.6	47.6	540.7	1080.1	536.4

- Average amount of cost for forestry per household by kind of expenditure

```
> d<-subset(muc4b42,m4b42ma<=2)
> dim(d)
[1] 2182 23
> head(d)
  tinh huyen xa diaban hoso m4b42ma m4b42c1 m4b42c2 m4b42c3 m4b42c4 m4b42c5
1  103   19 09   001   14      1      0      0      10      0      0
2  104   03 11   010   14      1      0      0      0      0      0
3  104   03 11   010   15      1      0      0     12      0      0
4  104   03 29   004   13      1      0      0     40      0      0
5  104   03 29   004   14      1      0      0      0      0      0
6  104   03 29   004   15      1      0     90     10      0      0
  m4b42c6 m4b42c7 m4b42c8 m4b42c9 m4b42c10 m4b42c11 m4b42c12 m4b42c13 m4b42c14
1      0      0      0      0      0      0      0      0      0      10
2      0      0      0      0      0      0      0      0     20     20
3      0      0      0      0      0      0      0      0      0     12
4      0      0      0      0      0      0      0      0     30     70
5      0      0      0      0      0      0      0      0     20     20
6      0      0      0      0      0      0      0      0      0    100
      ID      wt      xaid
1 103190900114 1880.380 1031909
2 104031101014 1931.557 1040311
3 104031101015 1931.557 1040311
4 104032900413 2064.387 1040329
5 104032900414 2064.387 1040329
6 104032900415 2064.387 1040329
> table(d$m4b42ma)
  1      2
2139  43
> NHH<-sum(d$wt)
> m<-matrix(0,nrow=2,ncol=14)
```

```

> for(j in 1:14){
+ m[,j]<-tapply(d[,j+6]*d$wt,d$m4b42ma,sum,rm.na=T)/NHH
+ }
> m<-t(m)
> colnames(m)<-c("Forestry activities","Forestry services")
> rownames(m)<-c(1:13,"14 Total")
> m[is.na(m)]<-0
> round(addmargins(m,2),1)

```

	Forestry activities	Forestry services	Sum
1	18.2	0.0	18.2
2	11.0	0.0	11.0
3	50.0	0.9	50.9
4	5.8	0.2	6.0
5	4.2	0.1	4.3
6	17.2	0.0	17.2
7	0.3	0.0	0.3
8	13.3	0.0	13.4
9	3.4	0.0	3.4
10	35.1	0.0	35.1
11	0.6	0.0	0.6
12	0.7	0.0	0.7
13	25.7	0.4	26.1
14 Total	185.6	1.6	187.1

7.2.6 Hunting

- Average amount of revenue from hunting per household

```

> d<-subset(muc4b41,m4b41ma==15)
> dim(d)
[1] 111 16
> weighted.mean(d$m4b41c3f,d$wt)
[1] 736.249

```

- Average amount of cost for forestry per household by kind of expenditure

```

> d<-subset(muc4b42, m4b42ma==3)
> dim(d)
[1] 101 23
> head(d)
  tinh huyen xa diaban hosu m4b42ma m4b42c1 m4b42c2 m4b42c3 m4b42c4 m4b42c5
18  115    07 95    013   15      3      NA      NA      60      0      0
171 203    13 31    001   13      3      NA      NA      4      7      0
176 203    15 11    001   14      3      NA      NA      5      0      0
186 203    15 39    001   14      3      NA      NA     30      0      0
204 203    21 31    003   13      3      NA      NA     28      0      0
330 209     3 21    011   13      3      NA      NA      0      0      0
  m4b42c6 m4b42c7 m4b42c8 m4b42c9 m4b42c10 m4b42c11 m4b42c12 m4b42c13
18      0      0      0      0      0      0      0      100
171      0      0      0      0      0      0      0      0
176      0      0      0      0      0      0      0      0
186      0      0      0      0      0      0      0      0
204      0      0      0      0      0      0      0      0
330      0      0      0      0      0      0      0      50
  m4b42c14      ID      wt      xaid
18      160 115079501315 2551.385 1150795
171      11 203133100113 1122.741 2031331
176      5 203151100114 1116.924 2031511
186      30 203153900114 1233.270 2031539
204      28 203213100313 1244.905 2032131
330      50 209032101113 1515.878 2090321
> m<-matrix(0, nrow=14, ncol=1)
> for(j in 1:14){
+   m[j, 1]<-sum(d[, j+6]*d$wt, rm.na=T)/NHH
+ }
> colnames(m)<-"Hunting"
> rownames(m)<-c(1:13, "14 Total")
> round(m, 1)
  Hunting
1      NA

```

2	NA
3	1.8
4	0.8
5	0.1
6	0.3
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	2.3
14 Total	5.2

7.2.7 Aquaculture

Revenue of aquaculture is grouped as follow;

- 1) Acuacultural raising
 - 11 Fish
 - 12 Shrimp
 - 13 Shrimp and fish for breed
 - 14 Other aquacultural products
- 2) Aquacultural catching
 - 21 Fish
 - 22 Shrimp
 - 23 Other aquacultural products
- 3) Aquacultural services

Remarks:

Code 1 and 2 seem not to exist in the variable m4b51ma according to the form of Section 4B5.

If code 1 or code 2 exists, it might be errors.

```
> d<-muc4b51
# Number of records by kind of products
> table(d$m4b51ma)
 1   2   3  11  12  13  14  21  22  23
 7   3   4 1368 251  39  188 1052 127  614
# Average revenue by kind of products
> t<-round(tapply(d$m4b51c6b*d$wt, d$m4b51ma, sum, na.rm=T)/NHH)
> t
 1   2   3  11  12  13  14  21  22  23
10   2 136 951 842 284  62 802  61 270
# Total of aquaculture raising
> sum(t[4:7])
[1] 2139
# Total of aquacultural catching
> sum(t[8:10])
[1] 1133
```

Table Average revenue per household by kind of products

Code	Kind of products	Average revenue per household
1	Aquaculture raising	2,139
1.1	Fish	951
1.2	Shrimp	842
1.3	Shrimp and fish for breed	284
1.4	Other aquacultural products	62
2	Aquacultural catching	1,133
2.1	Fish	802
2.2	Shrimp	61
2.3	Other aquacultural products	270
3	Aquacultural services	136

7.2.8 Household business

Data file MUC4C (Revenue of household business) and MUC4C2 (Cost of household business) record at most 4 activities per household. If there are more than 4 activities, then the fifth, sixth ... activities are combined with the fourth activity.

For each activity, the industry code is recorded. See the list of industry code in the questionnaire.

Code	Industry	Number of activities
10	Coal mining	4
13	Metal mining	9
14	Mining for rocks, stone, sand, salt, fertilizer...	28
15	Food and beverage production	594
16	Tobacco production	1
17	Textile	29
18	Fur processing and fur products	190
19	Leather tanning and leather products including wallets, seats, suitcases and footwear	6
20	Wood processing and production of wood, bamboo and rattan products (excluding	210

	bed, wardrobe, table, chair); production of straw products	
21	Paper and paper products	10
22	Printing and publishing (books, magazines, newspapers, and copies)	7
25	Plastic and Rubber production and products	4
26	Other non-metal mineral products production	28
27	Metal production and processing	1
28	Metal products (except machines and equipment)	66
29	Other equipments and machinery not specified elsewhere	4
33	Medical and laboratory equipment, precision instruments, and meters (clocks)	1
34	Motor vehicles and spare parts	1
35	Other means of transportation (boats, railroad, airplane)	1
36	Furniture production and other productions not specified elsewhere	86
37	Recycling, reprocessing	2
45	Construction	49
50	Vehicle sales, maintenance and repair; retail sales of fuel	91
51	Wholesale and agent sales (excluding motor vehicles and motorbikes)	167
52	Retail sales (excluding motor vehicles and motorbikes);repairs of family appliances	1638
55	Hotel and restaurant (including big and small restaurants, cafe, beverage and drink stands,...)	475
60	Road, railroad and pipeline transport	357
61	Waterway transport	14
63	Services in transport; tourist services	2
64	Post and telecommunications	1
65	Financial intermediary (excluding insurance and pensioner's social welfare)	3
67	Assistance in finance (including social insurance)	4
71	Activities relating real-estate	15
72	Rental of machines and equipment (excluding operators); rental of furnitures and household goods	17
73	Computer-related activities	7
74	Other business activities (accounting, tax, technical and legal consulting, architecture, advertising, protection, housecleaning, photography, packaging, etc.	30
80	Education and training	16
85	Health and social relief (hospitals, health centers, veterinary care, social relief,...)	37
90	Cultural and sport activities (broadcasting, television, cinema, recreation and entertainment, press, library, museum, sport,...)	31

92	Disposal collection, public sanitation improvement, and similar activities	10
93	Other service activities (laundry, hairdressing, funerals,...)	133

```
> d<-muc4c
> dim(d)
[1] 4379 36
```

Number of activities by industry code

```
> t<-table(d$m4c1c2)
> df<-data.frame(code=names(t), activity=as.vector(t))
> df<-merge(industry.code, df, by="code", all.y=T)
> dim(df)
[1] 41 3
> write.csv(df, "business_by_industry.csv")
> fix(df)
```

	code	industry_name	activity
1	10	Coal mining	4
2	13	Metal mining	9
3	14	Mining for rocks, stone, sand, salt, fertilizer...	28
4	15	Food and beverage production	594
5	16	Tobacco production	1
6	17	Textile	29

- ✓ Revenue of each activity of household business is captured in the variables of MUC4C as the next;

No	Variable	Description
25	m4c1c18	Revenue for the past 12 months
27	m4c1c20	Value of exchanged goods and services
29	m4c1c22	Value of goods and services consumed by your household
31	m4c1c24	Value of by-products consumed or sold by your household
32	m4c1c25	Total revenue (in cash and in-kind) = c18+c20+c22+c24
13	m4c1c8	Ownership rate of household (%)
33	m4c1c25a	Total revenue allocated for household = (c18 x c8 / 100) +c20+c22+c24

- ✓ Cost for each activity of household business is categorized by the variable m4c2c26 of MUC4C2.

It is noted that the item of total cost is included in data set.

Item	Description
1	Materials, sub-materials
2	Small and non-durable tools
3	Electricity
4	Water
5	Gasoline, oil, petrol, lubricants, burning fuels,...
6	Small repair and maintenance
7	Fixed asset depreciation
8	Rental land, workshops, shops, machines, and other production means
9	Transportation (rent and fee)
10	Labor costs (wage, salary; social insurance; health insurance; trade union fees;...)
11	Loan interest
12	Taxes, fees, and other fees considered as taxes
13	Expenditure on water and solid sewage disposal
14	Other expenditures (postage, transportation, ad., marketing, model purchases, design, production insurance,...)
15	Total expenditure = Sum of item 1 to 14
16	Total expenditure allocated for the household = Item 15 x Q8 (ownership rate) / 100

- ✓ Average revenue per household by industry

```
> d<-muc4c
> dim(d)
[1] 4379 36
> revenue<-tapply(d$m4c1c25a*d$wt, d$m4c1c2, sum, na.rm=T)/NHH
> length(revenue)
[1] 41
```

- ✓ Average cost per household by industry

```
> d2<-subset(muc4c2, m4c2c26==16)
> dim(d2)
[1] 4379 12
# Added industry code for data frame d2
```

```
> d2<-cbind(d2, d["m4c1c2"])
> cost<-tapply(d2$m4c2c28*d2$wt, d2$m4c1c2, sum, na.rm=T)/NHH
> length(cost)
[1] 41
```

✓ Average income per household by industry

```
> income<-revenue-cost
> income<-cbind(income, revenue, cost)
> round(addmargins(income, 1), 1)
```

```
      income revenue    cost
10      3.9      5.3      1.4
13      5.0      8.2      3.2
14     48.3     97.8     49.5
15    834.8    2032.4   1197.6
:
92     33.1     71.5     38.5
93    209.0     328.9    119.9
Sum  7895.3  20003.1  12107.8
```

✓ Income of household business per household by industry code is summarized as the next.

Code	Industry	income	revenue	cost
	Total	7895.3	20003.1	12107.8
10	Coal mining	3.9	5.3	1.4
13	Metal mining	5.0	8.2	3.2
14	Mining for rocks, stone, sand, salt, fertilizer...	48.3	97.8	49.5
15	Food and beverage production	834.8	2032.4	1197.6
16	Tobacco production	0.3	0.4	0.0
17	Textile	28.4	102.1	73.7
18	Fur processing and fur products	184.3	535.3	351
19	Leather tanning and leather products including wallets, seats, suitcases and footwear	23.3	112.3	89.0
20	Wood processing and production of wood, bamboo and rattan products (excluding bed, wardrobe, table, chair); production of straw products	149.7	509.7	360.1
21	Paper and paper products	51.9	132.2	80.2
22	Printing and publishing (books, magazines, newspapers, and copies)	13.2	20.6	7.3

25	Plastic and Rubber production and products	101.6	607.7	506
26	Other non-metal mineral products production	169.8	953.2	783.3
27	Metal production and processing	2.5	2.8	0.3
28	Metal products (except machines and equipment)	250.8	1141.8	891
29	Other equipments and machinery not specified elsewhere	75.6	607.4	531.8
33	Medical and laboratory equipment, precision instruments, and meters (clocks)	6.6	7.9	1.4
34	Motor vehicles and spare parts	4.8	6.7	1.8
35	Other means of transportation (boats, railroad, airplane)	29.6	29.7	0.1
36	Furniture production and other productions not specified elsewhere	331.5	1124.8	793.3
37	Recycling, reprocessing	23.2	116.3	93.2
45	Construction	272.3	958.4	686.1
50	Vehicle sales, maintenance and repair; retail sales of fuel	139.4	390.6	251.2
51	Wholesale and agent sales (excluding motor vehicles and motorbikes)	485.0	822.6	337.6
52	Retail sales (excluding motor vehicles and motorbikes);repairs of family appliances	2395.0	4071.1	1676.1
55	Hotel and restaurant (including big and small restaurants, cafe, beverage and drink stands,...)	1030.5	2728.1	1697.6
60	Road, railroad and pipeline transport	685.8	1521.9	836.1
61	Waterway transport	66.2	293.0	226.8
63	Services in transport; tourist services	6.2	8.6	2.3
64	Post and telecommunications	0.7	1.0	0.3
65	Financial intermediary (excluding insurance and pensioner's social welfare)	13.0	15.3	2.3
67	Assistance in finance (including social insurance)	13.0	15.1	2.2
71	Activities relating real-estate	36.5	73.6	37.1
72	Rental of machines and equipment (excluding operators); rental of furnitures and household goods	20.3	26.2	5.9
73	Computer-related activities	15.3	31.3	16.0
74	Other business activities (accounting, tax, technical and legal consulting, architecture, advertising, protection, housecleaning, photography, packaging, etc.	-44.0	192.0	236.0
80	Education and training	16.0	31.6	15.6
85	Health and social relief (hospitals, health centers, veterinary care, social relief,...)	78.9	131.7	52.8
90	Cultural and sport activities (broadcasting, television, cinema, recreation and entertainment, press, library, museum, sport,...)	83.6	136.0	52.3

92	Disposal collection, public sanitation improvement, and similar activities	33.1	71.5	38.5
93	Other service activities (laundry, hairdressing, funerals,...)	209.0	328.9	119.9

7.2.9 Other

```

> d<-muc4d
> dim(d)
[1] 9189 25
> head(d)
  tinh huyen xa diaban hosu m4d1c2_01 m4d1c2_02 m4d1c2_03 m4d1c2_04 m4d1c2_05
1  101    01 03    014  15          0    2000          0          0          0
2  101    01 03    014  19          0    4000          0          0          0
3  101    01 03    014  24          0    6000      7800          0          0
4  101    01 09    019  13          0    3000     30000          0          0
5  101    01 09    019  15          0    6200          0          0          0
6  101    01 09    019  19          0    6000     36000          0          0
  m4d1c2_06 m4d1c2_07 m4d1c2_08 m4d1c2_09 m4d1c2_10 m4d1c2_11 m4d1c2_12
1          0          0          0          0          0          0          0
2          0          0          0     1850          0          0          0
3          0          0          0          0          0          0          0
4          0          0          0          0          0          0     7000
5          0          0          0          0          0          0          0
6          0          0          0    18000          0          0          0
  m4d2c2_1 m4d2c2_2 m4d2c2_3 m4d2c2_4 m4d2c2_5      ID      wt      xaid
1          0          0          0          0          0 101010301415 3107.318 1010103
2          0          0          0          0          0 101010301419 3107.318 1010103
3          0          0          0          0          0 101010301424 3107.318 1010103
4          0          0          0          0          0 101010901913 3092.521 1010109
5          0          0          0          0          0 101010901915 3092.521 1010109
6          0          0          0          0          0 101010901919 3092.521 1010109
> m<-matrix(0,nrow=17,ncol=1)
> for(j in 1:17){
+   m[j,1]<-sum(d[,j+5]*d$wt,rm.na=T)/NHH
+ }

```

```
> colnames(m) <- "Other income"
> rownames(m) <- c(101:112, 201:205)
> round(m, 1)
```

	Other income
101	7345.3
102	12145.0
103	6540.8
104	208.8
105	419.4
106	1720.3
107	26.2
108	84.1
109	1822.9
110	1153.9
111	194.1
112	1515.8
201	8648.6
202	3687.8
203	7069.1
204	23464.5
205	3333.6

```
# Total of 101 to 105
```

```
> sum(m[1:12, 1])
```

```
[1] 33176.53
```

```
# Total of 201 to 205
```

```
> sum(m[13:17, 1])
```

```
[1] 46203.56
```

7.3 Household expenditure

- In summary file TTCHING, household expenditure is grouped into 13, that is, variables of chikhac_02 to chikhac_14, as in the next table. Out of 13 groups of expenditure, the following 4 groups are not counted in household expenditure.

Variable	Expenses not counted in household expenditure
chikhac_09	Selling means of production, selling gold/silver/jewelry, withdrawal from savings, borrowing on interest, etc.
chikhac_10	Expenditure on major repairs of fixed assets
chikhac_11	Expenditure on purchased fixed assets
chikhac_13	Expenditure on purchased/repared house/land

- Therefore, the household expenditure is grouped into 8.
- The reference period of expenditure for all items in the questionnaire is the past 12 months.
- It has an advantage to be able to cover all expenditures during the survey year. At the same time, it is a disadvantage that respondent's memory about daily food expenditure becomes vague.

According to the discussion at the Workshop 2014, the delegates from Vietnam explained that enumerators are trained to induce an accurate income values as much as possible by using various techniques.

So, it is somewhat estimates by enumerators rather than facts.

- Unit of records is in principle household-level expenditure item code.
Conversion to COICOP (Classification of Individual Consumption According to Purpose) is not clear.
- The value of expenditure includes goods and services bought or bartered (in cash) as well as self-generated or given (in-kind).
- Expenditures on food and drinks are captured in two forms;
Section 5A1. Expenditure of foods and drinks during holidays, and
Section 5A2. Daily expenditure on foods and drinks.

Holidays mean Lunar New Year, Christmas, National Day, Mid-Autumn Festival, First Full Moon Festival. Traditional holidays of ethnic minorities are also included.

Table Structure of expenditure related data files and variables

Expenditure	Variable of total amount in TTCHUNG	Original data				Remarks
		File	Variable in cash	Variable in kind	Item code	
Education	chikhac_02	MUC2A	m2ac13k + m2ac16			13k: cost for education (sum of 9 items) 16: educational training
Health	chikhac_03	MUC3A2				Total
	m3act1		m3ac10b			Outpatient treatment
	m3act2		m2ac12b			Inpatient treatment
	m3ac16		Q16			Non-prescribed medicine for self-treatment
	m3ac17		Q17			Medical tools
	m3ac18		Q18			Health care insurance
Food & drinks during holidays	chikhac_04	MUC5A1	m5a1c2b	m5a1c3b	101-157	24 items only
Daily food & drinks	chikhac_05	MUC5A2	m5a2c6	m5a2c10	101-157	
Daily non-food	chikhac_06	MUC5B1	m5b1c4	m5b1c5	201-221, 299	Note: Code 299 is located between 202 and 203 in Section 5B1 of the questionnaire
Yearly non-food	chikhac_07	MUC5B2	m5b2c2	m5b2c3	301-333	
Other spending considered as household expenditure	chikhac_08	MUC5B3_4	m5b3c2_01 to 10		400-408	

Other spending not considered as household expenditure (*)	chikhac_09	MUC5B3_4	m5b4c2_1 to 8		501-508	
Major repairs of fixed assets (*)	chikhac_10	section 6	Q7			
Purchased fixed assets (*)	chikhac_11	MUC6A	m6ac5*m6ac7/100 during the past 12 months		asset code 1-63	Purchased month & year available
Durable goods	chikhac_12	MUC6B	m6bc5 during the past 12 months		asset code 1-63	Purchased month & year available
Purchased/repaired house/land (*)	chikhac_13	MUC7				
			m7c21			Purchased extra house
			m7c23a			Building house
			m7c24			Major house repair or upgrade
Housing, electricity, water, garbage collection	chikhac_14	MUC7				
			m7c9*m7c11/m7c10			House rent in cash & in kind
			m7c25			Minor house repair
			m7c32			Water of daily life use
			m7c36			Electricity
			m7c39			Garbage collection
Note: (*) are not included in household expenditure.						
Total household expenditure	chitieu	=Sum of chikhac_02 to 08, 12 and 14				
Total consumption expenditure	chids	=Sum of chikhac_02 to 07, 12 and 14				
Food & drinks		=chikhac_04 + chikhac_05				

7.4 Household expenditure and consumption expenditure

Definition of consumption expenditure is the household expenditure (chitieu in TTCHUNG) minus chikhac_08.

Variable	Expenses counted in household expenditure, but not counted in consumption expenditure
chikhac_08	Fee, administrative and legal service for life, Contributions to various funds, Amount paid in replacement of compulsory public labor, All kinds 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.

In the survey report, values of monthly expenditure per capita are written in principle.

Terms used in the survey report vs terms used in this manual

Terms used in the survey report		Monthly per capita	Terms used in this manual
Total consumption expenditure		511.4	Total household expenditure
Consumption expenditure for living		460.4	Consumption expenditure
	Eating, drinking & smoking	242.9	
	Non-eating, drinking & smoking	217.5	
Other consumption expenditure		51.0	Non-consumption expenditure

Monthly consumption expenditure per capita

> df<-ttchung

```
> (t<-round(sum(df$chids*df$wt)/sum(df$tsnguai*df$wt)/12,1))
```

```
[1] 460.2
```

```
# Monthly consumption expenditure per capita by urban/rural
```

```
> t<-c(t, as.vector(by(d, d$ttnt, function(df) sum(df$chids*df$wt)/sum(df$tsnguai*df$wt)/12)))
```

```
> names(t)<-c("Total", "Urban", "Rural")
```

```
> round(t, 1)
```

```
Total Urban Rural
```

```
460.2 738.3 358.7
```

- ✓ Average monthly consumption per capita is high in South East and Red River Delta, especially in urban area.

Region	Total	Urban	Rural
Vietnam	460.2	738.3	358.7
Red River Delta	474.9	821.7	360.7
North East	372.8	616.1	313.0
North West	291.3	593.7	242.8
North Central	314.1	552.5	276.5
South Central Coast	414.6	593.6	335.7
Central Highlands	391.1	540.2	328.4
South East	740.5	944.1	519.1
Mekong River Delta	434.4	558.8	401.6

```
# Monthly consumption expenditure per capita by region
```

```
> r<-as.vector(by(d, substr(d$tin, 1, 1),
```

```
+ function(df) sum(df$chids*df$wt)/sum(df$tsnguai*df$wt)/12))
```

```
> names(r)<-region.name
```

```
> round(r, 1)
```

```

      Red River Delta      North East      North West      North Central
      474.9              372.8              291.3              314.1
South Central Coast Central Highlands      South East Mekong River Delta
      414.6              391.1              740.5              434.4
```

```
# Monthly consumption expenditure per capita by region and urban/rural
```

```
> m<-matrix(as.vector(by(d, list(substr(d$tin, 1, 1), d$ttnt),
```

```

+ function(df) sum(df$chids*df$wt)/sum(df$tsnguoi*df$wt)/12)),
+ nrow=8, ncol=2)
> m<-cbind(r, m)
> m<-rbind(t, m)
> rownames(m)<-c("Vietnam", region.name)
> round(m, 1)

```

	Total	Urban	Rural
Vietnam	460.2	738.3	358.7
Red River Delta	474.9	821.7	360.7
North East	372.8	616.1	313.0
North West	291.3	593.7	242.8
North Central	314.1	552.5	276.5
South Central Coast	414.6	593.6	335.7
Central Highlands	391.1	540.2	328.4
South East	740.5	944.1	519.1
Mekong River Delta	434.4	558.8	401.6

7.4.2 Foods and drinks during holidays

Code	Description	Average amount per household	In cash	In-kind
	Total	1098	913	185
101	Fragrant, specialty rice	25	20	5
102	Glutinous rice	47	30	17
110	Pork (inedible parts removed)	149	136	14
111	Beef	42	41	1
112	Buffalo's meat	3	2	0
113	Chicken	138	67	71
114	Duck and other poultry meat	24	17	7
115	Other meat (goat, dog, lamb, game meat, bird,...)	8	7	1
116	Processed meat (meat pies, fried meat pies, sausage,...)	53	49	4
118	Fresh fish, shrimp	48	39	9

120	Other seafoods (crab, snails..)	9	8	1
121	Chicken or duck eggs	19	14	5
124	Beans	16	15	1
134	Fruit	83	73	9
139	Sugar, molasses	20	19	1
140	Cakes, candy, jam	77	68	9
144	Liquor of all kinds	40	32	8
145	Beers of all kinds	65	56	8
146	Canned or bottled refreshment	24	20	4
151	Coffee	11	10	1
153	Tea	19	18	2
154	Cigarettes, tobacco	27	26	1
156	Outdoors eating	84	81	3
157	Other things (processed foods, spices, additives ...)	68	65	3

```
> d<-muc5a1
```

```
> head(d[1:10])
```

```
  tinh huyen xa diaban hosu m5a1c1 m5a1c2a m5a1c2b m5a1c3a m5a1c3b
```

```
1 101 01 03 014 15 156 NA 300 NA 0
2 101 01 03 014 15 111 1 120 0 NA
3 101 01 03 014 15 101 5 45 0 NA
4 101 01 03 014 15 113 2 140 0 NA
5 101 01 03 014 15 114 2 70 0 NA
6 101 01 03 014 15 145 10 250 0 NA
```

```
> length(unique(d$m5a1c1))
```

```
[1] 24
```

```
> m1<-tapply(d$m5a1c2b*d$wt, d$m5a1c1, sum, na.rm=T)/NHH
```

```
> m2<-tapply(d$m5a1c3b*d$wt, d$m5a1c1, sum, na.rm=T)/NHH
```

```
> m<-cbind(m1, m2)
```

```
> mt<-round(addmargins(m)) [c(25, 1:24), c(3, 1, 2)]
```

```
> mt
```

```
Sum m1 m2
```

```
Sum 1098 913 185
```

```
101 25 20 5
```

102	47	30	17
110	149	136	14
:			
156	84	81	3
157	68	65	3

7.4.3 Daily foods and drinks

Code	Description	Average amount per household	In cash	In-kind
	Total	10461	8635	1826
101	Ordinary rice (incl. fragrant, specialty)	2249	1150	1099
102	Glutinous rice	74	27	47
103	Corn/maize (as kemels)	22	10	12
104	Cassava (as fresh)	11	5	6
105	Various types of potatoes (as fresh)	27	19	8
106	Bread, wheat or wheat flour	57	56	0
107	Noodle, pho noodle, instant rice soup	127	126	1
108	Rice noodle	55	54	1
109	Vermicelli?	18	18	0
110	Pork (inedible parts removed)	1358	1349	10
111	Beef	229	228	1
112	Buffalo's meat	10	10	0
113	Chicken	327	172	154
114	Duck and other poultry meat	101	74	27
115	Other meat (goats, dogs, lamb, wild beasts, birds,...)	35	29	6
116	Processed meat	62	61	1
117	Animal fat, vegetable oil	198	196	2
118	Fresh fish, shrimp	974	815	159
119	Dried and processed fish and shrimp	86	83	3
120	Other seafoods (crab, snails..)	63	51	12
121	Chicken or duck eggs	136	107	29
122	Tofu	113	112	1
123	Peanuts, sesame seeds	36	23	13
124	Beans	24	22	2
125	Various kinds of fresh pea	53	48	5
126	Water morning glory	99	74	25
127	Kohlrabi	36	28	8
128	Cabbage	69	60	9
129	Tomatoes	75	73	2

130	Other vegetables (calabash, pumpkin, cucumber)	195	143	52
131	Oranges	76	70	6
132	Bananas	74	52	22
133	Mangoes	58	46	12
134	Other fruit (rambutan, papaya, melon...)	141	102	39
135	Fish sauce and dipping sauce	115	113	3
136	Salt	23	23	0
137	Spices, powdered soup	30	30	0
138	Food seasoning	101	101	1
139	Sugar, molasses	116	114	2
140	Cakes, jam, sweets	65	62	3
141	Condensed milk, powdered milk	182	176	6
142	Ice creams, yoghurt	38	37	1
143	Fresh milk	59	59	1
144	Liquor of all kinds	105	95	10
145	Beer	85	83	2
146	Bottled & canned refreshment	25	24	1
147	Bottled, canned non-carbonated fruit juices	16	16	1
148	Bottled & canned purified water	11	11	0
149	Bottled & canned tonic water	7	7	0
150	Instant coffee	32	30	2
151	Powdered coffee	29	28	1
152	Powdered tea/instant tea	9	9	0
153	Dried tea	101	97	4
154	Cigarettes, tobacco	307	305	2
155	Betel leaf, areca nut, lime	8	7	1
156	Outdoors meals (breakfast, lunch, dinner)	1561	1561	0
157	Others	165	155	9

> d<-muc5a2

> head(d)

 tinh huyen xa diaban hosu m5a2c1 m5a2c2 m5a2c3 m5a2c4 m5a2c5 m5a2c6

```

1 101 01 03 014 15 113 12 4 0.5 25 1200
2 101 01 03 014 15 121 12 2 10.0 10 240
3 101 01 03 014 15 109 6 1 0.3 4 24
4 101 01 03 014 15 111 12 8 0.2 14 1344
5 101 01 03 014 15 116 12 NA NA NA 480
6 101 01 03 014 15 138 12 NA NA NA 156

```

```

      m5a2c7 m5a2c8 m5a2c9 m5a2c10      ID      wt      xaid
1      2      NA      NA      NA 101010301415 3107.318 1010103
2      2      NA      NA      NA 101010301415 3107.318 1010103
3      2      NA      NA      NA 101010301415 3107.318 1010103
4      2      NA      NA      NA 101010301415 3107.318 1010103
5      2      NA      NA      NA 101010301415 3107.318 1010103
6      2      NA      NA      NA 101010301415 3107.318 1010103

```

```
> length(unique(d$m5a2c1))
```

```
[1] 57
```

```
> m1<-tapply(d$m5a2c6*d$wt, d$m5a2c1, sum, na.rm=T)/NHH
```

```
> m2<-tapply(d$m5a2c10*d$wt, d$m5a2c1, sum, na.rm=T)/NHH
```

```
> m<-cbind(m1, m2)
```

```
> mt<-round(addmargins(m)) [c(58, 1:57), c(3, 1, 2)]
```

```
> mt
```

```

      Sum  m1  m2
Sum 10461 8635 1826
101  2249 1150 1099
102   74  27  47
103   22  10  12
104   11  5  6
105   27  19  8
:
156 1561 1561 0
157  165 155 9

```

7.4.4 Daily non-food expenditure, and other expenditure

Code	Description	Average amount per household	In cash	In-kind
	Total (201-221)	3040	2808	231
201	Allowance for children	262	262	0
202	Coal, firewood, rice husk, sawdust	331	116	215
203	Gas	324	320	4
204	Parafin (lighting, cooking)	28	28	0
205	Gasoline, lubricant and grease for cars, motorcycle, other equipments	813	812	1
206	Parking fees (bicycles, motorbikes, cars)	55	55	0
207	Matches, candles, flint, lighters	20	19	0
208	Washing powder softening liquid	177	176	1
209	Dish washing liquid, house cleaning liquid	56	56	0
210	Shampoo, conditioning	149	148	2
211	Bath soap, lotion	68	67	1
212	Cream, powder & lipsticks	53	52	1
213	Toothpaste, tooth brushes	89	88	1
214	Tissue/blades	57	57	0
215	Books, newspapers, magazines	55	55	0
216	Flowers	24	24	0
217	Entertainment (cinema, music, video, sports)	25	25	0
218	Lottery	76	75	0
219	Items of worship	151	148	3
220	Haircut, hairdressing	107	106	1
221	Other daily expenses	120	119	1
299	in 202: agricultural by-products (straw, thatch, leaves of sugarcane, body of maize, jute, rush...)	59	2	58

```

> d<-muc5b1
> head(d)
  tinh huyen xa diaban hoso m5b1c1 m5b1c2 m5b1c3 m5b1c4 m5b1c5      ID
1  101    01 03    014   15    211    12    40    480    0 101010301415
2  101    01 03    014   15    219    12    20    240    0 101010301415
3  101    01 03    014   15    207    12     2    24    0 101010301415
4  101    01 03    014   15    215    12    20    240    0 101010301415
5  101    01 03    014   15    210    12    25    300    0 101010301415
6  101    01 03    014   15    213    12    16    192    0 101010301415

      wt      xaid
1 3107.318 1010103
2 3107.318 1010103
3 3107.318 1010103
4 3107.318 1010103
5 3107.318 1010103
6 3107.318 1010103
> length(unique(d$m5b1c1))
[1] 22
> (NHH<-sum(ttchung$wt))
[1] 19629872
> m1<-tapply(d$m5b1c4*d$wt, d$m5b1c1, sum, na.rm=T)/NHH
> m2<-tapply(d$m5b1c5*d$wt, d$m5b1c1, sum, na.rm=T)/NHH
> m<-cbind(m1, m2)
> colnames(m)<-c("In cash", "In-kind")
> mt<-round(addmargins(m, 2))[, c(3, 1, 2)]
> mt
      Sum In cash In-kind
201 262      262      0
202 331      116     215
203 324      320      4
204  28       28      0
205 813      812      1
206  55       55      0
207  20       19      0
208 177      176      1
209  56       56      0

```

210	149	148	2
211	68	67	1
212	53	52	1
213	89	88	1
214	57	57	0
215	55	55	0
216	24	24	0
217	25	25	0
218	76	75	0
219	151	148	3
220	107	106	1
221	120	119	1
299	59	2	58

Note: When calculating total, the value of code 299 is included in that of code 202.

```
> mt2<-mt[1:21,]
> mt3<-addmargins(mt2, 1)[c(22, 1:21),]
> rownames(mt3)[1]<-"Total (201-221)"
> mt4<-rbind(mt3, mt[22,])
> rownames(mt4)[23]<-"(299)"
> mt4
```

	Sum	In cash	In-kind
Total (201-221)	3040	2808	231
201	262	262	0
202	331	116	215
203	324	320	4
204	28	28	0
205	813	812	1
206	55	55	0
207	20	19	0
208	177	176	1
209	56	56	0
210	149	148	2
211	68	67	1
212	53	52	1

213	89	88	1
214	57	57	0
215	55	55	0
216	24	24	0
217	25	25	0
218	76	75	0
219	151	148	3
220	107	106	1
221	120	119	1
(299)	59	2	58

7.4.5 Annual consumption expenditure

Code	Description	Average amount per household	In cash	In-kind
	Total	2462	2385	76
301	Textile materials of all kinds	196	189	7
302	Ready-made clothing (incl. underwear)	459	438	21
303	Mosquito net and netting	20	19	0
304	Face towels, scarves	39	39	0
305	Rush mats, blankets, bed sheets, pillow, table cloth, curtains	80	79	1
306	Other garments (thread, socks...)	27	27	0
307	Tailoring or laundry service	91	89	2
308	Shoes, sandals, wooden clogs	170	167	3
309	Nylon sheeting, hats, umbrellas	45	45	1
310	Electric devices: light bulbs, electric wire, plugs, fuse	38	38	0
311	Earthenware, porcelain and glass: bowls, plates, teapots and cups,...	43	43	1
312	Pans, pots, bins, buckets, basins	42	42	0
313	Thermos	7	7	0
314	Bags and baskets	11	10	0

315	Flashlights and batteries for lighting, TV, radios	11	11	0
316	Cradles, hammocks, prams	7	7	0
317	Other household items (excluding durable goods)	23	23	0
318	Bicycle tires, tubes and spare parts	35	35	0
319	Automotive tires, tubes and spare parts	94	94	0
320	Maintenance and repairs of household appliances	38	38	0
321	Travel fees (boat, bus, train, taxi, car...)	115	113	2
322	Pictures, photos, bonsai	17	16	0
323	Sport instruments	8	7	0
324	Toys	12	12	0
325	Envelopes, stamps, telephone, postage	378	374	4
326	Internet	16	16	0
327	Cosmetic surgery, body building	2	2	0
328	Domestic excursions, holidays	172	155	17
329	Foreign excursions, holidays	35	25	10
330	Jewelry, watches, glasses	58	56	1
331	Other cultural activities	9	9	0
332	Hiring servants for the family	45	45	0
333	Other annual expenses	27	26	0
399	Subcode of 325; In which, operating and repairing fee for telephone	91	90	1

```
> d<-muc5b2
```

```
> dim(d)
```

```
[1] 114952    11
```

```
> head(d)
```

```

tinh huyen xa diaban hosu m5b2c1 m5b2c2 m5b2c3      ID      wt
1  101    01 03    014   15    326   1250      0 101010301415 3107.318
2  101    01 03    014   15    325   2700      0 101010301415 3107.318

```



```

3 101 01 03 014 15 310 45 0 101010301415 3107.318
4 101 01 03 014 15 319 250 0 101010301415 3107.318
5 101 01 03 014 15 309 20 0 101010301415 3107.318
6 101 01 03 014 15 330 250 0 101010301415 3107.318

```

```
xaid
```

```
1 1010103
```

```
2 1010103
```

```
3 1010103
```

```
4 1010103
```

```
5 1010103
```

```
6 1010103
```

```
> length(unique(d$m5b2c1))
```

```
[1] 34
```

```
> NHH<-sum(ttchung$wt)
```

```
> m1<-tapply(d$m5b2c2*d$wt, d$m5b2c1, sum, na.rm=T)/NHH
```

```
> m2<-tapply(d$m5b2c3*d$wt, d$m5b2c1, sum, na.rm=T)/NHH
```

```
> m<-cbind(m1, m2)
```

```
> colnames(m)<-c("In cash", "In-kind")
```

```
> mt<-round(addmargins(m)) [c(35, 1:34), c(3, 1, 2)]
```

```
> mt
```

```

      Sum In cash In-kind
Sum 2462   2385    76
301  196    189     7
302  459    438    21
303   20     19     0
304   39     39     0
305   80     79     1
306   27     27     0
307   91     89     2
308  170    167     3
309   45     45     1
310   38     38     0
311   43     43     1
312   42     42     0
313    7      7     0
314   11     10     0

```

315	11	11	0
316	7	7	0
317	23	23	0
318	35	35	0
319	94	94	0
320	38	38	0
321	115	113	2
322	17	16	0
323	8	7	0
324	12	12	0
325	378	374	4
326	16	16	0
327	2	2	0
328	172	155	17
329	35	25	10
330	58	56	1
331	9	9	0
332	45	45	0
333	27	26	0
399	91	90	1

7.4.6 Other spending

Variable	Description	Code	Average amount
Other spending that is considered as household expenditure			
	Total	400-408	2,570
M5B3C2_01	Contributions to various funds	401	11
M5B3C2_02	Amount paid in replacement of compulsory public labor	402	75
M5B3C2_03	All kinds of taxes	403	45
M5B3C2_04	Wedding of a household member	404	30

M5B3C2_05	Funeral and death anniversaries of household members	405	507
M5B3C2_06	Entertainment	406	598
M5B3C2_07	Gifts, donation, support	407	155
M5B3C2_08	Other expenses	408	1,082
M5B3C2_09	in which:cost for persons who used to be HH member to study or be medically trea	499	97
M5B3C2_10	Fee, administrative and legal service for life	400	68
Other spending that is not considered as household expenditure			
	Total	501-508	5,717
M5B4C2_1	Debt repayment, reimbursement, advance payment	501	1,617
M5B4C2_2	Lending, contributing to revolving credit groups	502	521
M5B4C2_3	Buying gold, silver, gemstone	503	853
M5B4C2_4	Depositing in savings accounts	504	937
M5B4C2_5	Buying life and security insurances	505	146
M5B4C2_6	Other insurances	506	17
M5B4C2_7	investment of completed	507	904
M5B4C2_8	Others	508	722

```
> d<-muc5b3_4
```

```
> dim(d)
```

```
[1] 9189 26
```

```
> head(d)
```

```
  tỉnh huyện xa diaban hoso m5b3c2_01 m5b3c2_02 m5b3c2_03 m5b3c2_04 m5b3c2_05
```

```
1 101 01 03 014 15 0 150 60 0 0
2 101 01 03 014 19 0 120 60 0 13500
3 101 01 03 014 24 0 120 60 0 0
```

4	101	01 09	019 13	0	70	0	0	0
5	101	01 09	019 15	0	50	0	0	0
6	101	01 09	019 19	0	70	60	0	0
	m5b3c2_06	m5b3c2_07	m5b3c2_08	m5b3c2_09	m5b3c2_10	m5b4c2_1	m5b4c2_2	m5b4c2_3
1	600	0	400	0	0	0	0	0
2	0	400	250	0	0	0	0	0
3	800	300	100	0	0	0	0	0
4	0	0	800	0	0	0	0	0
5	0	0	600	0	0	0	0	0
6	0	0	900	0	0	0	0	0
	m5b4c2_4	m5b4c2_5	m5b4c2_6	m5b4c2_7	m5b4c2_8	ID	wt	xaid
1	0	0	0	0	0	101010301415	3107.318	1010103
2	0	0	0	0	0	101010301419	3107.318	1010103
3	0	0	0	0	0	101010301424	3107.318	1010103
4	20000	0	0	0	0	101010901913	3092.521	1010109
5	20000	0	0	0	0	101010901915	3092.521	1010109
6	30000	0	0	0	0	101010901919	3092.521	1010109

```

> NHH<-sum(ttchung$wt)
> m<-matrix(0,nrow=18,ncol=1)
> for(j in 1:18){
+ m[j,1]<-sum(d[,j+5]*d$wt)/NHH
+ }
> colnames(m)<-"Average amount"
> rownames(m)<-c(401:408,499,400,501:508)
> round(m)
  Average amount
401           11
402           75
403           45
404           30
405          507
406          598
407          155
408         1082
499           97
400           68

```

501	1617
502	521
503	853
504	937
505	146
506	17
507	904
508	722

Remarks:

The sequence of code in the above table is different from that of Section 5B3 of the questionnaire. We followed the sequence of variables in muc5b3_4 and Codebook.

7.4.7 Purchased fixed assets and durable appliances

Table Share of households with fixed assets/durable goods as well as average amount of purchased fixed assets and durable goods for the past 12 months

Code	Description	Share of households	Purchased fixed assets	Purchased durable goods
1	Perennial crop gardens	14.5	75.8	0
2	Aquaculture farms	8.7	19.1	0
3	Fish/shrimp-rearing cages/rafts	0.2	1.6	0
4	Land for doing other business	0.9	8.5	0
5	Drawing, ploughing and breeding cattle	18	192.3	0
6	Breeding pigs	14.4	28	0
7	Basic herds of poultry and cattle	3.1	23.3	0
8	Breeding facilities	30.2	59.6	0
9	Feed grinding machines	0.7	1.8	0
10	Rice milling machines	2	6.8	0
11	Grain harvesting machines	4.3	8.7	0
12	Pesticide sprayers	1.1	1.5	0
13	Houses and workshops	2.3	18.4	0

14	Shops	3.8	85.4	0
15	Other production facilities	0.3	1.8	0
16	Cars	1	395.6	135
17	Tractors of all kinds	1.3	36.9	0
18	Trailers	0.4	2.2	0
19	Tractor ploughs	1.3	13.6	0
20	Motorbikes	60.3	134.1	1039.3
21	Bicycles	67.3	1.7	38.2
22	Carts	6.5	10.9	0
23	Motor boats, ferries ...	3.8	71.9	3.7
24	Rowing boats, ferries..	2.7	2.6	0.8
25	Other means of transportation	0.9	6	0.1
26	Lathes and welding and milling machines	0.7	1	0
27	Punchers	0.2	0.4	0
28	Wooden sawing machines	0.9	10.2	0
29	Pumps	36.5	15.2	8.7
30	Power generators	0.9	2.2	0.9
31	Printers, photocopiers	0.4	0.3	0.4
32	Fax machines	0.2	0	0
33	Telephone sets	31.5	0.9	25.2
34	Mobilephones	18	6.4	133.4
35	Sewing, weaving, embroidering machines	8.9	5.6	2.4
36	Other machines and equipment	2.4	34.7	0.4
37	Fishing net	1.7	16.1	0.3
38	Durable containers for storage	1.9	1.1	0.3
39	Other specify equipments	0.6	1.4	0.5
40	Video cassette players	44.8	0	54.6
41	Color T.V sets	79.1	1	205.4
42	Black and white T.V sets	5.7	0	0.9
43	Multi-tier stereos	13.1	0.8	36
44	Radios/Cassette players	12.2	0	1.5
45	Recorders/Disc players	2.9	0	4.3
46	Computers	8.1	2.6	81.1

47	Cameras, camcorders	2	0	6.3
48	Refrigerators, freezers	23.5	5.9	93.9
49	Air-conditioners	2.9	0.7	33.1
50	Washing machines and driers	9.2	0	55.3
51	Electric fans	81.6	0.1	13.9
52	Water heaters	7.2	0	13.2
53	Gas cookers	37.8	0	34.5
54	Electric cookers, rice cookers, pressure cookers	61	0	17.8
55	Trolleys of all kinds	0.9	0.2	0.7
56	Wardrobes of all kinds	80.3	1.2	111.2
57	Beds	88.2	0.8	44.1
58	Tables, chairs, sofas ...	66.9	4.9	89.3
59	Vacuum cleaners, water filters	1.2	0	1.3
60	Microwaves, baking stoves	1.6	0	2.6
61	Fruit blenders, juicers	8.8	0.2	2.9
62	Other valuable things (Antiques, pianos, dressing tables...)	6.5	10.4	15.9

● Share of households with the following assets

```
> d<-muc6
```

```
> dim(d)
```

```
[1] 9189 70
```

```
> colnames(d)
```

```
[1] "tin" "huyen" "xa" "diaban" "hoso" "m6ma1_01" "m6ma1_02"
```

```
[8] "m6ma1_03" "m6ma1_04" "m6ma1_05" "m6ma1_06" "m6ma1_07" "m6ma1_08" "m6ma1_09"
```

```
[15] "m6ma1_10" "m6ma1_11" "m6ma1_12" "m6ma1_13" "m6ma1_14" "m6ma1_15" "m6ma1_16"
```

```
[22] "m6ma1_17" "m6ma1_18" "m6ma1_19" "m6ma1_20" "m6ma1_21" "m6ma1_22" "m6ma1_23"
```

```
[29] "m6ma1_24" "m6ma1_25" "m6ma1_26" "m6ma1_27" "m6ma1_28" "m6ma1_29" "m6ma1_30"
```

```
[36] "m6ma1_31" "m6ma1_32" "m6ma1_33" "m6ma1_34" "m6ma1_35" "m6ma1_36" "m6ma1_37"
```

```
[43] "m6ma1_38" "m6ma1_39" "m6ma1_40" "m6ma1_41" "m6ma1_42" "m6ma1_43" "m6ma1_44"
```

```
[50] "m6ma1_45" "m6ma1_46" "m6ma1_47" "m6ma1_48" "m6ma1_49" "m6ma1_50" "m6ma1_51"
```

```
[57] "m6ma1_52" "m6ma1_53" "m6ma1_54" "m6ma1_55" "m6ma1_56" "m6ma1_57" "m6ma1_58"
```

```
[64] "m6ma1_59" "m6ma1_60" "m6ma1_61" "m6ma1_62" "ID"      "wt"      "xaid"
```

```
> head(d)
```

	tin	huyen	xa	diaban	hoso	m6ma1_01	m6ma1_02	m6ma1_03	m6ma1_04	m6ma1_05	m6ma1_06
1	101	01	03	014	15	20	33	34	41	43	45
2	101	01	03	014	19	20	29	31	33	34	41
3	101	01	03	014	24	20	33	34	41	48	51
4	101	01	09	019	13	21	33	41	44	48	51
5	101	01	09	019	15	20	33	40	41	44	46
6	101	01	09	019	19	20	21	33	40	41	48

	m6ma1_07	m6ma1_08	m6ma1_09	m6ma1_10	m6ma1_11	m6ma1_12	m6ma1_13	m6ma1_14	m6ma1_15
1	48	50	51	53	54	56	57	58	0
2	43	45	46	48	50	51	52	53	54
3	54	57	0	NA	NA	NA	NA	NA	NA
4	53	54	56	57	58	60	0	NA	NA
5	48	51	52	53	54	56	57	58	60
6	50	51	53	54	56	57	58	61	0

	m6ma1_16	m6ma1_17	m6ma1_18	m6ma1_19	m6ma1_20	m6ma1_21	m6ma1_22	m6ma1_23	m6ma1_24
1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	56	57	61	0	NA	NA	NA	NA	NA
3	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	0	NA	NA	NA	NA	NA	NA	NA	NA
6	NA	NA	NA	NA	NA	NA	NA	NA	NA

Remarks:

All values in variables of m6ma1_33 to m6ma1_62 are NA.

```
> m<-matrix(0, nrow=62, ncol=1)
> for(i in 1:nrow(d)) {
+   for(j in 1:62) {
+     code<-d[i, j+5]
+     if(code==0) break
+     m[code, 1]<-m[code, 1]+d[i, 69]
+   }
+ }
```



```
> colnames(m) <- "Share of households"
```

```
> rownames(m) <- 1:62
```

```
> NHH <- sum(ttchung$wt)
```

```
> round(m/NHH*100, 1)
```

```
      Share of households
1              14.5
2               8.7
3               0.2
:
60              1.6
61              8.8
62              6.5
```

● Total of spending on purchased fixed assets for the past 12 months

Please also refer to No. 97 of chapter 6 “Household summary file TTCHUNG”.

```
> d <- merge(muc6a, ttchung[, c("ID", "thangdt", "ngaydt")], by="ID", all.x=T)
```

```
> dim(d)
```

```
[1] 15897    17
```

```
> head(d)
```

```
      ID tinh huyen xa diaban hoso m6ama m6ac3 m6ac4a m6ac4b m6ac5 m6ac6
1 101011502715 101 01 15 027 15 20 1 0 2004 22000 19000
2 101011700213 101 01 17 002 13 47 1 0 1998 5000 4000
3 101011700219 101 01 17 002 19 21 1 0 2000 300 150
4 101011700219 101 01 17 002 19 48 1 0 2001 3000 1600
5 101030301414 101 03 03 014 14 14 1 0 1993 30000 50000
6 101031100915 101 03 11 009 15 14 1 0 1999 12000 28000
      m6ac7      wt      xaid thangdt ngaydt
1 100 3085.123 1010115      6      15
2 100 3099.920 1010117      9      18
3 100 3099.920 1010117      9      23
4 100 3099.920 1010117      9      23
5 100 2988.944 1010303      5      27
```

6 100 3003.741 1010311 6 18

```
# m6ac4a: Purchased month
# m6ac4b: Purchased year
# m6ac5: Value when purchasing or receiving
# m6ac7: The percentage of the household ownership
# thangdt: Month of survey
```

```
# Purchased fixed assets for the past 12 months
> d<-subset(d, (2006-m6ac4b)*12+(thangdt-m6ac4a)<=12)
> dim(d)
[1] 1320 17
> m<-matrix(0,nrow=62,ncol=1)
> for(i in 1:nrow(d)) {
+ code<-d$m6ama[i]
+ if(code==0) break
+ m[code,1]<-m[code,1]+ d$m6ac5[i]*d$m6ac7[i]/100*d$wt[i]
+ }
> colnames(m)<-~"Purchased fixed assets"
> rownames(m)<-1:62
> NHH<-sum(ttchung$wt)
> m1<-round(m/NHH, 1)
> m1
```

	Purchased fixed assets
1	75.8
2	19.1
3	1.6
4	8.5
5	192.3
6	28.0
7	23.3
8	59.6
9	1.8
10	6.8
11	8.7

12	1.5
13	18.4
14	85.4
15	1.8
16	395.6
17	36.9
18	2.2
19	13.6
20	134.1
21	1.7
22	10.9
23	71.9
24	2.6
25	6.0
26	1.0
27	0.4
28	10.2
29	15.2
30	2.2
31	0.3
32	0.0
33	0.9
34	6.4
35	5.6
36	34.7
37	16.1
38	1.1
39	1.4
40	0.0
41	1.0
42	0.0
43	0.8
44	0.0
45	0.0
46	2.6
47	0.0

48	5.9
49	0.7
50	0.0
51	0.1
52	0.0
53	0.0
54	0.0
55	0.2
56	1.2
57	0.8
58	4.9
59	0.0
60	0.0
61	0.2
62	10.4

● **Total of spending on purchased durable goods for the past 12 months**

Please also refer to No. 98 of chapter 6 “Household summary file TTCHUNG”.

```
> d<-merge(muc6b, ttchung[, c("ID", "thangdt", "ngaydt")], by="ID", all.x=T)
> dim(d)
[1] 85890    16
> head(d)
      ID tinh huyen xa diaban hoso m6bma m6bc3 m6bc4a m6bc4b m6bc5 m6bc6
1 101010301415 101    01 03    014  15    34    2    0    2004  3000   500
2 101010301415 101    01 03    014  15    45    2    0    2002  2500   800
3 101010301415 101    01 03    014  15    43    2    0    2002  8000  2000
4 101010301415 101    01 03    014  15    51    4    0    1995  1500   400
5 101010301415 101    01 03    014  15    57    1    0    1997  1800   300
6 101010301415 101    01 03    014  15    20    1    0    1997 18000  8000
      wt    xaid thangdt ngaydt
1 3107.318 1010103    6    16
2 3107.318 1010103    6    16
3 3107.318 1010103    6    16
```

```

4 3107.318 1010103      6      16
5 3107.318 1010103      6      16
6 3107.318 1010103      6      16

# m6bc4a: Purchased month
# m6bc4b: Purchased year
# m6bc5: Value when purchasing or receiving
# thangdt: Month of survey

# Purchased durable for the past 12 months
> d<-subset(d, (2006-m6bc4b)*12+(thangdt-m6bc4a)<=12)
> dim(d)
[1] 7224 16
> m<-matrix(0,nrow=62,ncol=1)
> for(i in 1:nrow(d)) {
+ code<-d$m6bma[i]
+ if(code==0) break
+ m[code,1]<-m[code,1]+ d$m6bc5[i]*d$wt[i]
+ }
> colnames(m)<-~"Purchased durable goods"
> rownames(m)<-1:62
> NHH<-sum(ttchung$wt)
> m1<-round(m/NHH, 1)
> m1
      Purchased durable goods
1                0.0
2                0.0
3                0.0
4                0.0
5                0.0
6                0.0
7                0.0
8                0.0
9                0.0
10               0.0
11               0.0

```

12	0.0
13	0.0
14	0.0
15	0.0
16	135.0
17	0.0
18	0.0
19	0.0
20	1039.3
21	38.2
22	0.0
23	3.7
24	0.8
25	0.1
26	0.0
27	0.0
28	0.0
29	8.7
30	0.9
31	0.4
32	0.0
33	25.2
34	133.4
35	2.4
36	0.4
37	0.3
38	0.3
39	0.5
40	54.6
41	205.4
42	0.9
43	36.0
44	1.5
45	4.3
46	81.1
47	6.3

48	93.9
49	33.1
50	55.3
51	13.9
52	13.2
53	34.5
54	17.8
55	0.7
56	111.2
57	44.1
58	89.3
59	1.3
60	2.6
61	2.9
62	15.9

8 Resampling method

Strategies for 80% resampling

- 1) To order TTCHUNG by strata (province and urban/rural), xa and the amount of consumption expenditure, and
to append the variable sn, the serial number of records to TTCHUNG.
- 2) To select 80% of TTCHUNG, by dropping 20% households using systematic selection with the interval=5 and a random start number, and
to create the vector ID.res, a set of ID06 selected for resampled data set.
- 3) For each data set, to select records with ID.res.
- 4) To adjust the weight of xa as the next, if a household of the xa is dropped;
$$\text{Adjusted weight} = \text{original weight} \times (3/2)$$
- 5) For each data set, to replace wt with the adjusted weight, and rename R data frame “xxx” as “xxx.80”.
- 6) Export R data frames to CSV files with the name “xxx_80.CSV”.

- Ordered TTCHUNG by strata (province and urban/rural), xa and the amount of consumption expenditure.

```
> d<-ttchung[c("ID", "tinh", "ttnt", "xaid", "chids", "wt")]
> d<-d[order(d$tinh, d$ttnt, d$xaid, d$chids), ]
> d[,"sn"]<-seq(1:nrow(d))
> head(d)
```

	ID	tinh	ttnt		xaid	chids	wt	sn
3	101010301424	101	1	1010103	47211	3107.318	1	
1	101010301415	101	1	1010103	49445	3107.318	2	
2	101010301419	101	1	1010103	58829	3107.318	3	
4	101010901913	101	1	1010109	24313	3092.521	4	
6	101010901919	101	1	1010109	24870	3092.521	5	
5	101010901915	101	1	1010109	26368	3092.521	6	

- Selected 80% of TTCHUNG, by dropping 20% households using systematic selection with the interval=5 and a random start number

```
> int<-5
```



```

> (st<-sample(1:5, 1))
[1] 4
> d[~flag"]<-ifelse(d$sn%%int==(st-1), 0, 1)
> head(d)
      ID tinh ttnt   xaid chids      wt sn flag
3 101010301424 101    1 1010103 47211 3107.318 1  1
1 101010301415 101    1 1010103 49445 3107.318 2  1
2 101010301419 101    1 1010103 58829 3107.318 3  0
4 101010901913 101    1 1010109 24313 3092.521 4  1
6 101010901919 101    1 1010109 24870 3092.521 5  1
5 101010901915 101    1 1010109 26368 3092.521 6  1
> table(d$flag)
  0    1
1838 7351
> nrow(subset(d, flag==1))/nrow(d)
[1] 0.7999782
> ID.res<-subset(d, flag==1)$ID

```

- The number of resampled households is 7,352.
The number of xa where one household is dropped is 1,838.

```

> d2<-subset(d, flag==1)
> nrh<-tapply(d2$ID, d2$xaid, length)
> table(nrh)
nrh
  2    3
1838 1225

```

- For each data set, selected records with ID.res and confirmed the resampling rate.

```

> lss2006res<-lss2006
> for(j in 1:49) {
+ d<-lss2006[[j]]
+ d<-subset(d, is.element(d$ID, ID.res))
+ lss2006res[[j]]<-d
+ }

```

```
> for(j in 1:49) print (paste(Rnames[j], round(nrow(lss2006res[[j]])/nrow(lss2006[[j]])*100, 1)))
[1] "muc1a 79.9"
[1] "muc1b 79.4"
:
[1] "muc8_vayvon 79.6"
[1] "ttchung 80"
```

- Adjusted the weight of xa, if a household of the xa is dropped;

```
> table(wt$xaidd==names(nrh))
TRUE
3063
> wt<-cbind(wt, nrh)
> wt["WT"]<-ifelse(wt$nrh==2, wt$wt*(3/2), wt$wt)
> head(wt)
      xaidd      wt nrh      WT
1 1010103 3107.318    2 4660.977
2 1010109 3092.521    3 3092.521
3 1010115 3085.123    2 4627.685
4 1010117 3099.920    3 3099.920
5 1010121 3085.123    2 4627.685
6 1010123 3099.920    2 4649.880
```

- For each data set, replaced wt with the adjusted weight WT, and renamed R data frame "xxx" as "xxx.80".

```
> for(j in 1:49) {
+ d<-lss2006res[[j]]
+ d<-merge(d, wt[c("xaidd", "WT")], by="xaidd")
+ d<-d[, c(2:ncol(d), 1)]
+ d<-d[, colnames(d)!="wt"]
+ lss2006res[[j]]<-d
+ }
> lss2006res.old<-lss2006res

> Rnames
[1] "muc1a"      "muc1b"      "muc2a"      "muc2b"      "muc2c"      "muc2d"
```

```

:
[49] "ttchung"
> Rnames.res<-paste(Rnames, ". 80", sep="")
> Rnames.res
[1] "muc1a. 80"      "muc1b. 80"      "muc2a. 80"      "muc2b. 80"      "muc2c. 80"
:
[46] "muc7. 80"      "muc8. 80"      "muc8_vayvon. 80" "ttchung. 80"
> for (j in 1:49) {
+ cmd<-paste(Rnames.res[j], "<-lss2006res[[", j, "]]", sep="")
+ eval(parse(text=cmd))
+ }
> ls()
[1] "muc1a. 80"      "muc1b. 80"      "muc2a. 80"      "muc2b. 80"      "muc2c. 80"
[6] "muc2d. 80"      "muc2e. 80"      "muc3a1. 80"     "muc3a2. 80"     "muc3b. 80"
[11] "muc3c. 80"      "muc3d. 80"      "muc3e. 80"      "muc3f. 80"      "muc3g. 80"
[16] "muc3h. 80"      "muc3i. 80"      "muc4a. 80"      "muc4b0. 80"     "muc4b11. 80"
[21] "muc4b12. 80"    "muc4b13. 80"    "muc4b14. 80"    "muc4b15. 80"    "muc4b16. 80"
[26] "muc4b161. 80"   "muc4b21. 80"    "muc4b22. 80"    "muc4b31. 80"    "muc4b32. 80"
[31] "muc4b41. 80"    "muc4b42. 80"    "muc4b51. 80"    "muc4b52. 80"    "muc4c. 80"
[36] "muc4c2. 80"     "muc4d. 80"      "muc5a1. 80"     "muc5a2. 80"     "muc5b1. 80"
[41] "muc5b2. 80"     "muc5b3_4. 80"   "muc6. 80"       "muc6a. 80"      "muc6b. 80"
[46] "muc7. 80"      "muc8. 80"      "muc8_vayvon. 80" "ttchung. 80"

```

Remarks:

Deleted the variable m1bc2 of MUC1B, household member's name in 2004 for confidentiality.

```

> d<-muc1b. 80
> d<-d[, colnames(d)!="m1bc2"]
> muc1b. 80<-d
> lss2006res[[2]]<-d

```

- Exported the resampled R data frames to CSV files with the name "xxx_80.CSV".

```

> CSVnames.res<-paste(Rnames, "_80.csv", sep="")
> head(CSVnames.res)
[1] "muc1a_80.csv" "muc1b_80.csv" "muc2a_80.csv" "muc2b_80.csv" "muc2c_80.csv" "muc2d_80.csv"

```

```

> for(j in 1:49){
+ cmd<-paste("write.csv(lss2006res[[",j,"]],'",CSVnames.res[j],"'",row.names=F)",sep="")
+ eval(parse(text=cmd))
+ }

> list.files()

[1] "muc1a_80.csv"      "muc1b_80.csv"      "muc2a_80.csv"      "muc2b_80.csv"
[5] "muc2c_80.csv"      "muc2d_80.csv"      "muc2e_80.csv"      "muc3a1_80.csv"
[9] "muc3a2_80.csv"      "muc3b_80.csv"      "muc3c_80.csv"      "muc3d_80.csv"
[13] "muc3e_80.csv"      "muc3f_80.csv"      "muc3g_80.csv"      "muc3h_80.csv"
[17] "muc3i_80.csv"      "muc4a_80.csv"      "muc4b0_80.csv"     "muc4b11_80.csv"
[21] "muc4b12_80.csv"     "muc4b13_80.csv"     "muc4b14_80.csv"     "muc4b15_80.csv"
[25] "muc4b16_80.csv"     "muc4b161_80.csv"    "muc4b21_80.csv"     "muc4b22_80.csv"
[29] "muc4b31_80.csv"     "muc4b32_80.csv"     "muc4b41_80.csv"     "muc4b42_80.csv"
[33] "muc4b51_80.csv"     "muc4b52_80.csv"     "muc4c_80.csv"       "muc4c2_80.csv"
[37] "muc4d_80.csv"       "muc5a1_80.csv"      "muc5a2_80.csv"      "muc5b1_80.csv"
[41] "muc5b2_80.csv"      "muc5b3_4_80.csv"    "muc6_80.csv"        "muc6a_80.csv"
[45] "muc6b_80.csv"       "muc7_80.csv"        "muc8_80.csv"        "muc8_vayvon_80.csv"
[49] "ttchung_80.csv"

```

Number of records and variables in resampled data files

```

> for(j in 1:49){
+ cat(format(Rnames.res[j],width=17),": ",format(CSVnames.res[j],width=19),": ",
+ format(nrow(lss2006res[[j]]),width=6),",",format(ncol(lss2006res[[j]]),width=3),"¥n")
+ }

muc1a.80      : muc1a_80.csv      : 31230 , 21
muc1b.80      : muc1b_80.csv      : 14918 , 18
muc2a.80      : muc2a_80.csv      : 31230 , 38
muc2b.80      : muc2b_80.csv      : 31230 , 25
muc2c.80      : muc2c_80.csv      : 31230 , 35
muc2d.80      : muc2d_80.csv      : 31230 , 23
muc2e.80      : muc2e_80.csv      : 31230 , 20
muc3a1.80     : muc3a1_80.csv     : 31230 , 16
muc3a2.80     : muc3a2_80.csv     : 14864 , 22
muc3b.80      : muc3b_80.csv      : 31230 , 97
muc3c.80      : muc3c_80.csv      : 31230 , 21

```

muc3d. 80	:	muc3d_80. csv	:	5316 ,	19
muc3e. 80	:	muc3e_80. csv	:	27026 ,	15
muc3f. 80	:	muc3f_80. csv	:	31230 ,	32
muc3g. 80	:	muc3g_80. csv	:	8869 ,	31
muc3h. 80	:	muc3h_80. csv	:	7379 ,	34
muc3i. 80	:	muc3i_80. csv	:	17259 ,	20
muc4a. 80	:	muc4a_80. csv	:	31230 ,	56
muc4b0. 80	:	muc4b0_80. csv	:	19255 ,	19
muc4b11. 80	:	muc4b11_80. csv	:	11901 ,	22
muc4b12. 80	:	muc4b12_80. csv	:	12422 ,	15
muc4b13. 80	:	muc4b13_80. csv	:	3161 ,	16
muc4b14. 80	:	muc4b14_80. csv	:	7826 ,	16
muc4b15. 80	:	muc4b15_80. csv	:	6739 ,	13
muc4b16. 80	:	muc4b16_80. csv	:	41979 ,	14
muc4b161. 80	:	muc4b161_80. csv	:	13305 ,	14
muc4b21. 80	:	muc4b21_80. csv	:	13185 ,	17
muc4b22. 80	:	muc4b22_80. csv	:	8129 ,	21
muc4b31. 80	:	muc4b31_80. csv	:	223 ,	12
muc4b32. 80	:	muc4b32_80. csv	:	222 ,	20
muc4b41. 80	:	muc4b41_80. csv	:	3104 ,	16
muc4b42. 80	:	muc4b42_80. csv	:	1816 ,	23
muc4b51. 80	:	muc4b51_80. csv	:	2950 ,	17
muc4b52. 80	:	muc4b52_80. csv	:	2170 ,	22
muc4c. 80	:	muc4c_80. csv	:	3510 ,	36
muc4c2. 80	:	muc4c2_80. csv	:	23503 ,	12
muc4d. 80	:	muc4d_80. csv	:	7351 ,	25
muc5a1. 80	:	muc5a1_80. csv	:	105247 ,	13
muc5a2. 80	:	muc5a2_80. csv	:	230449 ,	18
muc5b1. 80	:	muc5b1_80. csv	:	91275 ,	13
muc5b2. 80	:	muc5b2_80. csv	:	91840 ,	11
muc5b3_4. 80	:	muc5b3_4_80. csv	:	7351 ,	26
muc6. 80	:	muc6_80. csv	:	7351 ,	70
muc6a. 80	:	muc6a_80. csv	:	12641 ,	15
muc6b. 80	:	muc6b_80. csv	:	68673 ,	14
muc7. 80	:	muc7_80. csv	:	7351 ,	54
muc8. 80	:	muc8_80. csv	:	7351 ,	40

muc8_vayvon.80	:	muc8_vayvon_80.csv	:	3969	,	23
ttchung.80	:	ttchung_80.csv	:	7351	,	144

9. References

- “COMPARISON OF INCOME BETWEEN THE “SHORT” AND “LONG” SAMPLES OF THE 2004 VHLSS”, Brian McCaig, Department of Economics, University of Toronto, April 2008 (http://homes.chass.utoronto.ca/~bmccaig/McCaig_income_comparison_2004vhlss.pdf)

Attachment list

1. The questionnaire IB
2. Data dictionary
3. Province map
4. Survey plan of VHLSS 2006

Attachment 1. The questionnaire IB

Problems found in the questionnaire

Page	Section	Problems	Measures taken
6	Q3 of section 1a List of household members	5 MATERNAL/PATE	Should be read as “5 Grandfather/grandmother”
		6 MATERNAL/PATE	Should be read as “6 Grandchild”
27	List of chronic diseases	Written in Vietnamese	Changed to English version
28	Section 3C (Health)	Written in Vietnamese	Changed to English version
29	Section 3D (Fertility)	Written in Vietnamese	Changed to English version
65	Section 4C2 (Household business cost)	Written in Vietnamese	
74	Section 5B2 (Annual consumption expenditure)	Mistyping in code 399	“The Internet” in Column 1 should be read as “In which, operating and repairing fee for telephone. (*)
77	Section 6 Fixed assets (MUC6A)	Question “The percentage of the household ownership” was not exist.	

(*) It was found in comparison with the questionnaire of VHLSS 2008.

CONFIDENTIAL

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GENERAL STATISTICAL OFFICE
HOUSEHOLD LIVING STANDARD SURVEY 2006

QUESTIONNAIRE 1B-
PVH/KSMS06:
INCOME & EXPENDITURE

QUEST NO

/

QUESTIONNAIRE ON HOUSEHOLD SURVEY

	VHLSS 2006	VHLSS 2004
Province/City.....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
District/ Provincial Town.....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Commune/ Ward/ District Town.....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Location.....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Area: (URBAN:.....1; RURAL:.....2).....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Household head (CAPITALIZED)..... Household number:	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Head's ethnicity.....	<table border="1" style="display: inline-table; width: 150px; height: 20px;"></table>	<table border="1" style="display: inline-table; width: 100px; height: 20px;"></table>
Address.....		
IS INTERPRETATION SERVICE REQUIRED? (YES:.....1; NO:.....2)..... <table border="1" style="display: inline-table; width: 30px; height: 20px;"></table>		
Surveyor's full name.....	Mã số <table border="1" style="display: inline-table; width: 60px; height: 20px;"></table>	
Team leader's full name.....	Mã số <table border="1" style="display: inline-table; width: 60px; height: 20px;"></table>	
Date month 2006 Team Leader (signature)	Date month 2006 Điều tra viên (signature)	

Household living standard survey
brings benefits to both the country and the family

The survey data shall be kept strictly confidential, and used for no other purposes than the analytical basis for the State to develop socio-economic policies aimed at stabilising and improving people's living standards, including those of every single family.

GENERAL STATISTICAL OFFICE

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LIST OF TRAINING/EDUCATION DISCIPLINES

No	Name	Junior college	University	MA	PhD
1	Education science and teacher training	5014	5214	6014	6214
2	Art	5021	5221	6021	6221
3	Humanities	5022	5222	6022	6222
4	Social science and behaviour	5031	5231	6031	6231
5	Press and information	5032	5232	6032	6232
6	Business and management	5034	5234	6034	6234
7	Law	5038	5238	6038	6238
8	Living science	5042	5242	6042	6242
9	Natural science	5044	5244	6044	6244
10	Math and statistics	5046	5246	6046	6246
11	Computer science	5048	5248	6048	6248
12	Technology	5051	5251	6051	6251
13	Engineering	5052	5252	6052	6252
14	Mining technology	5053	5253	6053	6253
15	Processing	5054	5254	6054	6254
16	Construction and architecture	5058	5258	6058	6258
17	Agriculture, forestry and fishery	5062	5262	6062	6262
18	Animal health	5064	5264	6064	6264
19	Health	5072	5272	6072	6272
20	Social services	5076	5276		
21	Hospitality, tourism, sports and personal service	5081	5281	6081	6281
22	Transportation	5084	5284	6084	6284
23	Environment and environmental protection	5085	5285	6085	6285
24	National security and defence	5086	5286	6086	6286
25	Others	5090*	5290*	6090*	6290*

ETHNIC GROUP CODES

KINH	01	KHO MU	29
TAY	02	CO	30
THAI	03	TA OI	31
CHINESE	04	CHO RO	32
KHMER	05	KHANG	33
MUONG	06	SINGMUN	34
NUNG	07	HANHI	35
H'MONG (MEO)	08	CHURU	36
DAO	09	LAO	37
JARAI	10	LA CHI	38
NGAI	11	LAHA	39
EDE	12	PHU LA	40
BANA	13	LA HU	41
SEDANG	14	LU	42
SAN CHAY (CAO LAN-SAN CHI)	15	LO LO	43
CO HO	16	CHUT	44
CHAM	17	MANG	45
SAN DIU	18	PAT HEN	46
HRE	19	CO LAO	47
MNONG	20	CONG	48
RAGLAI	21	BO Y	49
STIENG	22	SILA	50
BRU -VAN KIEU	23	PU PEO	51
THO	24	BRAU	52
GIAY	25	ODU	53
CO TU	26	ROMAN	54
GIE TRIENG	27	FOREIGNER	55
MA	28	UNSPECIFIED	56

TABLE OF THE LUNAR-SOLAR CALENDAR YEAR EQUIVALENCE

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

Year with the last digit	0	belongs to the	Canh
- # -	1	- # -	Tan
- # -	2	- # -	Nham
- # -	3	- # -	Quy
- # -	4	- # -	Giap
- # -	5	- # -	At
- # -	6	- # -	Binh
- # -	7	- # -	Dinh
- # -	8	- # -	Mau
- # -	9	- # -	Ky

LIST OF PROVINCES/CITIES UNDER CENTRAL AUTHORITY

No.	Code	Name
I	1	Red River Delta
1	101	Ha Noi
2	103	Hai Phong
3	104	Vinh Phuc
4	105	Ha Tay
5	106	Bac Ninh
6	107	Hai Duong
7	109	Hung Yen
8	111	Ha Nam
9	113	Nam Dinh
10	115	Thai Binh
11	117	Ninh Binh
II	2	North East
12	201	Ha Giang
13	203	Cao Bang
14	205	Lao Cai
15	207	Bac Kan
16	209	Lang Son
17	211	Tuyen Quang
18	213	Yen Bai
19	215	Thai Nguyen
20	217	Phu Tho
21	221	Bac Giang
22	225	Quang Ninh

No	Code	Name
III	3	North West
23	301	Lai Chau
24	302	Dien Bien
25	303	Son La
26	305	Hoa Binh
IV	4	North Central
27	401	Thanh Hoa
28	403	Nghe An
29	405	Ha Tinh
30	407	Quang Binh
31	409	Quang Tri
32	411	Thua Thien - Hue
V	5	South Central Coast
33	501	Da Nang
34	503	Quang Nam
35	505	Quang Ngai
36	507	Binh Dinh
37	509	Phu Yen
38	511	Khanh Hoa
VI	6	Central Highlands
39	601	Kon Tum
40	603	Gia Lai
41	605	Dak Lak
42	606	Dak Nong
43	607	Lam Dong

No	Code	Name
VII	7	South East
44	701	Ho Chi Minh
45	705	Ninh Thuan
46	707	Binh Phuoc
47	709	Tay Ninh
48	711	Binh Duong
49	713	Dong Nai
50	715	Binh Thuan
51	717	Ba Ria - Vung Tau
VIII	8	Mekong River Delta
52	801	Long An
53	803	Dong Thap
54	805	An Giang
55	807	Tien Giang
56	809	Vinh Long
57	811	Ben Tre
58	813	Kien Giang
59	815	Can Tho
60	816	Hau Giang
61	817	Tra Vinh
62	819	Soc Trang
63	821	Bac Lieu
64	823	Ca Mau

999 Foreign

SECTION 1a. LIST OF HOUSEHOLD MEMBERS

	1 Please provide the full name of each household member, starting with the household head. A household member is a person who shares lodging, income and expenditure for at least 6 months out of the last 12 months WRITE DOWN IN CAPITAL LETTERS AND IN THE ORDER OF NUCLEAR FAMILY (INTERVIEWER NOTICES)	2 Sex of [NAME] MALE.....1 FEMALE.....	3 What is the of [NAME] with the household HEAD.....1 SPOUSE.....2 CHILDREN.....3 PARENTS.....4 MATERNAL/PATE5 MATERNAL/PATE6 OTHER RELATIVE7	4 In what month and year was [...NAME...] born? SOLAR CALENDAR IF THE MONTH AND YEAR ARE UNKNOWN, WRITE "X" RECORD 2 DIGIT NUMBER RECORD 4 DIGIT NUMBER MONTHS YEARS	5 How old is [NAME]? IN ROUND AGES TO MONTH OF INTERVIEW (UNDER 13 YEARS OLD >> QUEST 7) YEARS	6 What is the current marital status of [NAME]? SINGLE.....1 MARRIED.....2 WIDOWED.....3 DIVORCED.....4 SEPARATED.....5	7 For the last 12 months, how many months has [NAME] been staying with the household? MONTHS ACCUMULATED MONTHS	8 Where did [NAME] register for permanent residence? AT THIS RESIDENCE WITHIN THIS COMMUNE/PRECINCT 1>> OTHER PLACES WITHIN THIS PROVINCE 2>> ANOTHER PROVINCE 3 OTHERS.....4	9 Which province DOES [NAME] have permanent residence in? PROVINCE CODE YEARS MONTHS	10 How long has [...NAME]...been living in this province/city? YEARS MONTHS
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

TEAM HEAD COMPLETES QUESTIONS 1 2 3 4 5 BEFORE PASSING TO THE QUESTIONAIRE TO INTERVIEWER

YES 1

NO. 21>>SECTION 2)

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~~Vietnam VHLSS 2006 Manual (Version 1.1)~~

GRADE CONVERSION TABLE FOR GENERAL EDUCATION SYSTEMS

General education system for conversion		EQUIVALENT GENERAL EDUCATIONAL LEVELS								
		System under French rule	From 1945 until 1954			Complementary Education (CE)	Educational system Northern Vietnam			Current national educational system
			Unoccupied area		Temporarily occupied area		Prior to 1981	From Quang Binh northward		
Level	Grade		1945-1950	1950-1954						1981-1986
Primary school	1	Grade 5 (Cours enfantin)			Grade 5 primary school		Pre-school	Grade 1	Grade 1	Grade 1
	2	Grade 4 (Cours préparatoire)	Grade 4	Grade 1	Grade 4 primary school	Grade 1 CE	Grade 1 PT	Grade 2	Grade 2	Grade 2
	3	Grade 3 (Cours elementaire)	Grade 3	Grade 2	Grade 3 primary school	Grade 2 CE	Grade 2 PT	Grade 3	Grade 3	Grade 3
	4	Intermediate 1 (Moyen1) Intermediate 2 (Moyen2)	Grade 2	Grade 3	Grade 2 primary school	Grade 3 CE	Grade 3 PT	Grade 4	Grade 4	Grade 4
	5	Upper intermediate (Supérieur) Certificate (Certificat)	Grade 1	Grade 4	Grade 1 primary school	Grade 4 CE	Grade 4 PT	Grade 5	Grade 5	Grade 5
Lower secondary school	6	First year (Première année)	First year		7th class secondary school	Grade 5 CE			Grade 6	Grade 6
	7	Second year (Deuxième année)	Second year	Grade 5	6th class secondary school	Grade 6 CE	Grade 5 PT	Grade 6	Grade 7	Grade 7
	8	Third year (Troisième année)	Third year	Grade 6	5th class secondary school	Grade 7 CE	Grade 6 PT	Grade 7	Grade 8	Grade 8
	9	Fourth year-Diploma (Quatrième année - Diplôme)	Fourth year	Grade 7	4th class secondary school	Grade 7B CE	Grade 7 PT			Grade 9
Upper secondary school	10	First year	First year specialisation	Grade 8	3rd class	Grade 8 CE	Grade 8 PT	Grade 10	Grade 10	Grade 10
	11	First part of secondary school degree (Baccalauréat première partie)	Second year specialisation	Grade 9	2nd class Baccalaureate 1	Grade 9 Grade 10A CE	Grade 9 PT	Grade 11	Grade 11	Grade 11
	12	Second part, secondary school degree (Baccalauréat deuxième partie)	Third year specialisation		1st class 2nd education degree	Grade 10B CE	Grade 10 PT	Grade 12	Grade 12	Grade 12

SECTION 2. EDUCATION, TRAINING AND VOCATIONAL TRAINING

2A. General information

Please provide us with information about the education of your household's members

	1 Which grade did ..[NAME] .. finish? CONVERSION ACCORDING TO THE 12 GRADE SYSTEM C WRITE 00 IF NOT FINISHED O 1ST GRADE OR WRITE 00 D IF NEVER GO TO SCHOOL E FROM GRADE 5 UPWARDS >>3 GRADE	2 Is..[NAME].. .. literate? YES 1 NO.....2 >>5	3 What is the highest diploma ...[NAME]...obtained ? NO DIPLOMA..... 0 PRIMARY SCHOOL..... 1 LOWER SECONDARY SCHOOL..... 2 UPPER SECONDARY SCHOOL..... 3 SHORT-TERM VOCATIONAL TRAINING..... 4 LONG-TERM VOCATIONAL TRAINING..... 5 PROFESSIONAL HIGH SCHOOL..... 6 JUNIOR COLLEGE DIPLOMA..... 7 BACHELOR DEGREE..... 8 MASTER DEGREE..... 9 DOCTORATE..... 10 OTHERS (SPECIFY IT)..... 11 GENERAL AND HIGHER EDUCATION VOCATIONAL TRAINING	4 What type of school is...[NAME] attending? PUBLIC..... 1 SEMI-PUBLIC .. 2 SPONSORED 3 PRIVATE 4 OTHERS (SPECIFY) 5	5 Is [NAME] currently attending school? YES..... 1(>>8) VACATION.. 2(>>8) NO..... 3	6 For the past 12 months has [NAME] attended school? YES..... 1 (>>8) NO..... 2	7 Why did [NAME] not attend school? ONLY ASK THOSE UNDER THE AGE OF 15 ILLNESS/DISABILITY..... 1 NO PERMANENT RESIDEN 2 FAILURE TO PAY TUITION 3 WORK 4 OTHERS (SPECIFY) 5 >> 16	8 At which level is...[NAME]...currently attending? PRE-SCHOOL..... 0 PRIMARY SCHOOL..... 1 LOWER SECONDARY SCHOOL..... 2 UPPER SECONDARY SCHOOL..... 3 SHORT-TERM VOCATIONAL TRAINING 4 LONG-TERM VOCATIONAL TRAINING 5 PROFESSIONAL HIGH SCHOOL 6 JUNIOR COLLEGE DIPLOMA..... 7 BACHELOR DEGREE..... 8 MASTER DEGREE..... 9 DOCTORATE..... 10 OTHERS (SPECIFY IT) 11	9 What type of school school is..[NAME] ...attending? PUBLIC..... 1 SEMI-PUBLIC..... 2 SPONSORED..... 3 PRIVATE..... 4 OTHERS 5
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SECTION 2. EDUCATION (END)

M E M B E R C O D E	10 Does [NAME] enjoy exemption and reduction of tuition or other contributions for education ? YES..... 1 NO..... 2 (>>13)	11 What are the reasons for exemption and reduction? POOR HOUSEHOLD..... 1 ETHNIC MINORITIES..... 2 MARTYR IMMEDIATE RELATIVES 3 DISABLED, SICK VETERANS, REVOLUTION CREDIT HOUSEHOLDS... 4 REMOTE, PARTICULARLY DIFFICULT AREA..... 5 FAMILY IN DIFFICULT SITUATION..... 6 PRIMARY PUPILS..... 7 NO TUITION REQUIRED..... 8 OTHERS (SPECIFY IT..... 9			12 What is the percentage for reduction? WRITE DOWN 0 IN COLUMN OF NO EXEMPTION REDUCTION A. TUITION B. CONTRIBUTION % %		13 What is the cost for ...[NAME]'s attendance for the last 12 months according to the school's regulations ? TRY TO FILL THE COLUMNS WITH DETAILS , WRITE 0 IF NONE, WRITE KB IF UNKNOWN OR UNABLE TO REMEMBER, RECORD TOTAL OR FILL IN CORRESPONDING COLUMNS IF ONLY REMEMBER THE TOTAL AMOUNT OR SOME DETAILS , WRITE KB IF UNABLE TO REMEMBER THOUSAND VND									
			HỌC PHÍ	ĐÓNG GÓP			a Tuition ?	b Addition of school permanent residence	c Contributions to schools, classes (construction fund, parents fund,...)?	d Parents' fund? Class fund?	e Uniform according to school regulation ?	f Textbooks, reference books?	g Other stationery (papers, pen, school bags, notebooks...)	h Attending extra courses (incl. foreign languages IT)?	i Other educational costs (fees for attending unconventional schools, transportation, lodging...)	k TOTAL (a +b +...+i)
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SECTION 2. EDUCATION *(END)*

M E M B E R C O D E	14	15	16
	What are other educational subsidies (For lodging, transportation, etc.) WRITE 0 IF NONE THOUSAND VND	What is the value of the scholarship or award received for the past 12 months? WRITE 0 IF NONE THOUSAND VND	What are other spending for education-training (housewife work, tutors, shorthand typing)? WRITE 0 IF NONE THOUSAND VND
1			
2			
3			
4			
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14			
15			

2TN. PLUS 14 AND 15:

2b. Detailed information on general and tertiary education

GENERAL EDUCATION										
M E B E R C O D E	1. CHECK QUESTIONS 1, 5, 6 SECTION 2A DID [NAME] ATTEND SCHOOL IN THE LAST 12 MONTHS? NEVER..... 00 NEXT PERSON YES..... 1 NO..... 2 (>>7)	2. Did [NAME] go to school in the last 12 months? YES..... 1 NO..... 2 (>>7)	3. What is the name of school [NAME] attends in the academic year 2005 - 2006?	4. What is [NAME]'s academic record in 2005 - 2006? DISTINCTION..... 1 GOOD..... 2 NORMAL..... 3 WEAK..... 4 NO IDEA..... 5	5. In your opinion, what is the performance of the school in 2005-06 where [NAME] is attending? EXCLUDING EXTRA CLASSES DISTINCTION..... 1 GOOD..... 2 NORMAL..... 3 WEAK..... 4 NO IDEA..... 5	6. In your opinion, what are the biggest problems facing this school? Quality of construction..... 1 Quality of teachers..... 2 Learning time too short..... 3 Lack of facilities..... 4 Lack of space for pupils..... 5 Others (Specify):..... 6 No idea/None..... 7 >> CÂU 9	7. When did [NAME] stop attending school? WRITE IN 4 DIGITS YEAR	8. What is the type of school where [NAME] attends? Public..... 1 Semi-public..... 2 Sponsored..... 3 Private..... 4 Others (Specify): 5		
	1ST	2ND	3RD	NAME OF SCHOOL	CODE					
1										
2										
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Did [NAME] attend primary or secondary school in the last 12 months?

2b. Detailed information on general and tertiary education (cont.)

JUNIOR COLLEGE, UNIVERSITY							
M E M B E R C O D E	9. CHECK QUESTIONS 3 AND 8 SECTION 2A. IS [NAME] ATTENDING JUNIOR COLLEGE/UNIVERSITY OR DID [NAME] ALREADY FINISH? YES..... 1 NO..... 2 (>>NEXT PERSON)	10. What does [NAME] major in this college/university? CODE OF DISCIPLINE					
		DESCRIPTION OF THE DISCIPLINE	CODE	DESCRIPTION OF THE DISCIPLINE	CODE	DESCRIPTION OF THE DISCIPLINE	CODE
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2c. Extra classes

EXTRA CLASSES DURING FORMAL SCHOOL YEAR									
M E M B E R C O D E	1. CHECK QUESTIONS 5, 6 SECTION 2A DID [NAME] ATTEND SCHOOL IN THE LAST 12 MONTHS? YES..... 1 NO..... 2 (>>NEXT PERSON)	2. How long has [NAME] had extra classes since the 1st grade, including those during school year, summer holiday, or lunar new year? WRITE 0 IF THERE IS NONE 0 (>>QUESTION 13) YEARS	3. Did [NAME] have extra classes during the formal school year in the last 12 months? EXCLUDING THOSE DURING SUMMER HOLIDAY OR LUNAR NEW YEAR INCLUDING THOSE NOT PROVIDED BY THE SCHOOL YES..... 1 NO..... 2(>>8)	4. Where are extra classes provided? IN SCHOOL BEING ATTENDED..... 1 AT TEACHER'S HOME..... 2 AT PUPILS' HOME..... 3 OTHERS (SPECIFY):..... 4	5. How many extra classes has [NAME] had per week during academic year 2005 - 2006? NUMBER OF WEEKS	6. How many hours on average did [NAME] have during those weeks? HOURS PER WEEK	7. Who taught at these extra classes?		
							TEACHERS OF CURRENT SCHOOL..... 1	TEACHERS OF OTHER SCHOOLS..... 2	RELATIVES OR FRIENDS OF FAMILY..... 3
							1ST	2ND	3RD
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2									
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14									
15									

2c. Extra classes (conti.)

255

EXTRA CLASSES DURING HOLIDY (SUMMER, LUNAR NEW YEAR...)								PRIVATE TUTORS (ONLY THOSE WHO ARE PAID)						
M E M B E C O D E	8. Did [NAME] have extra classes during summer or lunar new year holiday in the last 12 months? INCLUDING THOSE PROVIDED BY SCHOOL BEING ATTENDED YES..... 1 NO..... 2(>>13)	9. Where are those extra classes provided? IN SCHOOL BEING AT 1 AT TEACHER'S HOME 2 AT PUPILS' HOME 3 OTHERS (SPECIFY): 4	10. How many weeks did [NAME] have extra classes during holidays in the last 12 months? NUMBER OF WEEKS	11. How many hours on average did [NAME] have extra classes during those weeks? HOURS/ WEEK	12. Who taught at those extra classes? TEACHERS OF CURRENT SCHOOL 1 TEACHERS OF OTHER SCHOOLS 2 RELATIVES OR FRIENDS OF FAMILY 3 OTHERS (SPECIFY): 4			13. How many years has [NAME] been tutored since the 1st grade? WRITE 0 IF NONE >>NEXT PERSON YEAR	14. Was [NAME] tutored in the last 12 months? YES..... 1 NO..... 2 (>>NEXT PERSON)	15. How many weeks was [NAME] tutored in the last 12 months? NUMBER OF WEEKS	16. How many hours on average was [NAME] tutored during those weeks? HOURS/ WEEK	17. Who is [NAME]'s private tutor? TEACHERS OF CURRENT SCHOOL 1 TEACHERS OF OTHER SCHOOLS 2 RELATIVES OR FRIENDS OF FAMILY 3 STUDENTS/PUPILS 4 OTHERS (SPECIFY): 5		
					1ST	2ND	3RD					1ST	2ND	3RD
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2d. Repeat the school year

		UPPER SECONDARY				LOWER SECONDARY				PRIMARY			
1. CHECK QUESTIONS 3, 8 SECTION 2A WHAT IS THE HIGHEST LEVEL OF SCHOOL THAT [NAME] IS ATTENDING OR HAS ATTENDED? NEVER ATTEND SCHOOL 0 (>>NEXT PERSON) PRIMARY..... 1 (>>6) LOWER SECONDARY..... 2 (>>4) UPPER SECONDARY OR HIGHER..... 3		2. How many years did [NAME] repeat at upper secondary school? (if any) WRITE 0 IF NONE (>> 4) YEARS		3. What is the reason? DROP-OUT/LOW ATTENDANCE 1 EXAM FAILURE..... 2 INSUFFICIENT TUITION FEE /CONTRIBUTIONS..... 3 ILLNESS/DISABILITY..... 4 OTHERS (SPECIFY)::..... 5		4. How many years did repeat at lower secondary (if any) WRITE 0 IF NONE (>> 6) YEARS		5. What is the reason? DROP-OUT/LOW ATTENDANCE 1 EXAM FAILURE..... 2 INSUFFICIENT TUITION FEE /CONTRIBUTIONS..... 3 ILLNESS/DISABILITY..... 4 OTHERS (SPECIFY)::..... 5		6. How many years did [NAME] repeat at primary school? (if any) WRITE 0 IF NONE >> NEXT PERSON YEARS		7. What is the reason? DROP-OUT/LOW ATTENDANCE 1 EXAM FAILURE..... 2 INSUFFICIENT TUITION FEE /CONTRIBUTIONS..... 3 ILLNESS/DISABILITY..... 4 OTHERS (SPECIFY)::..... 5	
		1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
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2E. Vocational training

ASK ALL MEMBERS AGED FROM 10 ONWARD

M E M B E R C O D E	1. CHECK QUESTION 3 SECTION 2A. HAS [NAME] EVER RECEIVED VOCATIONAL TRAINING ON, E.G. IT AT THE SCHOOL OR AT A TRAINING CENTER? EXCLUDING MENTOR-BASED TRAINING OR GIFTED TRAINING ON, FOR EXAMPLE, MUSIC PAINTING, HOUSEWIFE WORK, SHORTHAND- TYPING, ETC. YES..... 1 NO..... 2 (>>NGƯỜI TIẾP THEO)	2. What type of training has [NAME] received? SHORT-TERM VOCATIONAL TRAINING..... 1 LONG-TERM VOCATIONAL TRAINING..... 2 VOCATIONAL JUNIOR COLLEGE..... 3 OTHERS (SPECIFY):..... 4			3. How long has [NAME] been trained? >>NEXT PERSON					
		1ST	2ND	3RD	1ST		2ND		3RD	
		YEARS	MONTHS	YEARS	MONTHS	YEARS	MONTHS	YEARS	MONTHS	
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FULL NAME OF HOUSEHOLD MEMBER		M
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		R
RECORD IN CAPITAL LETTERS		C
		O
		D
		E
AGE		1
		2
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258		8
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SECTION 3. HEALTH CARE AND DISABILITY

3a. Health and health care

Please provide us with information about the healthcare of your household's member

ASK ALL HOUSEHOLD MEMBERS

M E M B E R C O D E	1	2	3		4	5
	For the past 4 weeks has [NAME] suffered from any illness or injuries? For example, flu, diarrheah, accident-related injuries, burn or any other diseases?	For the past 12 months has [NAME] suffered from any illness or injuries?	For the last 12 months, due to illness or injuries, for how many days did [NAME] have to...		Does...[name]...have health insurance or free healthcare certificate?	Did [NAME] buy healthcare insurance him/herself or have it bought by someone else?
	YES..... 1 (>>3) NO..... 2	YES..... 1 NO..... 2 (>>4)	a. Stay in bed and need someone to take care of? DAYS	b. Be absent from work/school or not to be able to carry out regular activities? DAYS	YES, HEALTHCARE INSURANCE.. 1 YES, FREE HEALTH CARE CERTIFICATE..... 2 (>>NEXT PERSON) NO..... 3 (>>NEXT PERSON)	CHILDREN UNDER 6 1 HEALTHCARE INSURANCE FOR THE POOR..... 2 HEALTHCARE INS. FOR POLICY BENEFICIARIES..... 3 REQUIRED STATE HEALTHCARE INSURANCE..... 4 REQUIRED NON-STATE HEALTHCARE INSURANCE.. 5 PUPIL/STUDENT HEALTHCARE INSURANCE..... 6 OTHER VOLUNTARY HEALTHCARE INSURANCE..... 7 OTHERS..... 8
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NO..... 2 (>>16)

ASK THOSE WHO SUFFER FROM ILLNESS/INJURIES WITH QUESTION 3. FOLLOWED BY OTHER MEMBERS.

[illegible]

3a. Health and health care (end)

16. How much has your household spent on non-prescribed medicine for self-treatment or for reserve for the last 12 months?

(Including medicine costs and other expenses such as travel, parking,...)

IF NONE RECORD 0

THOUSAND VND

17. How much has your household spent on medical tools for the last 12 months? For example: stethoscope, hearing aid apparatus, sputum taking machine, sphygmomanometer, medicine cabinet ..
(Excluding healthcare tools recorded in Questions 10 and 11)

IF NONE, WRITE 0

THOUSAND VND

18. How much have your household members spent on voluntary and students' healthcare insurance or pooled money with other organisations/ people to buy healthcare insurance for the last 12 months?

IF NONE, WRITE 0

THOUSAND VND

19. How much has your household received as aid for members being sick, suffering from diseases or injuries for the last 12 months? (in-kind included)

IF NONE, WRITE 0

THOUSAND VND

3CT. HEALTHCARE EXPENDITURES: THOUSAND VND
(3CT1 + 3CT2 + QUEST 16 + QUEST 17 + QUEST 18)

3b. Disability

ASK MEMBERS AGED FROM 5 ONWARDS

THE FOLLOWING QUESTIONS FOCUS ON DIFFICULTIES IN PERFORMING SOME FUNCTIONS CAUSED BY HEALTH PROBLEMS.

MEMBER CODE	1 CODE OF RESPONSE	2 Does [...NAME] have visual difficulty, even when wearing glasses? SURVEYOR READS OUT RESPONSES IF CODE OF RESPONSE IS 3 >> C5	3 Does [...NAME] wear glasses? If yes, regularly or irregularly? REGULARLY 1 IRREGULARLY 2 NOT WEARING 3	4 [When wearing glasses], does [...NAME] have any difficulty?		5 Does [...NAME] have any aural difficulty, even when wearing hearing aid? SURVEYOR READS OUT RESPONSES IF CODE OF RESPONSE IS 3 >> C8	6 Does [...NAME] wear hearing aid? If yes, regularly or irregularly? REGULARLY 1 IRREGULARLY 2 NOT WEARING 3	7 [When wearing hearing aid], does [NAME] have difficulty listening to what other people are saying to him/her?	
				a. Reading books and newspapers, recognizing letters and handwriting. SURVEYOR READS OUT RESPONSES	b. Seeing and realizing an acquaintance 7 meters away. SURVEYOR READS OUT RESPONSES			a. In a quiet room SURVEYOR READS OUT RESPONSES	b. In a crowded room SURVEYOR READS OUT RESPONSES
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POSSIBLE RESPONSES

Not difficult..... 0

A little difficult..... 1

Very difficult..... 2

Impossible [...]..... 3

3b. Disability (*conti.*)

ASK MEMBERS AGED FROM 5 ONWARDS

M E M B E R C O D E	8 Does [...NAME] have any difficulty remembering or concentrating?	9 Does [...NAME] have any difficulty concentrating on doing something for about 10 minutes?	10 Does [...NAME] have any difficulty understanding something new, e.g., direction to a new place ?	11 Does [...NAME] have difficulty going on foot or walking upstairs/downstairs?	12 Does [...NAME] have difficulty in the following cases by himself/herself without using tools to help?		
	SURVEYOR READS OUT RESPONSES IF CODE OF RESPONSE IS 3 >> C11	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES IF CODE OF RESPONSE IS 3 >> C13	a. Walking about 400 meters long? SURVEYOR READS OUT RESPONSES	b. Walking up 10 steps without stopping? SURVEYOR READS OUT RESPONSES	e. Bowing, and bending his or her body, or standing on his/her knees? SURVEYOR READS OUT RESPONSES
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POSSIBLE RESPONSES

Not difficult..... 0

A little difficult..... 1

Very difficult..... 2

Impossible [...]...... 3

3b. Disability (*conti.*)

ASK MEMBERS AGED FROM 5 ONWARDS

	13	14						15	16	17	18
	Does [...NAME] have difficulty taking care of himself/herself, e.g. bathing, or getting dressed?	Does [...NAME] have difficulty in the following cases by himself/herself without using tools to help?						Does [...NAME] need somebody else to help in his/her everyday life, e.g. feeding, bathing, getting dressed?	Due to his/her physical or emotional conditions, does [...NAME] have difficulty communicating, eg. understanding others, and making himself/herself understood?	Does [...NAME] have difficulty understanding what somebody else is talking to him/her?	Does [...NAME] have difficulty starting and keeping a conversation going?
	KAD....8	a. Raising hands over the head?	b. Using fingers to button the shirt?	c. Wearing socks?	d. Tying shoelaces?	e. Combining his/her hair?	f. Feeding himself/herself?				
	SURVEYOR READS OUT RESPONSES, IF CODE OF RESPONSE IS 3>>C16	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES	YES 1 NO 2	SURVEYOR READS OUT RESPONSES, IF CODE OF RESPONSE IS 3 >>NEXT PERSON	SURVEYOR READS OUT RESPONSES	SURVEYOR READS OUT RESPONSES
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15											

POSSIBLE RESPONSES

Not difficult..... 0
 A little difficult..... 1
 Very difficult..... 2
 Impossible [...]...... 3

ASK MEMBERS AGED FROM 5 ONWARDS

RECORD CODES OF RESPONSES TO QUESTIONS 2, 5, 8, 11, 13 VÀ 16

CODES OF REASON	
OLD OR YOUNG AGE.....	1
WAR.....	2
AGENT ORANGE.....	3
NATURAL CALAMITYI.....	4
ROAD ACCIDENT.....	5
WORK-RELATED ACCIDENT.....	6
BIRTH DEFECTS.....	7
SOCIAL VICIS.....	8
ILLNESS/DISEASE.....	9
LEVEL OF EDUCATION.....	10
OTHER DISABILITIES.....	11
OTHER REASONS.....	12

ASK MEMBERS AGED FROM 5 ONWARDS

[illegible]

CODES OF REASON	
OLD OR YOUNG AGE.....	1
WAR.....	2
AGENT ORANGE.....	3
NATURAL CALAMITYI.....	4
ROAD ACCIDENT.....	5
WORK-RELATED ACCIDENT.....	6
BIRTH DEFECTS.....	7
SOCIAL VICES.....	8
ILLNESS/DISEASE.....	9
LEVEL OF EDUCATION.....	10
OTHER DISABILITIES.....	11
OTHER REASONS.....	12

Chronic diseases

Diseases with protracted and continuing symptoms or recurring for periods of more than three months (regardless of treatment or not)

Common chronic diseases:

Malnutrition	Mental illness	Chronic bronchitis
Thyroid	Chronic insomnia	Trachoma
Stomach ulcers/Duodenitis	Osteomalacia	Cancer
Colitis	Tooth decay	Tumour
Chronic dysentery	Diabetes	Leukemia
Kidney stone/gall stone	Cardiovascular	HIV/AIDS
Neuralgia	High blood pressure	Tuberculosis
Rheumatism	Low blood pressure	Hepatitis B, C (chronic)
Epilepsy	Bronchial asthma	

3C. Health status over the last four weeks

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THOSE AGED OVER 15 RESPOND BY THEMSELVES

ASK ALL HOUSEHOLD MEMBERS

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

Ask those under 6, and between 6 and 7

Ask those aged more than 6

	1 Did [NAME] suffer diarrhoea during the last four weeks? Diarrhoea is defined as defecating at least three times during 24 hours or at least with blood. Note: For those under 6, diarrhoea is defined as defecating with blood. Yes..... 1 No..... 2 (>> 3)	2 How many days did [NAME] suffer diarrhoea during the last four weeks? Days	3 Did [NAME] cough or have flu or dyspnea during the last four weeks? Yes..... 1 No..... 2 (>>6)	4 Was there any time when coughing, flu or dyspnea went with fever? Yes..... 1 No..... 2	5 How many days did [NAME] suffer coughing, flu or dyspnea during the last four weeks? Days	6 Did [NAME] suffer any disease or injury during the last four weeks? For example, wound caused by accidents, or burn. Yes..... 1 No..... 2 Next person	7 Did [NAME] suffer any disease or injury during the last four weeks? For example, coughing, flu, diarrhea, wound caused by accidents, or other diseases? Yes..... 1 No..... 2 (>> 11)	8 How many days did [NAME] suffer disease or injury during the last four weeks? Days	9 How many days did [NAME] fail to do normal work, eg. going to school, going to work, doing housework due to disease or injury? Fill in code 99 if it is not relevant, e.g. disabled people If 0 >>11 Days	10 How many days, due to illness or injuries, did [NAME] stay in bed or have someone take care of? Fill in code 99 if it is not relevant, e.g. disabled people Days	11 Did [NAME] have any chronic diseases, e.g. diabetes, hipetatis? Yes..... 1 No..... 2
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3											
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15											

3D. Reproductive health

Ask women aged between 15 and 49 who are married

m e m b e r c o d e	1	2	3	4		5	6	7		
	Are you pregnant or has been pregnant for the last 12 months?	Do you plan to have a baby in the next 12 months?	Do you use any contraceptive measures? (Including measures taken previously and still working; excluding abortion). Prompt: Do you do anything not to have a baby or space between children?	Which measures?		Have you given birth?	How many children have you got?	How many sons and daughters are still alive?		
	Currently pregnant..... 1(>>5) Pregnant for the past 12 2 No..... 3	Yes 1(>>5) No..... 2 Not yet decide 3	Yes 1 No..... 2 (>>5)	Contraceptive pills..... 1 Pessary..... 2 Injection..... 3 Stick 4 Dutch cap..... 5 Condom..... 6 Female sterilisation..... 7 Male sterilisation..... 8 Menstruation calendar 9 External ejaculation..... 10 Others (specify)..... 11		Yes 1 No 2 (>> Next person)	Including babies who were alive for a few minutes or hours	Including only children born alive today Otherwise, write 0 in the relevant column	Sons	Daughters
				Main	Supplementary	Number of children born				
1										
2										
3										
4										
5										
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15										

3E. Behaviours that have impacts on health

ASK THOSE MEMBERS AGED FROM 15 ONWARDS

IF THE PERSON IS UNDER 10 >> 3F

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

	1 Has [NAME] ever smoked cigarette, or pipe tobacco? YES..... 1 NO..... 2 (>>NEXT PERSON)	2 Is there any time when [NAME] smoked cigarette or pipe tobacco everyday (for at least month) YES..... 1 NO..... 2 (>>NEXT PERSON)	3 Now does [NAME] smoke everyday, sometimes or already quit smoking? EVERYDAY..... 1 SOMETIMES..... 2 (>>5) NO SMOKING..... 3 (>>NEXT PERSON)	4 When did [NAME] start smoking cigarette, pipe tobacco everyday? At what age? AGE	5 Does [NAME] often smoke at home? YES..... 1 NO..... 2
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3F. Health insurance

THOSE AGED OVER 15 RESPOND BY THEMSELVES

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

ASK ALL HOUSEHOLD MEMBERS

MEMBER	1	2	3	4	5
	CHECK IF [NAME] HAS FREE HEALTHCARE INSURANCE CARD/CERTIFICATE REQUIRED HEALTHCARE INSURANCE..... 1 (SECTION 3A, QUEST 5 CODE 1, 2, 3, 4, 5) VOLUNTARY HEALTHCARE INSURANCE..... 2(>>4) (SECTION 3A, QUEST 5 CODE 6, 7) CARD/CERTIFICATE..... 3(>>6) (SECTION 3A, QUEST 4 CODE 2) NO HEALTHCARE INSURANCE CARE..... 4(>>13) (SECTION 3A, QUEST 4 CODE 3)	Why did [NAME] have required healthcare insurance? WORKING IN PUBLIC SECTOR..... 1 WORKING IN PRIVATE/FOREIGN INVESTED SE..... 2 RETIRED..... 3 POLICY BENEFICIARIES..... 4 POOR PEOPLE/ETHNIC MINORITY/P135 COMM..... 5 OTHER SOCIAL PROTECTION GROUPS..... 6 THOSE OVER 90..... 7 RELATIVES OF MILITARY OFFICERS..... 8 OTHERS..... 9 NO IDEA..... 10	Does [NAME] have voluntary healthcare insurance? YES..... 1 NO..... 2(>>6)	Is it voluntary healthcare insurance or other types? STUDENT/PUPIL HEALTH INSURANCE PROVIDED BY VIETI 1 OTHER TYPES OF STUDENT/PUPIL HEALTH INSURANCE... 2 VOLUNTARY HEALTH INSURANCE PROVIDED BY ASSOCI/ 3 VOLUNTARY HEALTH INSURANCE ORGANIZED BY COMM/ 4 HEALTH INSURANCE FOR FAMILY MEMBERS OF REQUIRE 5 COMMERCIAL HEALTH INSURANCE..... 6 OTHERS (SPECIFY)..... 7 NO IDEA..... 8 1ST 2ND	How much does [NAME] pay a year for voluntary health insurance premium? WRITE "KB" IF NO IDEA THOUSAND VND 1 YEAR
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3F. Health insurance (conti)

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THOSE AGED OVER 15 REpond BY THEMSELVES

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

ASK ALL HOUSEHOLD MEMBERS

	6		7		8		9		10	11		12
	REQUIRED	VOLUNTARY	REQUIRED	VOLUNTARY	REQUIRED	VOLUNTARY	REQUIRED	VOLUNTARY		REQUIRED	VOLUNTARY	
M E M B E R C O D E	When did [NAME] start having this healthcare insurance card/certificate?		Since its reception, how long will this health insurance card/certificate be valid?		Was [NAME] given instruction on how to use this free healthcare insurance card/certificate?		Which health facility did [NAME] originally register his/her free healthcare insurance card/certificate?		For the last 12 months, has [NAME] used free healthcare insurance card/certificate for diagnosis/treatment ?	Did the household have to pay additional fees when using healthcare insurance for diagnosis/treatment?		Why was the card not used?
	IF THERE ARE INTERVALS, RECORD THE LATEST USE.		MONTHS		YES..... 1 NO..... 2		VILLAGE HEALTH CENTER..... 1 REGIONAL GENERAL CLINICS..... 2 DISTRICT HOSPITAL..... 3 PROVINCIAL HOSPITAL..... 4 CENTRAL HOSPITAL..... 5 OTHER STATE-OWNED HOSPITALS..... 6 PRIVATE HOSPITAL..... 7 OTHER HOSPITALS..... 8 PRIVATE CLINICS..... 9 OTHERS (SPECIFY)..... 10 NO REGISTRATION..... 11		YES..... 1 NO..... 2(>>12) NO DIAGNOSIS/T 3 (>>NEXT PERSON)	YES..... 1 NO..... 2 NO IDEA..... 3		NOT USING..... 1 HEALTH INSURANCE NOT REIMBURSE AT HEALTH FACILITY..... 2 LOWER QUALITY WHEN USING HEALTH INSURANCE CA..... 3 CUMBERSOME PROCEDURES... 4 HEALTH INSURANCE CARD/ CERTIFICATE NOT AVAILABLE T 5 OTHERS..... 6
							HEALTH FACILITY			>> NEXT PERSON		>> NEXT PERSON
							FREE HEALTHCARE					
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3F. Health insurance (end)

273

THOSE AGED OVER 15 RESPOND BY THEMSELVES

ASK ALL HOUSEHOLD MEMBERS

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

13		14	
Why did [NAME] do not have health insurance?		Ask those aged between 6 and 89	
M	Healthy/No need..... 1	If annual health insurance of 80,000VND is offered, are you willing to buy for [NAME]?	
E	Previously have but do not use..... 2		
M	Previously have but get unemployed..... 3		
B	Too expensive..... 4		
E	Can not afford..... 5		
R	Do not know where to buy..... 6		
C	Voluntary health insurance unavailable in commune..... 7		
O	Health services too poor..... 8		
D	No idea about health insurance..... 9		
E	Waiting for commune to issue insurance card..... 10		
	Others (specify.....)..... 11		
	NO IDEA 12		yes..... 1
	First	Second	no..... 2
1			
2			
3			
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15			

Quest from 14 to 18, ask member that know most about household healthcare:

15. Has the household requested for exemption due to too costly user-fees for the last 12 months?

Yes 1
No 2(>>17)

16. What is the result?

Get exemption..... 1
Obtain reduction in fees..... 2
Refusal..... 3
Wait for response 4

17. Has any household member enjoyed charity, fee-exemption/reduction health service for example, eye surgery, etc?

Yes..... 1
No 2(>>3G)

18. How much did the household have to pay for access to charity services for example, spending on transportation, tools, drugs, etc?

1000 VND

3G. Out-patient diagnosis/treatment

ASK ALL MEMBERS 274

THOSE AGED OVER 15 REPLY BY THEMSELVES

Now I will ask you about the time when you or your family member received out-patient treatment at the health facility

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

1					2	3	4		
Where did [NAME] go for outpatient diagnosis, treatment or check-up for the last 4 weeks? - Exclude vaccination - For each household member, list the code and all the healthcare facilities used for out-patient diagnosis/treatment for the last 4 weeks - In case none of household members used healthcare facilities, write 99 on the column of healthcare facilities, and move to the next section. Village health center..... 1 Commune/ward health center 2 Regional clinics 3 District hospital 4 Provincial/City hospital..... 5 Central hospital 6 Other public hospitals 7 Private hospital..... 8 Other hospitals 9 Private clinics 10 Medicine men 11 Others..... 12					How many times did [NAME] use out-patient services at this facility, or medical staff from this facility visit for the last 4 weeks?	How many times during that period has [NAME] been transferred to or from other healthcare facilities?	What are the reasons for using out-patient services over the last four weeks? Write in order of importance Preventive services 1 Treatment for coden..... 2 Treatment for other diseases..... 3 Traffic accidents..... 4 Work accidents..... 5 Other injuries/accidents..... 6 Pre-natal checkup 7 Delivery..... 8 Abortion/family planning..... 9 Check-up..... 10 Rehabilitation..... 11 Others (specify: _____) 12		
Member code	Name	Name of healthcare facilities	Healthcare facilities code	Times	Times	1st Reason	2nd Reason	3rd Reason	
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3G. Out-patient diagnosis/treatment (conti)

THOSE AGED OVER 15 REpond BY THEMSELVES

ASK ALL HOUSEHOLD MEMBERS

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

O R D E R	5 Who provided you with diagnosis/treatment?			6 During out-patient diagnosis/treatment did [NAME] use services on demand (i.e. to pay additional money to enjoy special services, quicker and higher-quality care, etc.)	7 How much did the household spend (both in cash and in kind) at this facility, or pay medical staff at this facility during out-patient diagnosis/treatment in the last four weeks?	8 Of the spending, how much are the tips and rewards given to medical staff?	9 Of the spending at this facility, how much was paid for medication here?	10 Over the last four weeks, how many times did the household buy medication outside this facility while receiving services here?	
	Doctor..... 1	Physician..... 2	Nurse..... 3	Midwife..... 4	Pharmacist..... 5	Home-based midwife..... 6	Traditional medicine man..... 7	Others(specify.....)..... 8	No idea..... 9
	First	Second	Third	yes..... 1 no..... 2	- including service charges, medication, tips and rewards for medical staff at this facility; -excluding travel and accomodation expenses, medication and services outside this facility	If 0 >> 10 1000 VND	1000 VND	1000 VND	Not clear, write KB Yes..... 1 No..... 2(>>12)
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14									

3G. Out-patient diagnosis/treatment (end)

THOSE AGED OVER 15 REpond BY THEMSELVES

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

ASK ALL HOUSEHOLD MEMBERS

O R D E R	11	12	13	14	15	16	17
	How much did the household spend on medication for [NAME] outside this facility over the last four weeks? Including travel and parking expenses, etc...	How much did the household spend on travel, accomodation and meals for [NAME] and relatives accompanying during out-patient diagnosis/treatment over the last four weeks?	Of all the times using services at this facility over the last four weeks, was the household given user-fee exemption as a result of health insurance?	Of all the times using services at this facility over the last four weeks, was the household given user-fee exemption because he is categorised as poor, or aged under 6 or for other reasons?	Of all the times using services at this facility over the last four weeks, did [NAME] use X-ray, ultrasound, blood test and other laboratory tests? Excluding testing or X-ray services at other facilities where [NAME] was given treatment	How much did the household spend on X-ray, ultrasound, blood and other laboratory tests for [NAME] at this facility over the last four weeks? Including travel and parking expenses, etc.v.v.	Did this facility transfer or introduce [NAME] to another one for treatment? Excluding introduction to other facilities to buy medication, or use image-based diagnosis and testing mentioned in Quest 11 và 15.
	1000 VND	1000 VND	YES..... 1 NO..... 2	YES..... 1 NO..... 2	yes..... 1 NO..... 2(>>17)	1000 VND	yes..... 1 no..... 2 (>>CƠ SỞ TIẾP THEO)
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3H. In-patient diagnosis/treatment

ASK ALL MEMBERS

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THOSE AGED OVER 15 RESPOND BY THEMSELVES

Now I will ask you about the time when you or your family member received in-patient treatment at the health facility

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

1				2		3		4		5			6		
In the last 12 months, where did [NAME] receive in-patient treatment?				In the last 12 months, how many times has [NAME] received in-patient treatment at this facility?		In the last 12 months, how many times has [NAME] received in-patient treatment at this facility to which [NAME] was transferred, or introduced?		In the last 12 months, how many days has [NAME] received in-patient treatment at this facility?		What are the reasons for in-patient treatment? Write in order of importance			Who provided you with diagnosis/treatment?		
- Excluding vaccination - For each member of the household, list the code and health facilities used overnight in the last 12 months. - Unless no household member used health facility, write 99 in the column of health facility and move to the next section.				Begin with the first health center. Do not move to the next facility until all the questions are asked.						Coden..... 1 Other diseases..... 2 Traffic accidents..... 3 Work accidents..... 4 Other injuries/accidents..... 5 Patient monitoring..... 6 Delivery..... 7 Others (specify:.....) 8			Doctor..... 1 Physician..... 2 Nurse..... 3 Midwife..... 4 Pharmacist..... 5 Home-based midwife..... 6 Traditional medicine man..... 7 Others(specify.....) 8 No idea..... 9		
Village health center..... 1 Commune health center..... 2 Regional clinics..... 3 District hospital..... 4 Provincial/City hospital..... 5 Central hospital..... 6 Other state-owned hospitals..... 7 Private hospital..... 8 Other hospitals..... 9 Private clinics..... 10 Traditional herb doctor..... 11 Others..... 12															
Member cod	Name	Name of health facility	Facility code	Times	Times	Days	Reason 1	Reason 2	Reason 3	Healthworker 1	Healthworker 2	Healthworker 3			
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3H. In-patient diagnosis/treatment (*conti*)

ASK ALL HOUSEHOLD MEMBERS

THOSE AGED OVER 15 REPLY BY THEMSELVES
PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

	7 During in-patient diagnosis/treatment did [NAME] use services on demand (i.e. to pay additional money to enjoy special services, quicker and higher-quality care, etc.) YES..... 1 NO..... 2	8 During in-patient diagnosis/treatment did [NAME] share bed with another patient? YES..... 1 NO..... 2	9 How much did the household spend (both in cash and in kind) at this facility, or pay medical staff at this facility during in-patient diagnosis/treatment? - Including service charges, medication, tips and rewards for medical staff at this facility; - excluding travel and accommodation expenses, medication and services outside this facility If 0 >> 13 1000 VND	10 Of the total expense, how much are the tips and rewards for medical staff of this facility? 1000 VND	11 Of the total expense at this facility, how much was spent on medication? Write KB if not clear 1000 VND	12 How many times did the household buy medication outside this facility while receiving services here, for example, because the required medicine is not available? - Excluding food to strengthen the health of patients. - Excluding the purchase of medication in other facilities as a result of receiving treatment elsewhere yes..... 1 no..... 2(>>1)	13 How much did the household spend on medication for [NAME] outside this facility over the last 12 months? Including travel and parking expenses, etc... 1000 VND	14 How much did the household spend on travel, accommodation and meals for [NAME] and relatives accompanying during in-patient diagnosis/treatment? 1000 VND
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3H. In-patient diagnosis/treatment (end)

ASK ALL HOUSEHOLD MEMBERS

THOSE AGED OVER 15 REpond BY THEMSELVES

PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

	15 Of all the times using in-patient services over the last 12 months, did [NAME] use X-ray, ultrasound, blood test and other laboratory tests outside this facility? Excluding testing or X-ray services at other facilities where [NAME] was given treatment yes..... 1 no..... 2	16 How much did the household spend on X-ray, ultrasound, blood and other laboratory tests for [NAME] outside this facility over the last 12 months? Including travel and parking expenses, etc.v.v.. 1000 VND	17 Did this facility transfer or introduce [NAME] to another one for treatment? Excluding introduction to other facilities to buy medication, or use image-based diagnosis and testing mentioned in Quest 15. yes..... 1 no..... 2	18 Was [NAME] transferred to another facility as requested by the doctor? yes..... 1 (>>20) no..... 2	19 Why was [NAME] not transferred? Long-distance..... 1 Economic difficulty..... 2 Incurable disease..... 3 Other reasons 4	20 During those in-patient diagnoses/treatments in the last 12 months, has [NAME] been discharged from hospital before full treatment due to extremely costly fees? yes..... 1 no..... 2 (>>Next)
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3I. Self-treatment

ASK ALL HOUSEHOLD MEMBERS

THOSE AGED OVER 15 REpond BY THEMSELVES
PARENT RESPONDS ON BEHALF OF CHILDREN UNDER 15

O R D E R	M E M B E R C O D E	1	2		3	4			5		6
		During the last four weeks, did the household buy medication for [NAME] according to the previous prescription without re-diagnosis?	During the last four weeks, how much did the household spend on medication for [NAME] according to the previous prescription?		During the last four weeks, did the household buy medication for [NAME] without diagnosis/treatment and previous	Where did the household buy medication for [NAME] without			During the last four weeks, how much did the household spend on medication without prescription?		
			YES..... 1 NO..... 2 (>>3)	THOUSAND VND		Village health center..... 1 Commune health center..... 2 Regional clinics..... 3 District hospital..... 4 Provincial/City hospital..... 5 Central hospital..... 6 Other state-owned hospitals..... 7 Private hospital..... 8 Other hospitals..... 9 Private clinics 10 Traditional herb doctor 11 Others..... 12 Drugstore 13 Home-made Vietnamese traditional medicine.. 14 Others (specify 15	THOUSAND VND				
			Oriental	Western	(>>next person)		1	2	3	Oriental	Western
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OCCUPATION CODE

LEADERS IN ALL FIELDS AND LEVELS

- 11 Communist Party offices of all levels (professional)
- 12 National Assembly and President's Office
- 13 Central Government
- 14 People's Courts and People's Procuracies
- 15 People's councils and People's committees at local level (including professional offices at local level, except legislative organs, mass organizations, hamlet chiefs)
- 16 Mass organizations
- 17 Charity organizations and specific organizations for other purposes
- 18 Corporations, companies and equivalent which produce material goods and services
- 19 Firms, factories, manufacturers which create material goods and services, and small schools

HIGH-LEVEL PROFESSIONALS AT ALL FIELDS

- 21 Natural sciences and Technical sciences
- 22 Life and Health sciences
- 23 Education and Training
- 24 Other professionals

MID-LEVEL PROFESSIONALS AT ALL FIELDS

- 31 Natural sciences and Technical sciences
- 32 Life and Health sciences
- 33 Education and Training
- 34 Other professionals

STAFF (ELEMENTARY PROFESSIONALS, WHITE-COLLAR TECHNICAL PERSONNEL IN ALL FIELDS

- 41 White-collar personnel
- 42 Customer service staff (directly contact with customers in terms of monetary management; transportation arrangement; information support; appointment and phone receptionists)

SKILLED WORKERS IN PERSONAL SERVICES, SOCIAL SAFETY PROTECTION AND SALES

BÁN HÀNG CÓ KỸ THUẬT

- 51 Personal services and protection services
- 52 Modelers, salesmen, product introducers/marketers

SKILLED WORKERS IN AGRICULTURE, SYLVICULTURE, AND AQUACULTURE

- 61 Skilled workers in agriculture, forestry, and aquaculture

SKILLED HANDICRAFTSMEN AND OTHER RELATING SKILLED MANUAL WORKERS

- 71 Skilled miners and builders
- 72 Metal workers, mechanical workers and other workers related
- 73 Workers who make sophisticated goods, handicraftsmen, printing workers, and other related workers
- 74 Food processing, woodworking, textile and garment, leather and shoemaking workers
- 79 Other handicraftsmen and workers related not elsewhere specified

ASSEMBLERS AND MACHINE OPERATORS

- 81 Production machine operators
- 82 Assemblers and machine operators
- 83 Drivers and operators of motorized equipment

UNSKILLED WORKERS

- 91 Sale and service unskilled workers
- 92 Unskilled workers in agriculture, forestry, and aquaculture
- 93 Unskilled workers in mining, construction, manufacturing, and transportation industry and other unskilled workers

ARMED FORCES

- 00 Armed forces

INDUSTRY CODE**AGRICULTURE AND FORESTRY**

01 Agriculture and services related (including livestock raising)

02 Forestry and services related

AQUACULTURE

05 Catching and raising seaproducts, and relating services

MINING INDUSTRY

10 Coal mining

11 Oil and gas drilling and services related
(except: exploring/searching activities)

12 Uranium and Thorium mining

13 Metal mining

14 Mining for rocks, stone, sand, salt, fertilizer...

PROCESSING INDUSTRY

15 Food and beverage production

16 Tobacco production

17 Textile

18 Fur processing and fur products

19 Leather tanning and leather products including wallets, seats, suitcases and footwear

20 Wood processing and production of wood, bamboo and rattan products
(excluding bed, wardrobe, table, chair); production of straw products

21 Paper and paper products

22 Printing and publishing (books, magazines, newspapers, and copies)

23 Coke, crude oil and nuclear processing

24 Chemicals and chemical products

25 Plastic and Rubber production and products

26 Other non-metal mineral products production

27 Metal production and processing

28 Metal products (except machines and equipment)

29 Other equipments and machinery not specified elsewhere

30 Office and computer equipment production

31 Other electronic, electric equipments not specified elsewhere

32 Radio, TV, broadcasting and other communication equipment

33 Medical and laboratory equipment, precision instruments, and meters (clocks)

34 Motor vehicles and spare parts

35 Other means of transportation (boats, railroad, airplane)

36 Furniture production and other productions not specified elsewhere

37 Recycling, reprocessing

ELECTRICITY, GAS, AND WATER PRODUCTION AND DISTRIBUTION

40 Electricity, gas, water steam, hot water production and distribution

41 Water exploitation, purification, and distribution

CONSTRUCTION

45 Construction

TRADING; REPAIR OF MOTOR VEHICLES AND MOTORBIKES**FAMILY AND PERSONAL EFFECTS**

50 Vehicle sales, maintenance and repair; retail sales of fuel

51 Wholesale and agent sales (excluding motor vehicles and motorbikes)

52 Retail sales (excluding motor vehicles and motorbikes); repairs of family appliances

HOTEL AND RESTAURANT

55 Hotel and restaurant (including big and small restaurants, cafe, beverage and drink stands,...)

TRANSPORTATION, WAREHOUSE/ STORAGE SITE, COMMUNICATION

60 Road, railroad and pipeline transport

61 Waterway transport

62 Airline transport

63 Services in transport; tourist services

64 Post and telecommunications

FINANCE AND CREDIT

65 Financial intermediary (excluding insurance and pensioner's social welfare)

66 Insurance and pensions (excluding compulsory social insurance)

67 Assistance in finance (including social insurance)

SCIENTIFIC AND TECHNOLOGICAL ACTIVITIES

70 Science and technology activities

ACTIVITIES RELATING ASSET BUSINESSES AND CONSULTING SERVICES

71 Activities relating real-estate

72 Rental of machines and equipment (excluding operators); rental of furnitures and household goods

73 Computer-related activities

74 Other business activities (accounting, tax, technical and legal consulting,
architecture, advertising, protection, housecleaning, photography, packaging, etc.**GOVERNMENT ADMINISTRATION AND NATIONAL DEFENSE; COMPULSORY SOCIAL INSURANCE**

75 Government administration and national defense; compulsory social insurance

EDUCATION AND TRAINING

80 Education and training

HEALTH AND SOCIAL RELIEF

85 Health and social relief (hospitals, health centers, veterinary care, social relief,...)

CULTURAL AND SPORT ACTIVITIES90 Cultural and sport activities (broadcasting, television, cinema, recreation and entertainment, press, library,
museum, sport,...)**ACTIVITIES OF THE COMMUNIST PARTY, MASS ORGANIZATIONS, PROFESSIONAL ASSOCIATIONS**

91 Activities of the Communist party, mass organizations, professional associations

ACTIVITIES OF PUBLIC AND PERSONAL SERVICES

92 Disposal collection, public sanitation improvement, and similar activities

93 Other service activities (laundry, hairdressing, funerals,...)

ACTIVITIES OF HOUSEWORK SERVICES PROVIDED AT CLIENT'S HOME

95 Housework services provided at client's home

ACTIVITIES OF INTERNATIONAL ORGANIZATIONS AND INTERNATIONAL MASS ONES

99 Activities of international organizations and international mass ones

SECTION 4. INCOME

283

SECTION 4A. EMPLOYMENT

ASK ALL HOUSEHOLD MEMBERS AGED 6 AND OLDER

MEMBER	1 For the last 12 months, have you			2 HAVE YOU WORKED?	3 Why hasn't [NAME] worked for the last 12 months?	THE MOST TIME CONSUMING JOB (MAIN ONE) FOR THE LAST 12 MONTHS				
	a worked for wage/salary	b household production or services in planting breeding, forestry or aquaculture?	c done trading or business for the household?	(AS STATED IN QUESTION 1 ?)		4 What is the most time-consuming among the jobs [NAME] has been doing for the last 12 months?	5 What branch does this work belong to?			
	WOKING FOR WAGE, SALARY	SELF-EMPLOYED IN AGRICULTURE, FORESTRY, AQUACULTURE	SELF-EMPLOYED IN PRODUCTION OTHER THAN AGRICULTURE, FORESTRY AND AQUACULTURE	YES.....1 (>>4) NO.....2	SMALL/AT SCHOOL..... 1 DO HOUSEWORK 2 TOO OLD, RETIRED..... 3 DISABLED..... 4 ILL..... 5 UNABLE TO FIND A JOB... 6 OTHERS (SPECIFY IT___ 7					
1	YES.....1 NO....2	YES.....1 NO....2	YES.....1 NO....2		>> 26	WORK DESCRIPTION	OCCUPATION CODE	NAME OF ORGANIZATION/ UNIT	MAIN FUNCTIONS / PRODUCTS	BRANCH CODE
2										
3										
4										
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SECTION 4A. EMPLOYMENT (CONTINUED)

THE MOST TIME-CONSUMING JOB (MAIN ONE) FOR THE LAST 12 MONTHS													
M E M B E R C O D E	6	7	8	9	10		11	12					
	For how many months has [NAME] done it for the last 12 months?	On average how many days does [NAME] usually work for a month?	On average how many hours does [NAME] usually work for a day?	For how many years has [NAME] been doing this work?	a. By economic sector SELF-EMPLOYED/ PRIVATE..... 1(>>13) SELF - EMPLOYED (EXCLUDING PRIVATE COMPANY)..... 2(>>13) FOR OTHER HOUSEHOLDS ... 3(>>11) STATE-OWNED ECONOMIC SECTOR ... 4 COLLECTIVE ECONOMIC SECTOR ... 5(>>11) PRIVATE ECONOMIC SECTOR ... 6(>>11) FOREIGN-INVESTED SECTOR ... 7(>>11)	b. Is [NAME] a State employee? YES 1 NO 2	How did [NAME] received from this work in cash and in-kind in the last 12 months? THOUSAND VND	Apart from salary/wage, how much did [NAME] receive in cash and in kind from the following things? TRY TO ASK AND FILL IN THE DETAILED COLUMNS. IF NONE, RECORD 0, IF [NAME] DOESN'T KNOW OR CAN'T REMEMBER, RECORD 'KB'. IF THE TOTAL AMOUNT & SOME DETAILED EXPENSES ARE REMEMBERED, FILL IN THE CORRESPONDING COLUMNS AND WRITE "KB" FOR COLUMNS [NAME] CAN'T REMEMBER.					
	MONTHS	DAYS	HOURS	YEARS				a	b	c	d	e	f
								Public holidays (May Day, Sep 2nd; mid-August festival, Lunar New Year, Dec 22nd)	Social allowance (sickness, workplace accidents)	Maternity allowance	Allowance for domestic and overseas business trips	Others (bonuses, uniform, spending on lunches,...)	TOTAL (a+b+c+d+e)
								THOUSAND VND	THOUSAND VND	THOUSAND VND	THOUSAND VND	THOUSAND VND	THOUSAND VND
1													
2													
3													
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4ATN1. TOTAL OF QUEST 11:

4ATN2. TOTAL OF QUEST 12f:

SECTION 4A. EMPLOYMENT (CONTINUED)

THE SECOND MOST TIME CONSUMING JOB IN THE LAST 12 MONTHS										
M E M B E R C O D E	13 Has [NAME] done any other job for the past 12 months? YES..... 1 NO 2 (>>26)	14 What is the second most time-consuming job after the main one that [NAME] has been doing for the last 12 months?	15 What branch does this job belong to?			16 For how many months has [NAME] been doing this job for the last 12 months?	17 For how many days has [NAME] been doing this job for a month on average?	18 For how many hours has [NAME] been doing this job for a day on average?	19 For how many years has [name] been doing this job?	20 For whom did [NAME] work? SELF - EMPLOYED (FOR FAMILY'S PRIVATE COMPANY).... 1(>>23) SELF - EMPLOYED (NOT FOR FAMILY'S PRIVATE COMPANY).... 2(>>23) WORK FOR OTHER HOUSEHOLDS 3 STATE-OWNED ENTERPRISES... 4 COLLECTIVE ECONOMIC SECTOR 5 PRIVATE ECONOMIC SECTOR 6 FOREIGN-INVESTED SECTOR 7
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

WAGE/SALARY FROM THE SECOND MOST TIME-CONSUMING WORK (SECONDARY WORK)							HOUSEWORK					
21 For the last 12 months, how much did [name] receive from this work in cash and in-kind?		22. Apart from salary/wage, how much did you receive from the following items in cash and in kind: TRY TO ASK AND FILL IN THE DETAILED COLUMNS. IF NO INCOME, RECORD 0. IF DON'T KNOW OR CAN'T REMEMBER RECORD "KB". IF REMEMBER TOTAL AMOUNT & SOME DETAILED EXPENSES, FILL IN CORRESPONDING COLLUMS AND WRITE "KB" FOR COLLUMS [NAME] CAN'T REMEMBER					23 Apart from the two above--mentioned jobs, has [NAME] done any other work for the last 12 months ?	24 Was this work for wage/ salary?	25 How much has [NAME] received from this work? (from the 3rd and so on work)?	26 Do you have to do your housework ? (such as cleaning, shopping, cooking clothes washing, water and wood fetching, repairing tools in the house...)	27 For how many hours a day for the last 12 months have you done this kind of on the average?	
THOUSAND VND		a Holidays (May Day, Sep 2nd; Mid Autumn festival, Lunar New Year, Dec. 22nd)	b Social allowance (sickness, workplace accidents)	c Maternity allowance	d Domestic and overseas business trip allowance	e Others (bonuses, spending for lunches, uniform...	f TOTAL (a+b+c+d+e)	YES..... 1 NO..... 2 (>>26)	YES..... 1 NO..... 2 (>>26)	THOUSAND VND	YES..... 1 NO..... 2 (>>NEXT PERSON)	HOURS
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

4ATN3. TOTAL OF 21:

4ATN4. TOTAL OF 22f:

4ATN5. TOTAL OF 25:

4ATN. INCOME FROM SALARY, WAGES (4ATN1+4ATN2+...+4ATN5):

SECTION 4B. AGRICULTURAL, FORESTRY AND AQUACULTURAL PRODUCTION ACTIVITIES

SECTION 4B0. LAND FOR AGRICULTURE AND FORESTRY, AND WATER SURFACE FOR AQUACULTURE

1. For the last 12 months, have your household used or managed land for agriculture and forestry or water surface for aquaculture?

YES..... 1

(INCLUDING RENTAL LAND AND LAND RENTING IN THE PAST 12 MONTHS. INCLUDING GARDEN, PONDS ADJACENT TO RESIDENTIAL LAND)

NO..... 2 (>> SECTION 4B1)

Followings are some questions about land pieces used or managed by household members

CODE OF LAND PIECE	2 List name of each land piece of household. FROM MAXIMUM PIECE >15 PIECES, INCLUDE IN PIECES OF SAME LAND TYPES	3 What is the area of this land piece?		4 What is type of this land piece? LAND FOR ANNUAL TREES 1 LAND FOR LONG-TERM TRI 2 FORESTRY LAND..... 3 WATER SURFACE..... 4 GRASS FIELD..... 5 ADJACENT GARDEN/POND RESIDENTIAL LAND..... 6 LAND FOR SHIFTING CULTI 7 OTHERS (SPECIFY IT)..... 8	5 What type of irrigation used for this land piece? (ANSWER: IF Q 4 HAS CODE 1, 2 IF NO, >>6) GRAVITY..... 1 PUMP..... 2 MANUAL..... 3 NO IRRIGATION..... 4	6 Why do you have this land piece? LONG-TERM RIGHT USE ALLOCATION 1(>>8) KHOÁN..... 2(>>8) INHERITANCE..... 3(>>8) CONTRACTING..... 4 PURCHASE..... 5(>>8) PROCLAIMING..... 6(>>8) EXCHANGE..... 7(>>8) RENT..... 8 BORROW..... 9(>>8) OTHERS (SPECIFY 10(>>8)	7 What is payment in cash and in-kind for land rent or contracting in the last 12 months? 1000 VND	8 When is the first time do you use this land piece? NĂM	9 Do you take planting or aquaculture activities in this land piece? [IF BOTH CULTIVATION AND RENT, RECORD CODE 2] YES..... 1 (>>NEXT PIECE) NO..... 2 2	10 What do you do in this land piece in the last 12 months? RENTAL..... 1 LEND WITHOUT PAYMENT..... 2 EXCHANGE FOR OTHER PIECE..... 3 FOLLOWING..... 4 OTHERS (SPECIFY 5 CODE 2 - 5 (>> NEXT PIECE)	11 What is amount in cash and in-kind obtained from land rental in the last 12 months? 1000 VND
		CODE	TOTAL AREA M2								
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

4B0T1. TOTAL OF Q7:

4B0T2. CỘNG CÂU 11:

4B1. PLANTING

288

1. Have you harvested any products from planting activities for the last 12 months?

YES..... 1

NO..... 2 (>> SECTION 4B2)

☐

4B1.1 RICE

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	What types of rice has your household harvested for the past 12 months? ASK QUESTION 2 FOR ALL KINDS OF RICE BEFORE STARTING QUESTION 3 WRITE DOWN IN THE LINE OF YEAR ROUND IF YOU CAN'T IDENTIFY IT AS SPECIFIC CROP MARK X IF THE ANSWER IS YES	What is the area your household has planted for the past 12 months?	How much output of [...] has your household harvested for the past 12 months?	How much has been lost due to pests, rotting or other reasons?	Have you sold or bartered any of the total output harvested for the last 12 months?	How much have you sold or bartered during the last 12 months? CALCULATE TOTAL AMOUNT OF SALES AMONG YOUR HARVESTED OUTPUT FOR THE LAST 12 MONTH	What is the total amount you obtain from sales/ barter for the last 12 months?	To whom have you sold or bartered mostly for the 12 months? STATE-OWNED ENTERPRISE 1 NON-STATE ENTERPRISE 2 PRIVATE TRADERS 3 RETAIL SALES 4 OTHERS (SPECIFY IT) 5 _____)	How many kgs of the [...] harvest for the past 12 months have been retained as breeds?	How many kgs have been used for your household as food?	How many kgs have been used as food or poultry? and for aquaculture?	How many kgs have been used as gifts, lending or payment for outside hired labourer?	How many kgs have been left for future use?	THE VALUE OF THE PRODUCE HARVESTED FOR THE PAST 12 MONTHS?
	X	M2	KG	KG	YES..... 1 NO..... 2 (>>10)	KG	1000 VND		KG	KG	KG		KG	1000 VND
1	Winter-spring ordinary rice?													
2	Summer-autumn ordinary rice?													
3	Tenth-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?													

SECTION 4B.1.2. OTHER STARCHY, VEGETABLE

289

C O D E	2 What of the following products has your household harvested for the last 12 months? ASK QUESTION 2 FOR ALL KINDS OF CROPS BEFORE STARTING QUESTION 3 MARK X IF THE ANSWER IS YES	3 What is the area which you grew crop?	4 How many kgs has your household harvested over the last 12 months?	5 How many kgs has your household sold or bartered of the total harvest for the last 12 months? (ALL SALES OR BARTERING OF THE TOTAL HARVESTED OUTPUT SOLD OR BARTERED FOR THE LAST 12 MONTHS) WRITE 0 AND >>7 IF NONE	6 What is the total amount your household obtained from selling/bartering [...] for the last 12 months?	7 How many kgs of the harvested output for the last 12 months has been retained for consumption?	8 WHAT IS THE VALUE OF THE OUTPUT HARVESTED FOR THE PAST 12 MONTHS?
	X	M ²	KG	KG	1000 VND	KG	1000 VND
8	Maize/corn						
9	Sweet potatoes						
10	Cassava/manioc						
11	Other starchy plants						
12	Potatoes						
13	Water spinach						
14	Kohlrabi						
15	Cabbage, cauliflower						
16	Mustard greens of all kinds						
17	Fresh beans of all kinds						
18	Tomatoes						
19	Spiced herbs		X	X		X	
20	Other vegetables, tubers, fruits		X	X		X	
21	Other annual crops (bonsai..)		X	X		X	

SECTION 4B1.3. ANNUAL AND PERENNIAL INDUSTRIAL CROPS

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C O D E	2 What of the following products has your household harvested for the past 12 months? ASK QUESTION 2 FOR ALL KINDS OF PLANTS BEFORE STARTING QUESTION 3 ĐÁNH DẤU X NẾU CÓ	3 What is the area or amount of plants and trees grown or taken care of by your household? CODE M2:..... 1 AMOUNT OF CROP:..... 2		4 How many kgs of [...] has your household harvested over the last 12 months? KG	5 How many kgs of [...] has your household sold or bartered of the total harvest for the last 12 months? (ALL SALES OR BARTERING OF THE TOTAL HARVESTED OUTPUT SOLD OR BARTERED) WRITE 0 AND >>7 IF NONE KG	6 What is the total of [...] amount your household obtained from selling/ bartering for the last 12 months? 1000 VND	7 How many kgs of the [...] output have been retained for consumption ? KG	8 WHAT IS THE VALUE OF THE OUTPUT HARVESTED FOR THE PAST 12 MONTHS? 1000 VND	
		X	AMOUNT						CODE
		22	Soybeans						
23	Peanuts			1					
24	Sesame seeds			1					
25	Suger cane			1					
26	Tobacco			1					
27	Cotton			1					
28	Jute, ramie			1					
29	Rush			1					
30	Other annual industrial crops			1	x	x	x		
31	Tea								
32	Coffee								
33	Rubber								
34	Pepper								
35	Coconut								
36	Mulberry			1					
37	Cashew								
38	Other perennial industrial crops				x	x	x		

SECTION 4B1.4. FRUIT CROPS

C O D E	2 What of the following products has your household harvested for the past 12 months? KINDS OF TREES BEFORE STARTING QUESTION 3 MARK X IF THE ANSWER IS YES		3 What is the area and how many [...] tree household grow or take care of? CODE M2:..... 1 AMOUNT OF CROP:..... 2		4 How many kgs of [...] has your household harvested for the last 12 months? KG	5 How many kgs of [...] has your household sold or bartered of the total harvest for the last 12 months? (CALCULATE ALL SALES OR BARTERING OF HAVESTED OUTPUT FOR THE LAST 12 MONTHS) WRITE 0 AND >>7 IF NONE KG	6 What is the total amount your household has earned from selling/ bartering the [...] for the last 12 months? 1000 VND	7 How many kgs of the output have been retained for consumption ? KG	8 WHAT IS THE VALUE OF THE OUTPUT HARVESTED FOR THE PAST 12 MONTHS? 1000 VND
	X		AMOUNT	CODE					
	39	Citrus fruits							
40	Pineapples								
41	Bananas								
42	Mangoes								
43	Apples								
44	Grapes								
45	Plums								
46	Papayas								
47	Longans, litchis, rambutans								
48	Sapodillas								
49	Custard apples								
50	Jackfruits, durians								
51	Mangosteens								
52	Other fruit trees				X	X		X	
53	Other perennial trees				X	X		X	
54	Breeding trees				X	X		X	
55	Bonsai				X	X		X	

SECTION 41.5. INCOME FROM CROP BY-PRODUCTS

C	1	2	3	4	5
O	Has your household used or sold any [...]	How much has your	What is the amount used as	What is the amount used for	WHAT IS THE TOTAL CROP
D	for 12 months?	household sold for	animal food for your	other purposes in your	BY-PRODUCT VALUE FOR
E	ASK QUESTION 1 FOR ALL KINDS OF BY-PRODUCTS BEFORE STARTING QUESTION 2	the last 12 months ?	household for the	household for the last	THE LAST 12 MONTHS ?
	MARK X IF THE ANSWER IS YES		last 12 months ?	12 months ?	(2 + 3 + 4)
	☐	1000 VND	1000 VND	1000 VND	1000 VND
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		X		
7	Mulberry plant stems		X		
8	Firewood (from agricultural plants)		X		
9	Other crop by-products				

4B1.5T. TOTAL OF QUESTION 5

4B1T. TOTAL OF PLANTING

(4B1.1T+ 4B1.2T +... + 4B1.5T)

SECTION 4B1.6. CROP PLANTING EXPENDITURE

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1		2				
On which of the following has your household spent for growing crops for the past 12 months? (including those purchased, bartered, self-generated, given, excluding collecting and picking ...)		How much has your household spent on the following crops:				
MARK X IF THE ANSWER IS YES		IF NONE, RECORD 0; IF YOU DON'T REMEMBER DETAILS, RECORD "KB", WRITE TOTAL AMOUNT IN THE TOTAL COLUMN				
		a. Rice	b. Starchy and other food crops	c. Industry crops	d. Fruit crops and others, excluding forestry trees	e. TOTAL (a + b + c + d)
		1000 VND	1000 VND	1000 VND	1000 VND	1000 VND
1	Seeds					
2	Saplings					
3	Chemical fertilizers (nitrogenous, phosphat, potassium, NPK, etc) (from Table 4B1.6.1)					
4	Organic fertilizers (seft-provided)					
5	Organic fertilizers (bought)					
6	Pesticides					
7	Herbicides					
8	Small, non-durable tools (sickles,shears,shovels,bamboo baskets ...)					
9	Energy, fuel (electricity, petrol, oil, lubricant, burning fuel...)					
10	Minor repairs, maintenance					
11	Depreciation of fixed assets					
12	Land rental or contracting					
13	Rental of asset, mechnery, equipment and means of transport					
14	Rental of cattle for ploughing					
15	Expense for outside hired laborers					
16	Irrigational fee					
17	Agricultural taxes					
18	Payment for cultivation loan interest					
19	Other costs (postage, advertisement, marketing, production insurance contributions to Plant Protection Fund, field improvement, extension, administrative management, food for working cattle.)					

4B1C. TOTAL EXPENDITURE OF PLANTING (TOTAL OF QUESTION 2E)

SECTION 4B1.6.1 TABLE OF QUANTITY OF CHEMICAL FERTILIZERS USED FOR TYPES OF TREES

NO.	1. Type of chemical fertilizers	2. Rice KG	3. Other staple and food trees KG	4. Industrial trees KG	5. Fruit trees and others, excluding forestry trees KG	6. TOTAL (2 + 3 + 4 + 5) KG
1	Nitrogenous					
2	Phosphat					
3	Potassium					
4	NPK					
5	Other chemical fertilizers					

SECTION 4B2. LIVESTOCK BREEDING

1.Has anyone in your household raised or owned cattle, poultry and pets for the last 12 months?

CÓ..... 1

KHÔNG..... 2 (>>SECTION 4B3)

SECTION 4B2.1. INCOME FROM LIVESTOCK BREEDING

N O.	2 Has your household earned any income following products? MARK X IF THE ANSWER IS YES ASK QUESTION 2 FOR ALL KINDS OF PRODUCTS BEFORE STARTING QUESTION 3	UNIT QU A N T I T Y	3 . What is the amount your household has sold, bartered, used as payment for wage or given as gifts for the last 12 months?		4. What is the amount you have retained for consumption for the past 12 months?		5. What is the amount you have used for other purposes for the past 12 months (inc. semi-processing used as production materials)?		6. WHAT IS THE TOTAL INCOME FROM LIVE STOCK BREEDING FOR THE PAST 12 MONTHS?	
			a. Quantity	b. Value	a. Quantity	b. Value	a. Quantity	b. Value	A. QUANTITY (3a + 4a + 5a)	B. VALUE (3b + 4b + 5b)
			IF NONE WRITE 0 AND >>4	1000 VND	IF NONE WRITE 0 AND >>5	1000 VND	IF NONE WRITE 0 AND >>6	1000 VND		1000 VND
1	Live pig pork	kg								
2	Live buffalo and cow meat	kg								
3	Horses	kg								
4	Sheep, goats	kg								
5	Chickens	kg								
6	Ducks, Thai ducks, geese	kg								
7	Other poultry	kg								
8	Pigs for breed	kg								
9	Buffaloes, oxen, cows for breed	no.			X		X			
10	Other cattle for breed	no.			X		X			
11	Other livestock (bears, deer, rabbits,	x	X		X		X		X	
12	Poultry eggs (chickens, ducks...)	no.								
13	Fresh milk	litre								
14	Silkworm cocoons	kg								
15	Bee's honey (house-raising)	kg								
16	Other livestock (non-slaughtered)	x	X		X		X		X	
17	Other income from breeding	x	X		X		X		X	
18	Livestock breeding by-products	x	X	X	X	X	X	X	X	

TABLE FOR CALCULATING LIVESTOCK FEED VALUE

Used for the interviewer to calculate before filling in question 8 section 4B2.2, livestock breeding cost

Animal	1 Value of self-supply feed 1000 VND	2 Value of feed having been bought 1000 VND	3 TOTAL (1 + 2) 1000 VND
1. Pigs			
2. Buffalos, oxen, cows			
3. Horses			
4. Sheep, goats			
5. Chickens			
6. Ducks, Thai ducks, geese			
7. Other poultry			
8. Bees			
9. Silkworms			
10. Others (specify _____)			

SECTION 4B2.2. LIVESTOCK BREEDING EXPENDITURE

Could you please tell us about your expenditure on livestock breeding for the past 12 months (including those self-generated, bought, bartered or given)

IF NONE, WRITE 0, IF UNABLE TO REMEMBER DETAILS, WRITE KB, IF ONLY ABLE TO REMEMBER THE TOTAL AMOUNT OR SOME DETAILS, WRITE THE TOTAL AMOUNT AND CORRESPONDING COLUMNS, WRITE KB FOR COLUMNS IF UNABLE TO REMEMBER

NO.		7 Livestock breeds 1000 VND	8 Feed COPY THE TOTAL FROM THE CALCULATION TABLE 1000 VND	9 Medicine for cattle, poultry 1000 VND	10 Energy, fuel (electricity petrol, lubricant oil, burning fuel, water...) 1000 VND	11 Depreciation of fixed assets 1000 VND	12 Land rental and contracting 1000 VND	13 Rental of assets, machinery, equipment, means of of production 1000 VND	14 Payment for hired laborers 1000 VND	15 Payment for loan interest for breeding 1000 VND	16 Business taxes 1000 VND	17 Other expenses (non-durable tools; postage; advertising, marketing; insurance;...) 1000 VND	18 TOTAL (7 + 8 + ... + 17) 1000 VND
1	Pigs												
2	Buffalos, cows												
3	Horses												
4	Sheep, goats												
5	Chickens												
6	Ducks, Thai ducks, geese												
7	Other poultry												
8	Bees												
9	Silkworms												
10	Others (specify it ___)												

4B2C. TOTAL EXPENDITURE ON LIVESTOCK BREEDING (TOTAL OF QUESTION 18)

4B2TN. TOTAL INCOME FROM LIVESTOCK BREEDING (4B2T - 4B2C)

SECTION 4B3. AGRICULTURAL SERVICES

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1. Has any of your household members used machines, equipment or tools for farm services for the last 12 months?
(such as ploughing, soil preparation, irrigation, pest and disease control, rice plucking, semi-processing
and other services such as artificial insemination, castration...)

YES..... 1

NO..... 2 (>>SECTION 4B4)

☐
SECTION 4B3.1. INCOME FROM AGRICULTURAL SERVICES

NO.	2. From which of the following activities has your household earned income? MARK X IF THE ANSWER IS YES ASK QUESTION 2 FOR ALL KINDS OF ACTIVITIES BEFORE STARTING QUESTION 3	3. What is the number of operating months for the last 12 months? MONTHS	4. What is the average monthly income? 1000 VND	5. TOTAL INCOME (3 x 4) 1000 VND
	X ↓			
1	Soil preparation			
2	Irrigation			
3	Pest and disease control			
4	Rice plucking, semi-processing			
5	Other services (artificial insemination, castration)			

4B3T. TOTAL OF QUESTION 5

SECTION 4B2.2. EXPENSES ON AGRICULTURAL SERVICES

Could you tell us about your expenditure on agricultural services for the last 12 months (IF NONE WRITE 0, IF UNABLE TO REMEMBER THE DETAILS, WRITE "KB")

NO.	6. On which of the following activities has your household spent? MARK X IF THE ANSWER IS YES ASK QUESTION 6 FOR ALL KINDS OF ACTIVITIES BEFORE STARTING QUESTION 7	7. Expenditure for materials 1000 VND	8. Small, non-durable items 1000 VND	9. Energy fuel (electricity petrol, oil, burning fuels...) 1000 VND	10. Minor repairs, maintenance 1000 VND	11. Fixed assets depreciation 1000 VND	12. Rental of houses, workshops, machines, transportation means 1000 VND	13. Payment for hired outside laborers 1000 VND	14. Payment for loan interest for business and production 1000 VND	15. Business taxes 1000 VND	16. Other expenditure (fees, postage, advertisement, marketing, production insurance ...) 1000 VND	17. TOTAL EXPENDITURE (7 + ... + 16) 1000 VND
	X ↓											
1	Soil preparation											
2	Irrigation											
3	Pest and disease control											
4	Rice plucking, semi-processing											
5	Other services (artificial insemination, castration)											

4B3C. TOTAL OF QUESTION 17

4B3TN. INCOME FROM AGRICULTURAL SERVICES (4B3T - 4B3C)

SECTION 4B4. FORESTRY AND HUNTING, TRAPPING AND DOMESTICATING FOREST ANIMALS AND BIRDS

1. For the last 12 months, has your household had income from planting/managing/protecting/maintaining forests, germinating forestry seedlings, collecting products from forests, harvesting forest trees (bamboos, wood, log,...incl. those from home garden); hunting, domesticating animals; forestry service activities?

YES..... 1

NO..... 2 (>>SECTION 4B5)

☐

SECTION 4B4.1. INCOME FROM FORESTRY AND HUNTING, TRAPPING AND DOMESTICATING FOREST ANIMALS AND BIRDS

2. From which of the following products has your household had income?		3. What is the value of turnover and harvested output for the last 12 months?						4. Of which, what is the value of sales and barter?
ASK QUESTION 2 FOR ALL KINDS OF TREES BEFORE STARTING QUESTION 3		1000 VND						RECORD 0 IF NO SALES OR BARTER
MARK X IF YES ☒		a. Forestry land for production allocated to household	b. Forestry land for production not allocated to household	c. Protective forestry land allocated to household	d. Protective forestry land not allocated to household	e. Other forestry land	f. TOTAL (a+b+c+d+e)	THOUSAND VND
1	Mu oil trees							
2	Cinnamon							
3	Anise							
4	Pine							
5	Varnish trees							
6	Trees for wood							
7	Bamboo							
8	Fan palm trees							
9	Water coconut							
10	Other forestry trees (specify them)							
11	Wood							
12	Forest plantation, protection, maintenance, improvement							
13	Trees for breeding and other products collected from forests							
14	Other forestry services (protection, management...)							

4B4T. TOTAL OF Q 3f:

5. Has your household had income from forestry and hunting, trapping and domesticating forest animals and birds?		6. What is the value of turnover and harvested output for the last 12 months?		7. Of which, what is the value of sales and barter?	
MARK X IF YES ☒		THOUSAND VND		THOUSAND VND	
15	Hunting, trapping, domesticating forestry animals and birds				

SECTION 4B4.2. EXPENDITURE FOR FORESTRY AND HUNTING, TRAPPING AND DOMESTICATING FOREST ANIMALS AND BIRDS

UNIT: 1000 VND

Now could you please provide us with the information on expenses for the products harvested over the last 12 months,

(including self-supply, purchases, barter, given,...)

RECORD 0 IF NO EXPENSES IF UNABLE TO REMEMBER DETAILS, RECORD KB AND RECORD THE TOTAL IN QUESTION 14	1. Seeds, breeds	2. Various types of fertilizers	3. Small, non- durable tools	4. Energy fuel	5. Small repair, maintenance	6. Depreci- ation of fixed assets	7. Land rent and contracting	8. Rent of assets, machi- nery equipment, other means of transportation	9. Hire animals for droughing and pulling	10. Hire laborers from outside	11. Loan interest	12. Business taxes	13. Other expenses	14. TOTAL EXPENSES (1 +...+ 13)
1. Forestry activities														
2. Forestry services	x	x												
4B4C. TOTAL OF QUESTION 14:														
3. Hunting, trapping, domesticating forest animals, birds	x	x												

4B41TN. INCOME FROM FORESTRY (4B4T-4B4C):

4B42TN. INCOME FROM HUNTING, TRAPPING, DOMESTICATING FOREST ANIMALS AND BIRDS (QUESTION 6 CODE 15 - QUESTION 14 LINE 3):

SECTION 4B5. AQUACULTURE

1. Has anyone in your household bred and reared fish, shrimp, and other aquacultural products;
caught aquacultural products from ponds, rivers, streams, seas; or had income from aquacultural service activities?

YES..... 1

NO..... 2 (>>SECTION 4C)

☐
4b5.1. Income from aquaculture

NO.	2. From which of the following products has your household had income? ASK QUESTION 2 FOR ALL KINDS OF PRODUCTS BEFORE STARTING QUESTION 3	MARK X IF THE ANSWER IS YES ☒	3. Which has been sold, bartered, used for payment, used as gifts for the last 12 months?		4. Which has been kept for household consumption for the last 12 months?		5. Which has been used for other purposes for 12 months? (incl.: preliminary processing, used as raw materials,...)		6. WHAT IS THE TOTAL INCOME FROM AQUACULTURE FOR THE LAST 12 MONTHS?	
			a. Quantity IF NOTHING WRITE 0 >>4 KG	b. Value THOUSAND VND	a. Quantity IF NOTHING WRITE 0 >>5 KG	b. Value THOUSAND VND	a. Quantity IF NOTHING WRITE 0 >>6 KG	b. Value THOUSAND VND	A. QUANTITY (3a+4a+5a) KG	B. VALUE (3b+4b+5b) THOUSAND VND
1	Aquacultural raising	X	X	X	X	X	X	X	X	X
1.1	Fish									
1.2	Shrimp									
1.3	Shrimp and fish for breed		X		X		X		X	
1.4	Other aquacultural products (SPECIFY THEM)		X		X		X		X	
2	Aquacultural catching	X	X	X	X	X	X	X	X	X
2.1	Fish									
2.2	Shrimp									
2.3	Other aquacultural products (SPECIFY THEM)		X		X		X		X	
3	Aquacultural services		X		X		X		X	

4B5T. TOTAL OF QUESTION 6B:

SECTION 4B5.2 EXPENDITURE ON AQUACULTURE

Could you please provide us with information about the aquacultural expenditure for the products harvested for the past 12 months (incl. all types of expenses on self-supply, purchase, barter, receiving,...)

TRY TO GET DETAILS AS MUCH AS POSSIBLE, IF NO TURNOVER, WRITE 0, IF DON'T KNOW OR UNABLE TO REMEMBER, WRITE KB, IF ONLY ABLE TO REMEMBER THE TOTAL AMOUNT OR SOME DETAILS, WRITE THE TOTAL AMOUNT AND CORRESPONDING COLUMNS, WRITE KB FOR COLUMNS IF UNABLE TO REMEMBER

C O D E		7. Breeds of aqua- cultural products	8. Feeds	9. Small, non-durable tools	10. Energy, fuel (electricity petrol, rude oil, salt, ice,...)	11. Small repair, maintenance	12. Depreciatio of fixed assets	13. Rent and bid for land use	14. Rent of asset, machinery equipment, other means of transportation	15. Payment for hired labor from outside	16. Payment for loan interest for agricultural activities	17. Business taxes	18. Other expenses, (medicines, fees, freight, ad., marketing, postage, production insurance, ...)	19. TOTAL EXPENDITURE (7 + ... + 18)
		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	Raising													
2	Catching													
3	Services													

4B5C. TOTAL OF Q. 19:

4B5TN. INCOME FROM RAISING, CATCHING AQUACULTURAL PRODUCTS (4B5T-4B5C):

SECTION 4C. NON-AGRICULTURE, NON-FORESTRY, NON-AQUACULTURE BUSINESS AND PRODUCTION TRADES; THE PROCESS OF AGRICULTURAL, FORESTRY, AND AQUACULTURAL PRODUCTS

Could you please provide us with the information about your household's non-agriculture, non-forestry, non-aquaculture business and production trades, the process of agricultural, forestry, and aquacultural products

1. For the last 12 months, has your household done any non-agriculture, non-forestry and non-aquaculture business and production trades, the process of agricultural, forestry and aquacultural products?

YES..... 1

NO..... 2 (>>SECTION 4D)

☐

SECTION 4C.1. INCOME FROM NON-AGRICULTURE, NON-FORESTRY, NON-AQUACULTURE BUSINESS AND PRODUCTION TRADES; THE PROCESS OF AGRICULTURAL, FORESTRY, AND AQUACULTURAL PRODUCTS

ORDER OF TRADE ACTIVITY	2. Please provide us with detailed information on these activities. IF THE HOUSEHOLD HAS MORE THAN 4 ACTIVITIES, ALL ACTIVITIES FROM ACTIVITY 4 WILL BE WRITTEN IN ONE LINE		3. Who is the manager/controller of almost information of this activity?	4. For how many months was this activity under operation for the past 12 months?	5. During these months, on average, how many days per month was this activity under operation?	6. Do you or the members of your household own all of this business?	7. How many households including yours own this business?	8. What is the percentage of income from this business received by your household? WRITE 100 IF IN QUEST 6 CODE 1 IS APPLIED
	ACTIVITY DESCRIPTION	BRANCH CODE	CODE	MONTHS	DAYS	YES.....1(>>8) NO...2	HOUSEHOLDS	%
1								
2								
3								
4								

ORDER OF TRADE ACTIVITY	9. Where is this activity taken place?			10. What is the total number of laborers doing this activity during the last 12 months? (incl. laborer as member of household)	11. In which how many are members of households?	12. How many laborers are paid?	13. In which, how many laborers paid are member of household?	14. When is this activity taken place?	15. Does this activity have business license? (IF IT IS TRADING ACTIVITY >>17) YES, ENTERPRISE.....1 YES, PRIVATE TRADING.....2 NO.....3	16. Is the product of this activity for selling, bartering or supplying services?
	FIRST	SECOND	THIRD	NUMBER	NUMBER	NUMBER	NUMBER	YAER (WRITE 4 DIGITS)	YES.....1 NO...2 (>>21)	
1										
2										
3										
4										

SECTION 4C2. EXPENDITURE FOR FROM NON-AGRICULTURE, NON-FORESTRY, NON-AQUACULTURE BUSINESS AND PRODUCTION TRADES; THE PROCESS OF AGRICULTURAL, FORESTRY AND AQUACULTURAL PRODUCTS (CONT.)

O R D E R	17. For months business under operation for past 12 months, what was the average monthly revenue of this business?	18. WHAT IS THE REVENUE FOR THE PAST 12 MONTHS> (C4 X C17) (IF IT IS TRADING ACTIVITY >>23)	19. Over the past 12 months, have you exchanged goods and services produced by this business for other goods and services?	20. What is the value of exchanged goods and services for the past 12 months?	21. Has your household consumed any goods and services produced by this business for the past 12 months?	22. What is the value of goods and services consumed by your household for the past 12 months?	23. Has your household consumed or sold and by-products produced by this business for the past 12 months?	24. What is the value of by-products consumed or sold by your household for the past 12 months?	25. TOTAL INCOME (C18+C20+C22+C24)	25A. TOTAL INCOME ALLOCATED FOR HOUSEHOLD ((C18 x C8):100) + (C20 + C22 + C24)
	1000 VND	1000 VND	CÓ.....1 KHÔNG.....2 (>>21)	1000 VND	YES.....1 NO.....2 (>>23)	1000 VND	YES.....1 NO.....2 (>>25)	1000 VND	1000 VND	1000 VND
1										
2										
3										
4										

NOTE: REVENUE OF TRADING ACTIVITIES DOES NOT INCLUDE ORIGINAL VALUE OF GOODS CAPITAL

4CTT. OTAL INCOME FROM ALL ACTIVITIES (TOTAL QUESTION 25 OF ALL ACTIVITIES)

1000 VND

4CT. TOTAL INCOME FROM ALL ACTIVITIES ALLOCATED FOR THE HOUSEHOLD (TOTAL QUESTION 25A OF ALL ACTIVITIES)

1000 VND

SECTION 4C2. EXPENDITURE FOR FROM NON-AGRICULTURE, NON-FORESTRY, NON-AQUACULTURE BUSINESS AND PRODUCTION TRADES; THE PROCESS

OF AGRICULTURAL, FORESTRY AND AQUACULTURAL PRODUCTS

		MÃ NGÀNH		MÃ NGÀNH		MÃ NGÀNH		MÃ NGÀNH
	26. Could you pls. provide us with the information on expenditure for trading and service activities for the last 12 months on each of the following items? (including self-supply, purchase, bartering, receiving,...) Just count generated expenditure for products which were sold, consumed, bartered, supplied for services MARK X IF THE ANSWER IS YES ASK QUESTION 26 FOR ALL ITEMS BEFORE STARTING QUESTION 27	HOẠT ĐỘNG THỨ 1	26	HOẠT ĐỘNG THỨ 2	26	HOẠT ĐỘNG THỨ 3	26	HOẠT ĐỘNG THỨ 4
		27. Trung bình 1 tháng hoạt động trong 12 tháng qua, chi cho [...] là bao nhiêu?	28. CHI CHO [...] TRONG 12 THÁNG QUA? (C4 X C27)	27. Trung bình 1 tháng hoạt động trong 12 tháng qua, chi cho [...] là bao nhiêu?	28. CHI CHO [...] TRONG 12 THÁNG QUA? (C4 X C27)	27. Trung bình 1 tháng hoạt động trong 12 tháng qua, chi cho [...] là bao nhiêu?	28. CHI CHO [...] TRONG 12 THÁNG QUA? (C4 X C27)	27. Trung bình 1 tháng hoạt động trong 12 tháng qua, chi cho [...] là bao nhiêu?
		1000 ĐỒNG	1000 ĐỒNG	1000 ĐỒNG	1000 ĐỒNG	1000 ĐỒNG	1000 ĐỒNG	1000 ĐỒNG
1	Materials, sub-materials							
2	Small and non-durable tools							
3	Electricity							
4	Water							
5	Gasoline, oil, petrol, lubricants, burning fuels.....							
6	Small repair and maintenance							
7	Fixed asset depreciation							
8	Rent of land, workshops, shops, machines, and other production means							
9	Transportation (rent and fee)							
10	Labor costs (wage, salary; social insurance; health insurance; trade union fees;...)							
11	Loan interest							
12	Taxes, fees, and other fees considered as taxes							
13	Expenditure on water and solid sewage disposal							
14	Other expenditures (postage, transportation, ad., marketing, model purchases, design, production insurance,...)							
15	TOTAL EXPENDITURE (1 + 2 +...+ 14)							
16	TOTAL EXPENDITURE ALLOCATED FOR THE HOUSEHOLD (ITEM 15 x Q 8):100							

NOTE: EXPENDITURE OF TRADING ACTIVITIES DOES NOT INCLUDE ORIGINAL VALUE OF GOODS CAPITAL.

4CCT. TOTAL EXPENDITURE OF ALL ACTIVITIES (TOTAL ITEM 15 FOR ALL ACTIVITIES)

4CC. TOTAL EXPENDITURE OF ALL ACTIVITIES ALLOCATED FOR THE HOUSEHOLD (TOTAL ITEM 16 FOR ALL ACTIVITIES)

4CTNT. INCOME FROM ACTIVITIES (4CTT-4CCT)

4CTN. INCOME FROM ACTIVITIES THE HOUSEHOLD RECEIVED (4CT-4CC)

	1000 VND
	1000 VND
	1000 VND
	1000 VND

SECTION 4D. OTHER INCOME

306

Could you please provide us with information about your household's other income?

SECTION 4D1. OTHER INCOMING MONEY WHICH IS CONSIDERED AS INCOME

1. For the past 12 months, has anyone in your household received money or goods from the following sources?		2. What is the value your household has received for the past 12 months?	
C O D E	ASK QUESTION 1 FOR ALL INCOME SOURCES BEFORE STARTING QUESTION 2 MARK X IF THE ANSWER IS YES		1000 VND
	☒		
101	Remittance and value of in-kind presents from people overseas who are not household members		
102	Domestic remittance and value of in-kind presents from people who are not household members		
103	Pension, one-time sickness and job loss allowance		
104	Social welfare allowance		
105	Lump sum retirement allowance		
106	Other social welfare allowance (invalids, relatives of revolutionary martyr, ...)		
107	Allowance for recovery from disaster, fire		
108	Income from various types of insurance		
109	Interest of savings, shares, bonds, loans		
110	Income from leasing workshops, machines, assets, equipment... that is not yet counted in trade and business production parts (excluded amount for land rental)		
111	Income and support from charity organizations, associations, or firms		
112	Others (Specify them _____)		

4D1TN. TOTAL OF QUESTION 2:

SECTION 4D2. OTHER INCOMING MONEY WHICH IS NOT CONSIDERED AS INCOME

1. For the past 12 months, has anyone in your household received money or cash or goods from the following sources?		2. What is the value your household has received for the past 12 months?	
C O D E	ASK QUESTION 1 FOR ALL SOURCES BEFORE STARTING QUESTION 2 MARK X IF THE ANSWER IS YES		1000 VND
	☒		
201	Selling means of production (working cattle, reproductive pigs, machines, equipment, workshops), houses, assets, exchanging lands,...		
202	Selling gold, silver, precious stone, jewelry		
203	Withdrawal from savings, stocks, obtaining debts...		
204	Borrowing on interest, advance payment		
205	Others (Specify them)		

4D2T. TOTAL OF QUESTION 2:

CONVERSION RATES FOR FOODS AND OTHER CONSUMER'S GOODS

A. Staple food

- 1 kg of rice paddy ~ 0.7 kg of rice
- 1 kg of rice powder ~ 0.7 kg of rice
- 3 kgs of fresh sweet potato or cassava
~ 1 kg of dried sweet potato or casava

B. Foodstuff

- 1 kg of pig fat liveweight ~ 0.7 kg of processed liquid pig fat
- 1 kg of chicken liveweight ~ 0.85 kg of chicken without internal organs
- 1 kg of pig liveweight ~ 0,7 kg of pig without internal organs = 0,6 kg of pig without organs, bones and head
- 1 kg of cow liveweight ~ 0,4 kg of cow without internal organs
- 1 kg of buffalo liveweight ~ 0.3 kg of buffalo without internal organs
- 3 kgs of fresh shrimp or fish ~ 1 kg of dried shrimp or fish
- 1 kg of molasses ~ 0.5 kg of brown sugar
- 250 grams of powdered milk ~ 1 can of condensed milk (395-400g)
- 5 kgs of fresh tea buds~ 1 kg of dried tea buds
- 4,6 kgs of fresh coffee beans ~ 1kg of dried coffee beans
~ 0.7kg powder coffee

SECTION 5. EXPENDITURE

SECTION 5A. EXPENDITURE ON FOODS AND DRINKS

SECTION 5A1. EXPENDITURE ON FOODS AND DRINKS DURING HOLIDAYS

Now, could you please provide us with information about your household's expenditure during holidays: Lunar New Year, Christmas, National Day, Mid-Autumn Festival, First Full Moon Festival
(TRADITIONAL HOLIDAYS OF ETHNIC MINORITIES SUCH AS CHAUL CHNAM THMEY OF THE KHMERS..)

C O D E	1 Which of the following things has your household consumed during holidays for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING QUESTIONS 2-3	Q U A N T I T Y UNIT	2 Bought or bartered		3 Self supplied or received	
			A Quantity? [...] ? IF NONE, WRITE 0 AND >> 3	B Value? THOUSAND VND	A Quantity? IF NONE, WRITE 0 AND >>NEXT ITEM	B Value? THOUSAND VND
101	Fragrant, specialty rice?	Kg				
102	Glutinous rice ?	Kg				
110	Pork? (inedible parts removed)	Kg				
111	Beef?	Kg				
112	Buffalo's meat?	Kg				
113	Chicken?	Kg				
114	Duck and other poultry meat?	Kg				
115	Other meat? (goats, dogs, lamb, wild beasts, birds,...)	X	X		X	
116	Processed meat? (meat pies, fried meat pies, sausages...)	X	X		X	
118	Fresh fish, shrimp?	Kg				
120	Other seafoods (crabs, shell-fish..)	X	X		X	
121	Chicken or duck eggs?	No.				
124	Beans of all kinds?	Kg				

C O D E	1 Which of the following things has your household consumed during holidays for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING QUESTIONS 2-3	Q U A N T I T Y UNIT	2 Bought or bartered		3 Self supplied or received	
			A Quantity? [...] ? IF NONE, WRITE 0 AND >> 3	B Value? THOUSAND VND	A Quantity? IF NONE, WRITE 0 AND >>NEXT ITEM	B Value? THOUSAND VND
134	Fruit?	X	X		X	
139	Sugar, molasses?	Kg				
140	Cakes, candy, jam?	Kg				
144	Liquor of all kinds?	litre				
145	Beer of all kinds?	litre				
146	Canned or bottled refreshment?	litre				
151	Coffee?	Kg				
153	Tea?	Kg				
154	Cigarettes, tobacco	X	X		X	
156	Outdoors eating	X	X		X	
157	Other things (processed food, spices, additives, ...)	X	X		X	

5A1CT. TOTAL:

(Q 4+ Q 5)

4. TOTAL OF Q 2B

(CODE 101 - 157)

5. TOTAL OF Q 3B

(CODE 101 - 157)

SECTION 5A2. DAILY EXPENDITURE ON FOODS AND DRINKS

		BOUGHT OR BARTERED						SELF-GENERATED OR GIVEN			
		2	3	4	5	6	7	8	9	10	
C O D E	1 Apart from holidays, feasts and rituals, which of the following things has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-10	Q U A N T I T Y	2 For how many months, apart from holidays' time, has your household bought or bartered? IF NONE, WRITE 0 AND >>7	3 How many times a on average month has your household done it?	4 What is the average amount each time of buying or bartering?	5 What is the average value each time of buying or bartering?	6 What is value bought or bartered for the last 12 months? THE INTERVIEWER CALCULATES BY HIM (HER)SELF COLUMN 6 FOR ROWS WITHOUT 'X' MARK FOR QUESTIONS 3,4,5 (QU 2 X QU 3 X QU 5)	7 Has your household consumed any self-generated or given goods for the last 12 months? YES 1 NO 2 (>> NEXT ITEM)	8 For how many months has your household consumed any self-generated or given goods?	9 What is the quantity of self-generated or given goods your household has consumed?	10 What is the value of self-generated or given goods your household has consumed? >> NEXT ITEM
		UNIT	MONTHS	TIMES	QUANTITY	THOUSAND VND	THOUSAND VND		MONTH	QUANTITY	THOUSAND VND
101	Ordinary rice? (incl. fragrant, specialty)	Kg									
102	Glutinous rice ?	Kg									
103	Corn/maize? (as kernels)	Kg									
104	Cassava? (as fresh)	Kg									
105	Various types of potatoes? (as fresh)	Kg									
106	Bread, wheat or wheat flour?	Kg									
107	Noodle, pho noodle, instant rice soup?	Kg									
108	Rice noodle?	Kg									
109	Vermicelli?	Kg									
110	Pork? (inedible parts removed)	Kg									
111	Beef?	Kg									
112	Buffalo's meat?	Kg									
113	Chicken?	Kg									
114	Duck and other poultry meat?	Kg									
115	Other meat? (goats, dogs, lamb, wild beasts, birds,...)	X		X	X	X				X	
116	Processed meat?	X		X	X	X				X	
117	Animal fat, vegetable oil	Kg									

SECTION 5A2. DAILY EXPENDITURE ON FOODS AND DRINKS (CONTINUED)

		BOUGHT OR BARTERED					SELF-GENERATED OR GIVEN				
1		Q	2	3	4	5	6	7	8	9	10
Apart from holidays, feasts and rituals, which of the following things has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES		UNIT	For how many months, apart from holidays' time, has your household bought or bartered.....? IF NONE WRITE 0 >>7	How many times a month on average has your household done it?	What is the average amount each time of buying or bartering?	What is the average value each time of buying or bartering?	What is value bought or bartered for the last 12 months? THE INTERVIEWER CALCULATES BY HIM (HER)SELF COLUMN 6 FOR ROWS WITHOUT "X" MARK FOR QUESTIONS 3,4,5 (QU 2 X QU 3 X QU 5)	Has your household consumed any self-generated or given goods for the last 12 months? YES 1 NO 2 (>> NEXT ITEM)	For how many months has your household consumed any self-generated or given goods?	What is the quantity of self-generated or given goods your household has consumed?	What is the value of self-generated or given goods your household has consumed? >> NEXT ITEM
ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-10			MONTHS	TIMES	QUANTITY	THOUSAND VND	THOUSAND VND		MONTH	QUANTITY	THOUSAND VND
118	Fresh fish, shrimp?	Kg									
119	Dried and processed fish and shrimp?	Kg								X	
120	Other seafoods (crab, snails..)?	X		X	X	X					
121	Chicken or duck eggs?	no.									
122	Tofu?	Kg									
123	Peanuts, sesame seeds?	Kg									
124	Beans?	Kg									
125	Various kinds of fresh pea ?	Kg									
126	Water morning glory?	Kg									
127	Kohlrabi?	Kg									
128	Cabbage?	Kg									
129	Tomatoes?	Kg									
130	Other vegetables? (calabash, pumpkin, cucumber)	X		X	X	X				X	
131	Oranges?	Kg									
132	Bananas?	Kg									
133	Mangoes?	Kg									
134	Other fruits ? (rambutan, papaya, melon...)	X		X	X	X				X	
135	Fish sauce and dipping sauce?	litre									

SECTION 5A2. DAILY EXPENDITURE ON FOODS AND DRINKS (CONTINUED)

		BOUGHT OR BARTERED					SELF-GENERATED OR GIVEN				
		2	3	4	5	6	7	8	9	10	
C O D E	1	Q	2	3	4	5	6	7	8	9	10
	Apart from holidays, feasts and rituals, which of the following things has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-10	For how many months, apart from holidays' time, has your household bought or bartered.....? IF NONE WRITE 0 >>7 UNIT	How many times a month on average has your household done it? TIMES	What is the average amount each time of buying or bartering? QUANTITY	What is the average value each time of buying or bartering? THOUSAND VND	What is the value bought or bartered for the last 12 months? THE INTERVIEWER CALCULATES BY HIM (HER)SELF COLUMN 6 FOR ROWS WITHOUT "X" MARK FOR QUESTIONS 3,4,5 (QU 2 X QU 3 X QU 5) THOUSAND VND	Has your household consumed any self-generated or given goods for the last 12 months? YES 1 NO 2 (>> NEXT ITEM)	For how many months has your household consumed any self-generated or given goods? MONTH	What is the quantity of self-generated or given goods your household has consumed? QUANTITY	What is the value of self-generated or given goods your household has consumed? THOUSAND VND	
	136 Salt? Kg										
	137 Spices, powdered soup	X	X	X	X					X	
	138 Food seasoning?	X	X	X	X					X	
	139 Sugar, molasses?	Kg									
	140 Cakes, jams, sweets	Kg									
	141 Condensed milk, powdered milk	Kg									
	142 Icecreams, yoghurt?	X	X	X	X					X	
	143 Fresh milk?	litre									
	144 Liquor of all kinds?	litre									
	145 Beer?	litre									
	146 Bottled & canned refreshment ?	litre									
	147 Bottled, canned non-carbonated fruit juices?	litre									
	148 Bottled & canned purified water	litre									
	149 Bottled & canned tonic water	litre									

SECTION 5A2. DAILY EXPENDITURE ON FOODS AND DRINKS (END)

		BOUGHT OR BARTERED						TỰ TỨC, NHẬN ĐƯỢC			
1		Q	2	3	4	5	6	7	8	9	10
Apart from holidays, feasts and rituals, which of the following things has your household consumed for the last 12 months? in the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-10		For how many months, apart from holidays' time, has your household bought or bartered.....? IF NONE WRITE 0 >>7	How many times a month on average has your household done it?	What is the average amount each time of buying or bartering?	What is the average value each time of buying or bartering?	What is the value bought or bartered for the last 12 months? THE INTERVIEWER CALCULATES BY HIM (HER)SELF COLUMN 6 FOR ROWS WITHOUT "X" MARK FOR QUESTIONS 3,4,5 (QU 2 X QU 3 X QU 5)	Has your household consumed any self-generated or given goods for the last 12 months? YES 1 NO 2 (>> NEXT ITEM)	For how many months has your household consumed any self-generated or given goods?	What is the quantity of self-generated or given goods your household has consumed?	What is the value of self-generated or given goods your household has consumed?	
		UNIT	MONTHS	TIMES	QUANTITY	THOUSAND VND	THOUSAND VND		MONTH	QUANTITY	THOUSAND VND
150	Instant coffee ?	X		X	X	X				X	
151	Powdered coffee ?	Kg								X	
152	Powdered tea/instant tea?	X		X	X	X				X	
153	Dried tea?	Kg								X	
154	Cigarettes, tobacco?	X		X	X	X				X	
155	Betel leaf, areca nut, lime?	X		X	X	X				X	
156	Outdoors meals (breakfast, lunch, dinner)	X		X	X	X		X	X	X	
157	Others?	X		X	X	X				X	

5A2CT. TOTAL:
(Q 11 + Q 12)11. TOTAL OF Q 6:
(CODE 101 - 157)12. CỘNG CÂU 10:
(MÃ 101 ĐẾN 157)

SECTION 5B. DAILY NON-FOOD EXPENDITURE, AND OTHER EXPENDITURES

SECTION 5B1. EXPENDITURE ON DAILY CONSUMPTION

	1 Which of the following items has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-5	2 For how many months has your household spent on/ bought.....? If none, write 0 >>5 months	3 What is the value of spending/ buying each month? thousand vnd	4 What is the value of spending/buying for the last 12 months? (q 2 x q 3) thousand vnd	5 What is the value you have self-generated or been given for the last 12 months? IF NONE WRITE 0 THOUSAND VND
201	Allowance for children?	☒			X
202	Coal, firewood, rice husk, sawdust... ?				
299	in which: agricultural by-products (straw, thatch, leaves of sugarcane, body of maize, jute, rush...)				
203	Gas?				
204	Parafin ? (lighting, cooking)				
205	Gasoline, lubricant and grease for cars, motorcycle, other equipments?				
206	Parking fees? (bicycles, motorbikes, cars)				X
207	Matches, candles, flint, lighters?				
208	Washing powder softening liquid ?				
209	Dish washing liquid, house cleaning liquid?				

	1 Which of the following items has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING Q. 2-5	2 For how many months has your household spent on/ bought.....? IF NONE, WRITE 0 >>5 MONTHS	3 What is the value of spending/ buying each month? THOUSAND VND	4 What is the value of spending/ buying for the last 12 months? (Q 2 X Q 3) THOUSAND VND	5 What is the value you have self-generated or been given for the last 12 months ? IF NONE WRITE 0 THOUSAND VND
210	Shampoo, conditioning?	☒			
211	Bath soap, lotion				
212	Cream, powder & lipsticks				
213	Toothpaste, tooth brushes?				
214	Tissue/blades				
215	Books, newspapers, magazines?				
216	Flowers?				
217	Entertainment? (cinema, music, video, sports)				
218	Lottery?				
219	Items for worship?				
220	Haircut, hairdressing?				
221	Other daily expenses				

6.TOTAL OF Q 4

(CODE 201- 221)

7.TOTAL OF Q 5

(CODE 201- 221)

5B1CT. TOTAL:
(Q 6 + Q 7)

SECTION 5B2. ANNUAL CONSUMPTION EXPENDITURE

	1 Which of the following items has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING QUESTION 2-3	2 What is the value of spending/ buying for the last 12 months? IF NONE WRITE 0 THOUSAND VND	3 What is the value you have self-generated or been given for the last 12 months? IF NONE WRITE 0 THOUSAND VND
C O D E			
301	Textile materials of all kind?		
302	Ready-made clothing (incl. underwear)?		
303	Mosquito net and netting?		
304	Face towels, scarves?		
305	Rush mats, blankets, bed sheets, pillows, table cloth, curtains		
306	Other garments? (thread, socks...)		
307	Tailoring or laundry service?		
308	Shoes, sandals, wooden clogs?		
309	Nylon sheeting, hats, umbrellas?		
310	Electric devices: light bulbs, electric wire, plugs, fuse?		
311	Earthenware, porcelain and glass: bowls, plates, teapots and cups,...		
312	Pans, pots, bins, buckets, basins?		
313	Thermos?		
314	Bags and baskets?		
315	Flashlights and batteries for lighting, TV, radios?		
316	Cradles, hammocks, prams?		
317	Other household items? (excluding durable goods)- (Specify it--)		

	1 Which of the following items has your household consumed for the last 12 months? MARK X IF THE ANSWER IS YES ASK QUESTION 1 FOR ALL ITEMS BEFORE STARTING QUESTION 2-3	2 What is the value of spending/ buying for the last 12 months? IF NONE WRITE 0 THOUSAND VND	3 What is the value you have self-generated or been given for the last 12 months? IF NONE WRITE 0 THOUSAND VND
C O D E			
318	Bicycle tyres, tubes and spare parts?		
319	Automobile tyres, tubes and spare parts?		
320	Maintenance and repairs of household appliances		
321	Travel fees (boat, bus, train, taxi, car...)?		
322	Pictures, photos, bonsai?		
323	Sports instruments?		
324	Toys?		
325	Envelopes, stamps, telephone, postage?		
399	The Internet		
326	Internet		
327	Cosmetic surgery, body building?		
328	Domestic excursions, holidays?		
329	Foreign excursions, holidays?		
330	Jewelry, watches, glasses?		
331	Other cultural activities?		
332	Hiring servants for the family?		
333	Other annual expenses (specify it)		

4. TOTAL OF Q 2
(CODE 301 - 333)5. TOTAL OF Q 3
(CODE 301 - 333)5B2CT. TOTAL
(Q 4 + Q 5)

SECTION 5B3. OTHER SPENDING THAT IS CONSIDERED AS HOUSEHOLD EXPENDITURE

1		2	
C	Which of the following things has your household spent on for the last 12 months?		What is the value you have spent on [...] for the past 12 months?
D	MARK X IF THE ANSWER IS YES		
E	ASK QUESTION 1 FOR ALL BEFORE STARTING QUESTION 2	☒	THOUSAND VND
400	Fee, administrative and legal service for life		
401	Contributions to various funds (natural disaster relief funds, charity funds, poverty funds, study encouragement funds...)		
402	Money paid in replacement of compulsory public labor		
403	All kinds of taxes (excl. production taxes)		
404	Wedding party of household?		
405	Funerals and death anniversaries of household members?		
406	Entertainment and parties (to celebrate birthdays, house warming, reception...)		
407	Gifts, donation, support,... (in cash and in kind)		
499	in which: cost for persons who used to be household member to study or be medically treated overseas		
408	Other expenses (Specify it _____)		

5B3CT. TOTAL (Q 2):

(CODE 400 - 408)

SECTION 5B4. OTHER SPENDING THAT IS NOT CONSIDERED AS HOUSEHOLD EXPENDITURE

1		2	
C	Which of the following things has your household spent on for the last 12 months?		What is the value you have spent on [...] for the past 12 months?
D	MARK X IF THE ANSWER IS YES		
E	ASK QUESTION 1 FOR ALL BEFORE STARTING QUESTION 2	☒	THOUSAND VND
501	Debt repayment, reimbursement, advance payment? (incl. payment for loan interest) ?		
502	Lending, contributing to revolving credit groups, buying shares ?		
503	Buying gold, silver, gemstones, foreign currency for savings?		
504	Depositing in savings accounts		
505	Buying life and life security insurance		
506	Other insurances (excl. life, life security and healthcare insurance)		
507	Incomplete large investments? (Incomplete houses, production workshops)		
508	Others? (specify it _____)		

5B4C. TOTAL (Q 2):

(CODE 501 - 508)

SECTION 6. FIXED ASSETS AND DURABLE APPLIANCES

1. Could you please let us know if you have any of the following things?

CO DE	ASSETS	MARK X IF YES
1	Perennial crop gardens	
2	Aquacultural farms	
3	Fish/shrimp-rearing cages/rafts	
4	Land for doing other business	
5	Drawing, ploughing and breeding cattle	
6	Breeding pigs	
7	Basic herds of poultry and cattle	
8	Breeding facilities	
9	Feed grinding machines	
10	Rice milling machines	
11	Grain harvesting machines	
12	Pesticide sprayers	
13	Houses and workshops	
14	Shops	
15	Other production facilities	
16	Cars	
17	Tractors of all kinds	
18	Trailers	
19	Tractor ploughs	
20	Motorbikes	
21	Bicycles	
22	Carts	
23	Motor boats, ferries ...	
24	Rowing boats, ferries..	
25	Other means of transportation	
26	Lathes and welding and milling machines	
27	Punchers	
28	Wooden sawing machines	
29	Pumps	
30	Power generators	
31	Printers, photocopiers	
32	Fax machines	

CO DE	ASSETS	MARK X IF YES
33	Telephone sets	
34	Mobilephones	
35	Sewing, weaving, embroidering machines	
36	Other machines and equipment	
37	Fishing net	
38	Durable containers for storage	
39	Other specific equipments	
40	Video cassette players	
41	Color T.V sets	
42	Black and white T.V sets	
43	Multi-tier stereos	
44	Radios/Cassette players	
45	Recorders/Disc players	
46	Computers	
47	Cameras, camcorders	
48	Refrigerators, freezers	
49	Air-conditioners	
50	Washing machines and driers	
51	Electric fans	
52	Water heaters	
53	Gas cookers	
54	Electric cookers, rice cookers, pressurised cookers	
55	Trollers of all kinds	
56	Wardrobes of all kinds	
57	Beds	
58	Tables, chairs, sofas ...	
59	Vacuum cleaners, water filters	
60	Microwaves, baking stoves	
61	Fruit blenders, juicers	
62	Other valuable things (Antiques, pianos, dressing tables...) (Specify it _____)	

SECTION 6. FIXED ASSETS (CONTD.)

R O W N U M B E R	2 Name of assets	3 What is the quantity? INTERVIEWER RECORDS THIS QUESTION ONLY IF THERE ARE MANY ASSETS OF THE SAME TYPE, SAME VALUE, AND PURCHASED AT THE SAME	4 When did you purchase or receive it? FULLY FILL IN THE YEAR WITH FOUR DIGITS IF BOUGHT WITHIN THE LAST 12 MONTHS, RECORD BOTH MONTH AND YEAR		5	6
			CODE	TIME	MONTH	YEAR
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

7. How much has your household spent on major repair of fixed assets for the last 12 months?

If none, write 0

thousand vnd

8. Total spending on fixed assets for the last 12months

If none, write 0

thousand vnd

R O W N U M B E R	2 Name of durable appliances	CODE	3 What is the quantity? INTERVIEWER RECORDS THIS QUESTION ONLY IF THERE ARE MANY ASSETS OF THE SAME TYPE, SAME VALUE, AND PURCHASED AT THE SAME TIME	4 When did you buy or receive it? FULLY FILL IN THE YEAR WITH FOUR DIGITS IF BOUGHT WITHIN THE LAST 12 MONTHS, RECORD BOTH MONTH AND YEAR		5 What was the value when purchasing or receiving? THOUSAND VND	6 What is the value at the current price? THOUSAND VND
				MONTH	YEAR		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							

7. TOTAL OF SPENDING ON APPLIANCES FOR THE LAST 12 MONTHS?

IF NONE, WRITE 0

THOUSAND VND

SECTION 7. ACCOMMODATION

319

Now, please provide us with information about your accommodation?

1. How many houses/flats is your household actually living in?

no house/flat, write 0 >> 26

NUMBER OF
HOUSES/FLATS

2. What is the total living area?

Including bedrooms, dining rooms, living rooms, study rooms, playing rooms

Excluding bathrooms, toilets, kitchens, storerooms, area for business activities

ATTICS ARE CALCULATED AS 50% OF THE AREA.

Sqm

3. What type of the main house are you living in?

(THE INTERVIEWER SHOULD COMBINE WITH OBSERVATIONS)

VILLAS

1

STRONG HOUSES WITH A PRIVATE KITCHEN AND BATHROOM/TOILET 2

STRONG HOUSES WITH A SHARED KITCHEN OR BATHROOM/TOILET

3

SEMI-PERMANENT HOUSES

4

SHIFT-MADE AND OTHER TYPES OF HOUSES.....

5

4. How long has your household been living here?

Since 2000 backwards >>6

YEAR

5. Before that, what type of house did you live in?

VILLAS.....

1

STRONG HOUSES WITH A PRIVATE KITCHEN AND BATHROOM/TOILET 2

STRONG HOUSES WITH A SHARED KITCHEN OR BATHROOM/TOILET

3

SEMI-PERMANENT HOUSES

4

SHIFT-MADE AND OTHER TYPES OF HOUSES.....

5

6. Does your household own this residence? (in-kind or in cash)

YES, FULLY.....1

YES, PARTLY.....2

NO.....3

7. Does your household have to pay rent for this residence?

YES.....1

NO.....2(>>12)

8. To whom does your household pay the rent?

THE STATE 1

RELATIVES 2

PRIVATE LANDLORDS.....3

OTHERS (SPECIFY IT:.....).....4

9. How much has your household paid for the last 12 months?

(including in cash and in-kind)

THOUSAND
VND

10. How many months has the rent been paid for?

NUMBER OF
MONTHS

11. For how many months of the last 12 months has your household lived in that rented house/flat?

NUMBER OF
MONTHS

12. At the current price, how much does the house your household is living in cost?

THOUSAND
VND

13. Apart from this residence, do you have any other land plots or houses/flats?

YES.....1

NO.....2(>>19)

14. Do you have any income from leasing those land plots or houses/flats?

YES.....1

NO.....2(>>18)

15. For the last 12 months, how much have you earned from land or house/flat leasing?

(in cash and in-kind)

THOUSAND
VND

16. How many months has this sum been paid for?

NUMBER OF
MONTHS

SECTION 7. ACCOMMODATION (CONTINUED)

320

17. For how many months has your household rented out those land plots/houses?

	NUMBER OF
	MONTHS

18. At the current price, how much do those land plots/houses cost?

	THOUSAND
	VND

19. Of the land plots/houses your household is living in, is there any that your household purchased?

YES..... 1	
NO..... 2(>>22)	

20. When is your latest purchase?

Before the last 12 months>>22	month		YEAR	

21. How much has your household paid for it for the last 12 months?

	THOUSAND
	VND

22. Of the houses your household has been building, has any been finalised for the last 12 months?

YES.....1.	
NO..... 2(>>24)	

23. What is the cost of its building?

	THOUSAND
	VND

23a. What is the cost for the last 12 months alone ?

	THOUSAND
	VND

24. What is the cost of major residence repair or upgrading for the last 12 months?
IF NONE WRITE 0

	THOUSAND
	VND

25. What is the cost of minor house repair for the past 12 months (incl. painting, white-wash...)
IF NONE WRITE 0

	THOUSAND
	VND

26. What type is the main source of cooking/drinking water of your household?

PRIVATE TAP WATER.INSIDE THE HOUSE.....	1(>>28)
PRIVATE TAP WATER.OUTSIDE THE HOUSE.....	2(>>28)
PUBLIC TAP WATER.....	3(>>28)
WATER PUMPED FROM DEEP DRILL WELLS.....	4
WATER FROM HAND-DUG AND REINFORCED WELLS.....	5
WATER FROM HAND-DUG, NON-REINFORCED AND COVERED WELLS.....	6
PROTECTED SPRING SOURCES	7
UNPROCTED SPRING SOURCES	8
RAIN WATER.....	9(>>28)
BOUGHT WATER (IN TANK, BOTTLE).....	10(>>28)
Small water tank	11
Water tank	12(>>28)
RIVERS, LAKES, PONDS.....	13
OTHERS (SPECIFY IT.....)	14

27. Do you use a filter or chemicals to purify your cooking/drinking water?

YES.....	1	
NO.....	2	

28. Does your household often boil drinking water?

YES, ALWAYS.....	1	
YES, USUALLY.....	2	
YES, SOMETIMES.....	3	
YES, RARELY.....	4	
NEVER.....	5	

29. What type is the main source of water for daily use in your household?

PRIVATE TAP WATER.INSIDE THE HOUSE.....	1(>>31)
PRIVATE TAP WATER.OUTSIDE THE HOUSE.....	2(>>31)
PUBLIC TAP WATER.....	3(>>31)
WATER PUMPED FROM DEEP DRILL WELLS.....	4
WATER FROM HAND-DUG AND REINFORCED WELLS.....	5
WATER FROM HAND-DUG, NON-REINFORCED AND COVERED WELLS.....	6
PROTECTED SPRING SOURCES	7
UNPROCTED SPRING SOURCES	8
RAIN WATER.....	9(>>31)
BOUGHT WATER (IN TANK, BOTTLE).....	10(>>31)
Small water tank	11
Water tank	12(>>31)
RIVERS, LAKES, PONDS.....	13
OTHERS (SPECIFY IT.....)	14

SECTION 7. ACCOMMODATION (LAST PART)

30. Do you use a filter or chemicals to purify water for daily life use?

yes..... 1
no..... 2

31. Does your household have to pay for water of daily life use?

YES..... 1
NO..... 2(>>33)

32. How much has your household paid for water of daily life use for the past 12 months?

THOUSAND
VND

33. What type of latrine does your household have?

FLUSH TOILET WITH SEPTIC TANK/SEWAGE PIPES 1
SUILABH..... 2
DOUBLE VAULT COMPOST LATRINE 3
TOILET DIRECTLY OVER THE WATER 4
OTHERS..... 5
NO TOILET..... 6

34. What is your main source of lighting?

GRID ELECTRICITY 1
POWER FROM BATTERIES, GENERATORS..... 2
GAS, OIL, KEROSENE LAMPS 3
OTHERS (SPECIFY IT) 4

35. Has your household had to pay for electricity for the last 12 months?

YES..... 1
NO..... 2 (>>37)

36. How much has your household paid for electricity for the last 12 months?

THOUSAND
VND

37. How has your household disposed garbage for the last 12 months?

COLLECTED..... 1
DUMPED IN RIVERS/LAKES..... 2
DUMPED IN A SITE NEARBY..... 3
OTHERS (SPECIFY IT) 4

38. Do you have to pay for garbage collection?

YES..... 1
NO..... 2 (>>40)

39. How much has your household paid
for the past 12 months for garbage collection?

THOUSAND
VND

40. TOTAL EXPENSES ON HOUSING, ELECTRICITY, WATER:
(C9XC11/C10 + C21 + C23A + C24 + C25 + C32 + C36 + C39)

THOUSAND
VND

41. DOES YOUR HOUSEHOLD HAVE A COMPUTER?

(REFER TO SECTION 6B, CODE 46)

YES..... 1
NO..... 2 (>>NEXT ITEM)

42. Is your household's computer connected to the Internet?

YES..... 1
NO..... 2 (>>NEXT ITEM)

43. For how many months of the last 12 months has your household's computer been connected
to the Internet?

IF NONE, WRITE 0 >>NEXT ITEM

MONTHS

44. How long is the Internet access for a month on the average?

MINUTES

SECTION 8. PARTICIPATION IN THE POVERTY ALLEVIATION AND HUNGER ERADICATION PROGRAM

THE INTERVIEWER ASKS EVERY HOUSEHOLD

1. Was your household classified as a poor one of the commune/ward in the following years?

YES..... 1

NO..... 2

if all three years, write 2>>c5)

Year 2004 2005 2006

2. Was your household involved in classifying poor households of the commune/ward in recent years?

YES..... 1

NO..... 2

Year 2004 2005 2006

3. Did your household benefit from the project/policy(...) of the year (...)?

PREFERENTIAL CREDIT

FREE HEALTHCARE

TUITION EXEMPTION

VOCATIONAL TRAINING

PROVISION OF CULTIVATION LAND FOR ETHNIC HOUSEHOLDS

AGRO-FORESTRY AND FISHERY PROMOTION

ACCOMODATION SUPPORT

PROVISION OF CLEAN AND CLEAR WATER

OTHERS (SPECIFY IT _____)

Yes..... 1

No..... 2

Unaware of it 3

2005 2006

4. Was your household involved in classifying beneficiaries of the program/policy (...) of the year (...)

ACCESS TO LOANS AT A PREFERENTIAL INTEREST RATE FOR THE POOR

VOCATIONAL TRAINING FOR THE POOR

AGRO-FORESTRY AND FISHERY EXTENTION

Yes..... 1

No..... 2

Unaware of it 3

2005 2006

5. Compared with 2001, has your household member's life been improved?

YES, VERY MUCH..... 1(>>7)

YES..... 2(>>7)

UNCHANGED..... 3

WORSE..... 4

6. If unchanged or worse, please let us know why?

NEGLECTIBLE AID..... 1

SICK PEOPLE IN THE HOUSEHOLD..... 2

NATURAL DISASTERS OR DIFFICULTIES IN PRODUCTION..... 3

TOO MUCH EXPENDITURE ON A FUNERAL IN THE HOUSEHOLD..... 4

OTHERS (SPECIFY IT _____).. 5

First

Second

Third

SECTION 8. PARTICIPATION IN THE POVERTY ALLEVIATION AND HUNGER ERADICATION PROGRAM /CON

7. Is there anyone in your household who has borrowed or owed money or goods in the last 12 months?

8. Please let us know the total debts that your household has incurred for the last 12 months? Where do they come from? (USE A ROW FOR EACH ITEM OF LOAN)	9. How many households in your credit group?	10. What is the value of the loan		11. When did you/ your household's members borrow it?	
SOCIAL POLICY BANK..... 1 (>>10) AGRI. AND RURAL DEV. BANK..... 2 (>>10) OTHER BANKS 3 (>>10) EMPLOYMENT SUPPORT FUND... 4 (>>10) CREDIT ORGANIZATIONS..... 5 (>>10) SOCIO-POLITICAL ORGANIZATION 6 (>>10) INDIVIDUAL CREDITORS..... 7 (>>10) FRIENDS, RELATIVES..... 8 (>>10) OTHERS (SPECIFY IT _____) 9 (>>10)		thousand vnd		RECORD THE MONTH WITH TWO DIGITS RECORD THE YEAR WITH FOUR DIGITS	
		the principal	the principal interest	MONTH	YEAR

TINUED)

12. How many months was this credit valid for?	13. Why did you or your household member borrow it? PRODUCTION CAPITAL.. 1 CAPITAL INVESTMENT.. 2 DEBT REPAYMENT..... 3(>>15) HOUSE PURCHASE/CON 4(>>15) WEDDINGS/FUNERALS.. 5(>>15) STUDY..... 6(>>15) MEDICAL TREATMENT... 7(>>15) GENERAL CONSUMPTION 8(>>15) BUYING FOOD BETWEEN 9(>>15) BUYING DURABLE GOODS 10(>>15) IMPROVING WATER SUPPLY 11(>>15) IMPROVING SANITATION 12(>>15) OTHERS (SPECIFY IT) 13(>>15)	14. On which sector is the money spent? AGRO/FORESTRY/F 1 BUSINESS AND TRADE 2 SERVICES..... 3 OTHER BUS. PRODUCTION 4	15 What is the interest rate of IF INTEREST RATE = 0 >> C16	
			INTEREST RATE %	TIME UNIT
Time unit: Date.....3 Week....4 Month.....5 Quarter.....6 half-yearly.....7 year....8				

SECTION 8. PARTICIPATION IN THE POVERTY ALLEVIATION AND HUNGER ERADICATION PROGRAM (END)

O r d e r	16	17	
	How much have you paid for this loan in the past 12 months?	How long did/will you/your household members pay all the debt?	
		Interview record the month and year of paid loans over the last 12 months..	
		record the month with two digits, record the year with four digits	
		If don't know, write "don't know"	
	thousand vnd	month	year

Attachment 2. Data dictionary

1. Problems found in the codebook

File	No	Variable	Problems	Measures taken
MUC1B	6	M1BC2	Member's name in 2004	Deleted.
MUC4B41	4	M4B41MA	Forest product code	"15 Hunting" should be added.
MUC5B2	6	M5B2C1	Mistyping in code 399	"The Internet" in Description should be read as "In which, operating and repairing fee for telephone."
MUC6	6 to 67	M6MA_01 to M6MA1_62	Topics of each variable is not fixed.	Revised as "Code of fixed assets and durable appliances which you have" and simplified.
MUC6A	12	M6AC7	The percentage of the household ownership	The questionnaire should be revised.
TTCHUNG	38	M4ATN2	Total of Q12e	Should be read as "Q12f"
	40	M4ATN4	Total of Q22e	Should be read as "Q22f"
	115	CHIKHAC_08	Other expenditure considered as consumption	Revised as "...considered as household expenditure, but not as consumption expenditure"
	116	CHIKHAC_09	Other expenditure not considered as consumption	Revised as "...not considered as household expenditure"
	124	CHITIEU	Expenditure	Revised as "Total household expenditure"
	126	CHIBQ	Expenditure per capita per month	Revised as "Household expenditure ..."

2. In addition to the variables in the following codebooks, the next variables are appended;

Variables appended	Description
ID	Household identifier
PID	Individual identifier, if records are at individual level.
xaid	Commune/ward identifier
WT	Adjusted weight for 80% resampled data

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC1A**

variables

17

No	Variable name in	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M1AC2	Sex of HH member	All	8		
				1		Yes
				2		No
8	M1AC3	Relationship with HH member	All	8		
				1		Head
				2		Spouse
				3		Children
				4		Parents
				5		Grandfather/Grandmother
				6		Grandchild
				7		Other relation
				9		Missing
9	M1AC4A	Month born?	All	8	1-12; -2:Don't know	Month
10	M1AC4B	Year born?	All	8	1898-2006	Year
11	M1AC5	Age	All	8	0-108	Years old
12	M1AC6	Marital status	All	8		
				1		Single
				2		Married
				3		Widowed
				4		Divorced
				5		Separated
13	M1AC7	Months stayed in the household in the past 12 months	All	8	0-12	Month
14	M1AC8	Place registered for residency?	All	8		
				1		Within the commune/ward
				2		Other place within the province
				3		Another province
				4		Others
15	M1AC9	Province permanent residence in	All	8	101-823	Numeric
16	M1AC10A	Years live in province	All	8	0-84	Year
17	M1AC10B	Months live in province	All	8	0-11	Month

Explanatory documents for the VHLSS 2006

Name of the data: **MUC1B**

variables

16

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M1BC2	Member's name in 2004	All	23	Name	Character
7	M1BC3	ID code in 2004	All	8	1-31	Numeric
8	M1BC4	Sex in 2004	All	8		
				1		Yes
				2		No
9	M1BC5	Age in 2004	All	8	0-100	Years old
10	M1BC6	Household in 2004?	All	8		
				1		Yes
				2		No
11	M1BC7	ID code from section 1A	All	8	1-16	Numeric
12	M1BC8	The reasons for no longer living in the household?	All	8		
				1		Moved/split
				2		Died
				3		Other
13	M1BC9	The reasons for moving out of the household?	All	8		
				1		For work
				2		Married
				3		Household split
				4		For study
				5		Moved with family
				6		Other (specify)
14	M1BC10	Province code that [Name] work in-	All	8	101-823; 999	Numeric
15	M1BC11	Occupation code Matched with	All	8	14-99	Numeric
16	GHEP	VHLSS2004?	All	8		
						0 Not surveyed in 2004
						1 Data in 2004

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC2A**

variables

34

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M2AC1	Completed grade	All	8	1-12; 0: Not completed 1st grade/never go to school	Numeric
8	M2AC2	Is [Name] literate?	All	8		1 Yes 2 No
9	M2AC3A	The highest diploma obtained?	All	8		0 No diploma 1 Primary school 2 Lower secondary school 3 Upper secondary school 4 Short-term vocational training 5 Long-term vocational training 6 Professional high school 7 Junior college diploma 8 Bachelor degree 9 Master degree 10 Doctorate 11 Others (specify)
10	M2AC3B	The highest vocational training obtained?	All	8		0 No diploma 1 Primary school 2 Lower secondary school 3 Upper secondary school 4 Short-term vocational training 5 Long-term vocational training 6 Professional high school 7 Junior college diploma 8 Bachelor degree 9 Master degree 10 Doctorate 11 Others (specify)
11	M2AC4	Type of school attending	All	8		1 Public 2 Semi-public 3 Sponsored 4 Private 5 Others (specify)
12	M2AC5	currently attending school	All	8		1 Yes 2 Vacation 3 No
13	M2AC6	Attended school for the past 12 months	All	8		1 Yes 2 No
14	M2AC7	Reason not attended school	All	8		1 Illness/Disability 2 No permanent resident 3 Failure to pay tuition 4 Work 5 Others (specify)
15	M2AC8	level currently attending	All	8		0 Pre-school 1 Primary school 2 Lower secondary school 3 Upper secondary school 4 Short-term vocational training 5 Long-term vocational training 6 Professional high school 7 Junior college diploma 8 Bachelor degree 9 Master degree 10 Doctorate 11 Others (specify)
16	M2AC9	Type of school attending	All	8		1 Public 2 Semi-public 3 Sponsored

				4 Private 5 Others (specify)
17 M2AC10	Exemption and reduction of tuition or other contributions for education	All	8	1 Yes 2 No
18 M2AC11A	Reason for exemption, reduction	All	8	1 Poor household 2 Ethnic minorities 3 Martyr immediate relative Disabled, sick veterans, 4 revolution credit households 5 Remote, particularly difficult area 6 Family in difficult situation 7 Primary pupils 8 No tuition required 9 Others (specify)
19 M2AC11B	Reason for exemption, reduction contribution	All	8	1 Poor household 2 Ethnic minorities 3 Martyr immediate relative Disabled, sick veterans, 4 revolution credit households 5 Remote, particularly difficult area 6 Family in difficult situation 7 Primary pupils 8 No tuition required 9 Others (specify)
20 M2AC12A	The percentage for reduction of tuition	All	8 0-100	%
21 M2AC12B	The percentage for reduction of contribution	All	8 0-100	%
22 M2AC13A	Tuition fee	All	8 0-30000; -2:Don't know	Thousand dong
23 M2AC13B	Addition attending school permanent resident	All	8 0-2000; -2:Don't know	Thousand dong
24 M2AC13C	Contribution to schools, classes	All	8 0-4500; -2:Don't know	Thousand dong
25 M2AC13D	Parents' class fund	All	8 0-1500; -2:Don't know	Thousand dong
26 M2AC13E	Uniform	All	8 0-1400; -2:Don't know	Thousand dong
27 M2AC13F	Textbooks, reference books	All	8 0-2500; -2:Don't know	Thousand dong
28 M2AC13G	Other stationery	All	8 0-6500; -2:Don't know	Thousand dong
29 M2AC13H	Attending extra courses	All	8 0-18000; -2:Don't know	Thousand dong
30 M2AC13I	Other educational cost	All	8 0-24000; -2:Don't know	Thousand dong
31 M2AC13K	Total educational cost	All	8 0-30000; -2:Don't know	Thousand dong
32 M2AC14	Other educational subsidied	All	8 0-19200	Thousand dong
33 M2AC15	The value of the scholarship or award received for the past 12 months	All	8 0-4700	Thousand dong
34 M2AC16	Other spending for education-training	All	8 0-12000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset: MUC2B

variables

21

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M2BC1	Attend school in the last 12 months?	All	8		
					0	Never
					1	Yes
					2	No
8	M2BC2	Go to school in the last 12 months?	Persons go to school	8		
					1	Yes
					2	No
9	M2BC3A	Name of school...attends in the academic year 05-06	Persons go to school	20	School's name	Character
10	M2BC3B	Code of school...attends in the academic year 05-06	Persons go to school	8	10-62; 99: Undefined label	Numeric
11	M2BC4	Name's academic record in 05-06	Persons go to school	8		
					1	Distinction
					2	Good
					3	Normal
					4	Weak
					5	No idea
12	M2BC5	Performance of the school in 05-06 where...is attending	Persons go to school	8		
					1	Distinction
					2	Good
					3	Normal
					4	Weak
					5	No idea
13	M2BC6A	Biggest problems facing this school 1st	Persons go to school	8		
					1	Quality of construction
					2	Quality of teachers
					3	Learning time too short
					4	Lack of facilities
					5	Lack of space for pupils
					6	Others (specify)
					7	No idea/None
14	M2BC6B	Biggest problems facing this school 2nd	Persons go to school	8		
					1	Quality of construction
					2	Quality of teachers
					3	Learning time too short
					4	Lack of facilities
					5	Lack of space for pupils
					6	Others (specify)
					7	No idea/None
15	M2BC6C	Biggest problems facing this school 3rd	Persons go to school	8		
					1	Quality of construction
					2	Quality of teachers
					3	Learning time too short
					4	Lack of facilities
					5	Lack of space for pupils
					6	Others (specify)
					7	No idea/None
16	M2BC7	When did...stop attending school?	Persons stop attending school	8	1918-2005; - 1:Missing data by interviewer	Year
17	M2BC8	Type of school where...attends	Persons stop attending school	8		
					1	Public
					2	Semi-public
					3	Sponsored
					4	Private
					5	Others (specify)
18	M2BC9	Is...attending junior college/university or did...already finish?	All	8		
					1	Yes
					2	No
19	M2BC10A	Major in college/university A	All	8		

Junior college

5014 Education science and teacher training

5021 Art

5022 Humanities

5031 Social science and behaviour

5032 Press and information

5034 Business and management

5038 Law

5042 Living science

5044 Natural science

5046 Math and statistics

5048 Computer science

5051 Technology

5052 Engineering

5053 Mining technology

5054 Processing

5058 Construction and architecture

5062 Agriculture, forestry and fishery

5064 Animal health

5072 Health

5076 Social services

5081 Hospitality, tourism, sports and personal service

5084 Transportation

5085 Environment and environment protection

5086 National security and defence

5090 Others

University

5214 Education science and teacher training

5221 Art

5222 Humanities

5231 Social science and behaviour

5232 Press and information

5234 Business and management

5238 Law

5242 Living science

5244 Natural science

5246 Math and statistics

5248 Computer science

5251 Technology

5251 Engineering

5253 Mining technology

5254 Processing

5258 Construction and architecture

5262 Agriculture, forestry and fishery

5264 Animal health

5272 Health

5276 Social services

5281 Hospitality, tourism, sports and personal service

5284 Transportation

5285 Environment and environment protection

5286 National security and defence

5290 Others

MA

6014 Education science and teacher training

6021 Art

6022 Humanities

6031 Social science and behaviour

6032 Press and information

6034 Business and management

6038 Law

6042 Living science

6044 Natural science

6046 Math and statistics

6048 Computer science

6051 Technology

6052 Engineering

6053 Mining technology

6054 Processing

6058 Construction and architecture

6062 Agriculture, forestry and fishery

6064 Animal health

6072 Health

6081 Hospitality, tourism, sports and personal service

6084 Transportation

6085 Environment and environment protection

6086 National security and defence

6090 Others

PhD

6214 Education science and teacher training

6221 Art

6222 Humanities

				6231 Social science and behaviour
				6232 Press and information
				6234 Business and management
				6238 Law
				6242 Living science
				6244 Natural science
				6246 Math and statistics
				6248 Computer science
				6251 Technology
				6252 Engineering
				6253 Mining technology
				6254 Processing
				6258 Construction and architecture
				6262 Agriculture, forestry and fishery
				6264 Animal health
				6272 Health
				6281 Hospitality, tourism, sports and personal service
				6284 Transportation
				6285 Environment and environment protection
				6286 National security and defence
				6290 Others
20	M2BC10B	Major in college/university B	All	
			8	
				Junior college
				5014 Education science and teacher training
				5021 Art
				5022 Humanities
				5031 Social science and behaviour
				5032 Press and information
				5034 Business and management
				5038 Law
				5042 Living science
				5044 Natural science
				5046 Math and statistics
				5048 Computer science
				5051 Technology
				5052 Engineering
				5053 Mining technology
				5054 Processing
				5058 Construction and architecture
				5062 Agriculture, forestry and fishery
				5064 Animal health
				5072 Health
				5076 Social services
				5081 Hospitality, tourism, sports and personal service
				5084 Transportation
				5085 Environment and environment protection
				5086 National security and defence
				5090 Others
				University
				5214 Education science and teacher training
				5221 Art
				5222 Humanities
				5231 Social science and behaviour
				5232 Press and information
				5234 Business and management
				5238 Law
				5242 Living science
				5244 Natural science
				5246 Math and statistics
				5248 Computer science
				5251 Technology
				5251 Engineering
				5253 Mining technology
				5254 Processing
				5258 Construction and architecture
				5262 Agriculture, forestry and fishery
				5264 Animal health
				5272 Health
				5276 Social services
				5281 Hospitality, tourism, sports and personal service
				5284 Transportation
				5285 Environment and environment protection
				5286 National security and defence
				5290 Others
				MA
				6014 Education science and teacher training
				6021 Art
				6022 Humanities
				6031 Social science and behaviour
				6032 Press and information
				6034 Business and management

					6038 Law 6042 Living science 6044 Natural science 6046 Math and statistics 6048 Computer science 6051 Technology 6052 Engineering 6053 Mining technology 6054 Processing 6058 Construction and architecture 6062 Agriculture, forestry and fishery 6064 Animal health 6072 Health 6081 Hospitality, tourism, sports and personal service 6084 Transportation 6085 Environment and environment protection 6086 National security and defence 6090 Others PhD 6214 Education science and teacher training 6221 Art 6222 Humanities 6231 Social science and behaviour 6232 Press and information 6234 Business and management 6238 Law 6242 Living science 6244 Natural science 6246 Math and statistics 6248 Computer science 6251 Technology 6252 Engineering 6253 Mining technology 6254 Processing 6258 Construction and architecture 6262 Agriculture, forestry and fishery 6264 Animal health 6272 Health 6281 Hospitality, tourism, sports and personal service 6284 Transportation 6285 Environment and environment protection 6286 National security and defence 6290 Others
21	M2BC10C	Major in college/university C	All	8	Junior college 5014 Education science and teacher training 5021 Art 5022 Humanities 5031 Social science and behaviour 5032 Press and information 5034 Business and management 5038 Law 5042 Living science 5044 Natural science 5046 Math and statistics 5048 Computer science 5051 Technology 5052 Engineering 5053 Mining technology 5054 Processing 5058 Construction and architecture 5062 Agriculture, forestry and fishery 5064 Animal health 5072 Health 5076 Social services 5081 Hospitality, tourism, sports and personal service 5084 Transportation 5085 Environment and environment protection 5086 National security and defence 5090 Others University 5214 Education science and teacher training 5221 Art 5222 Humanities 5231 Social science and behaviour 5232 Press and information 5234 Business and management 5238 Law 5242 Living science 5244 Natural science 5246 Math and statistics

5248 Computer science
 5251 Technology
 5251 Engineering
 5253 Mining technology
 5254 Processing
 5258 Construction and architecture
 5262 Agriculture, forestry and fishery
 5264 Animal health
 5272 Health
 5276 Social services
 5281 Hospitality, tourism, sports and personal service
 5284 Transportation
 5285 Environment and environment protection
 5286 National security and defence
 5290 Others
 MA
 6014 Education science and teacher training
 6021 Art
 6022 Humanities
 6031 Social science and behaviour
 6032 Press and information
 6034 Business and management
 6038 Law
 6042 Living science
 6044 Natural science
 6046 Math and statistics
 6048 Computer science
 6051 Technology
 6052 Engineering
 6053 Mining technology
 6054 Processing
 6058 Construction and architecture
 6062 Agriculture, forestry and fishery
 6064 Animal health
 6072 Health
 6081 Hospitality, tourism, sports and personal service
 6084 Transportation
 6085 Environment and environment protection
 6086 National security and defence
 6090 Others
 PhD
 6214 Education science and teacher training
 6221 Art
 6222 Humanities
 6231 Social science and behaviour
 6232 Press and information
 6234 Business and management
 6238 Law
 6242 Living science
 6244 Natural science
 6246 Math and statistics
 6248 Computer science
 6251 Technology
 6252 Engineering
 6253 Mining technology
 6254 Processing
 6258 Construction and architecture
 6262 Agriculture, forestry and fishery
 6264 Animal health
 6272 Health
 6281 Hospitality, tourism, sports and personal service
 6284 Transportation
 6285 Environment and environment protection
 6286 National security and defence
 6290 Others

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC2C**

variables

31

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M2CC1	Attend school in the last 12 months	All	8		
				1		Yes
				2		No
8	M2CC2	How long has..had extra classed since the 1st grade	All	8	0-18	Year
		Having extra class during the formal school year in the last 12 months	All			
9	M2CC3		All	8		
				1		Yes
				2		No
10	M2CC4A	Where extra classes provided 1st	All	8		
				1		In school being attendance
				2		At teachers' home
				3		At pupils' home
				4		Others (specify)
11	M2CC4B	Where extra classes provided 2nd	All	8		Num
				1		In school being attendance
				2		At teachers' home
				3		At pupils' home
				4		Others (specify)
12	M2CC4C	Where extra classes provided 3rd	All	8		Num
				1		In school being attendance
				2		At teachers' home
				3		At pupils' home
				4		Others (specify)
13	M2CC5	How many extra classes has...per week during academic year 05-06	All	8	1-45; -1:Missing data by interviewer	Number of weeks
14	M2CC6	How many hours on average did...having during those weeks?	All	8	1-48; -1:Missing data by interviewer	Hours per week
15	M2CC7A	Who taught at these extra classes 1st	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
16	M2CC7B	Who taught at these extra classes 2nd	All	8		Num
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
17	M2CC7C	Who taught at these extra classes 3rd	All	8		Num
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
18	M2CC8	Having extra classes during summer or lunar new year holiday in the last 12 mont	All	8		
				1		Yes
				2		No
19	M2CC9	Where are those extra classes provided	All	8		
				1		In school being attendance
				2		At teachers' home
				3		At pupils' home
				4		Others (specify)

20	M2CC10	How many weeks did...have extra classes during holidays in the last 12 months?	All	8	1-16	Number of weeks
21	M2CC11	How many hours on average did...have extra classes during those weeks?	All	8	1-55; -1:Missing data by interviewer	Hours per week
22	M2CC12A	Who taught at those extra classes 1st?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
23	M2CC12B	Who taught at those extra classes 2nd?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
24	M2CC12C	Who taught at those extra classes 3rd?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Others (specify)
25	M2CC13	How many years has...been tutored since the 1st grade?	All	8	0-12	Year
26	M2CC14	Was...tutored in the last 12 months?	All	8		
				1		Yes
				2		No
27	M2CC15	How many weeks was...tutored in the last 12 months?	All	8	3-48	Number of weeks
28	M2CC16	How many hours on average was...tutored during those weeks?	All	8	1-36	Hours per week
29	M2CC17A	Who is...s private tutor 1st?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Students/pupils
				5		Others (specify)
30	M2CC17B	Who is...s private tutor 2nd?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Students/pupils
				5		Others (specify)
31	M2CC17C	Who is...s private tutor 3rd?	All	8		
				1		Teachers of current school
				2		Teachers of other schools
				3		Relatives or friends of family
				4		Students/pupils
				5		Others (specify)

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC2D**

variables

19

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M2DC1	Highest level of school attending or has attended	All	8		
				1		Never attend school
				2		Primary
				3		Lower secondary
				4		Upper secondary or higher
8	M2DC2	Years repeated at upper secondary school	All	8	0-4	Year
9	M2DC3A	What is the reason 1st	All	8		
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
10	M2DC3B	What is the reason 2nd	All	8		Num
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
11	M2DC3C	What is the reason 3rd	All	8		Num
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
12	M2DC4	Years repeated at lower secondary	All	8	0-6	Year
13	M2DC5A	Reason of repeating at lower secondary 1st	All	8		
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
14	M2DC5B	Reason of repeating at lower secondary 2nd	All	8		
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
15	M2DC5C	Reason of repeating at lower secondary 3rd	All	8		
				1		Drop-out/low attendance
				2		Exam failure
						Insufficient tuition
				3		fee/contributions
				4		Illness/Disability
				5		Others (specify)
16	M2DC6	Years repeated at primary school	All	8	0-5	Year
17	M2DC7A	Reason of repeating at primary school 1st	All	8		
				1		Drop-out/low attendance
				2		Exam failure

			3	Insufficient tuition
			4	fee/contributions
			5	Illness/Disability
				Others (specify)
18 M2DC7B	Reason of repeating at primary school 2nd	All	8	
			1	Drop-out/low attendance
			2	Exam failure
				Insufficient tuition
			3	fee/contributions
			4	Illness/Disability
			5	Others (specify)
19 M2DC7C	Reason of repeating at primary school 3rd	All	8	
			1	Drop-out/low attendance
			2	Exam failure
				Insufficient tuition
			3	fee/contributions
			4	Illness/Disability
			5	Others (specify)

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC2E**

variables

16

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M2EC1	Received vocational training	All	8		
					1	Yes
					2	No
8	M2EC2A	Type of training received 1st	All	8		
					1	Short-term vocational training
					2	Long-term vocational training
					3	Vocational junior college
					4	Others (specify)
9	M2EC2B	Type of training received 2nd	All	8		
					1	Short-term vocational training
					2	Long-term vocational training
					3	Vocational junior college
					4	Others (specify)
10	M2EC2C	Type of training received 3rd	All	8		
					1	Short-term vocational training
					2	Long-term vocational training
					3	Vocational junior college
					4	Others (specify)
		How long has...been trained				
11	M2EC3A1	Years 1st?	All	8	0-4	Year
		How long has...been trained				
12	M2EC3A2	Months 1st?	All	8	0-11	Month
		How long has...been trained				
13	M2EC3B1	Years 2nd?	All	8	0-3	Year
		How long has...been trained				
14	M2EC3B2	Months 2nd?	All	8	1-10	Month
		How long has...been trained				
15	M2EC3C1	Years 3rd?	All	8	0-2	Year
		How long has...been trained				
16	M2EC3C2	Months 3rd?	All	8	0-6	Month

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3A1**

variables

12

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3AC1	Suffered from any illness or injuries for the past 4 weeks?	All	8		
				1		Yes
				2		No
8	M3AC2	Suffered from any illness or injuries for the last 12 months?	All	8		
				1		Yes
				2		No
9	M3AC3A	Stay in bed and need someone to take care of last 12 months	All	8	0-365; -1:Missing data by interviewer	Days
10	M3AC3B	Be absent from work/school or not to be able to carry out regular activities	All	8	0-365; -1:Missing data by interviewer	Days
11	M3AC4	Have health insurance or free healthcare certificate	All	8		
				1		Yes, health care insurance
				2		Yes, free health care certificate
				3		No
12	M3AC5	Buy healthcare insurance him.herself or have it bought by someone else	All	8		
						1 Children under 6
						Healthcare insurance for the
						2 poor
						Healthcare ins. For policy
						3 beneficiaries
						Required state healthcare
						4 insurance
						Required non-state healthcare
						5 insurance
						Pupil/student healthcare
						6 insurance
						Other voluntary healthcare
						7 insurance
						8 Others

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3A2**

variables

18

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3AC7	Name of household member that used healthcare services in last 12 months	Household member has gone to healthcare service	8	Name	Character
8	M3AC8A	Ordinal number of health center has visited	gone to healthcare service	8	1-5	Numeric
9	M3AC8B	Code of health center has visited	gone to healthcare service	8		
				1		Village health center
				2		Commune health center
				3		Regional general clinics
				4		District hospital
				5		Provincial hospital
				6		Central hospital
				7		Other state-owned hospitals
				8		Private hospital
				9		Other hospitals
				10		Private clinics
				11		Traditional herb doctor
				12		Other health center
10	M3AC9	Visited the health center	Household member has gone to healthcare service	8		
				1		Vaccination
				2		Pregnancy test, coil put in, abortion delivery
				3		Check-up and consulting
				4		Treatment
11	M3AC10A	Time and expenses of ...'s outpatient treatment in the last 12 months times	Household member has gone to healthcare service	8	0-80; -1:Missing data by interviewer	Times
12	M3AC10B	Time and expenses of ...'s outpatient treatment in the last 12 months costs	Household member has gone to healthcare service	8	0-105600	Thousand dong
13	M3AC11	How many times did...use free healthcare insurance card/certificate for these ou	Household member has gone to healthcare service	8	0-80	Times
14	M3AC12A	Time and expenses of inpatient treatment of...in the last 12 months? Times	Household member has gone to healthcare service	8	0-13; -1:Missing data by interviewer	Times
15	M3AC12B	Time and expenses of inpatient treatment of...in the last 12 months? Costs	Household member has gone to healthcare service	8	0-60000	Thousand dong
16	M3AC13	How many times did...use free healthcare insurance card/certificate for these in	Household member has gone to healthcare service	8	0-12	Times
17	M3AC14	Household afforded to cover all those expenses for	Household member has gone to healthcare service	8		
				1		Yes, enough
				2		Yes, not enough
				3		No
18	M3AC15	Household did or from what source did it enjoy if it did not have enough or did	Household member has gone to healthcare service	8		
						Sold products made by the
						1 household
						2 Sold assets
						3 Non-interest loan
						4 Loan with interest
						5 Quit the treatment
						6 Exempted/required by hospital
						7 Healthcare insurance
						8 Free healthcare certificate
						9 Others

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3B**

variables

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No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3BC1	Code of response	All	8	1-17	Numeric
8	M3BC2	Visual difficulty, even when wearing glasses	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
9	M3BC3	Wear glasses	All	8		
				1		Regularly
				2		Irregularly
				3		Not wearing
10	M3BC4A	Wearing glasses, have any difficulty?Reading	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
11	M3BC4B	Wearing glasses, have any difficulty?Seeing&Realising	All	8		Num
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
12	M3BC5	Have any aural difficulty even when wearing hearing aid?	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
13	M3BC6	Wearing hearing aid?	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
				9		No answer
14	M3BC7A	Wearing hearing aid, have difficulty listening to what other people are saying t	All	8		Num
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
				9		Missing
15	M3BC7B	Wearing hearing aid, have difficulty listening to what other people are saying t	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
				9		Missing
16	M3BC8	Having any difficulty remembering or concentrating?	All	8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible
17	M3BC9	Having any difficulty concentrating on doing something for about 10 minutes?		8		
				0		Not difficult
				1		A little difficult
				2		Very difficult
				3		Impossible

18	M3BC10	Having any difficulty understanding something new, e.g., direction to a new plac	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
19	M3BC11	Having difficulty going on foot or walking upstairs/downstairs?	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
20	M3BC12A	Having difficulty in the following cases by him.herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
					9	Missing
21	M3BC12B	Having difficulty in the following cases by him.herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
					9	Missing
22	M3BC12C	Having difficulty in the following cases by him.herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
					9	Missing
23	M3BC13	Having difficulty taking care of him/herself	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
					8	KAD
24	M3BC14A	Having difficulty in the following cases by him/herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
25	M3BC14B	Having difficulty in the following cases by him/herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
26	M3BC14C	Having difficulty in the following cases by him/herself without using tools to h	All	8	0	Not difficult
					1	A little difficult
					2	Very difficult
					3	Impossible
					8	KAD
27	M3BC14D	Having difficulty in the following cases by him/herself without using tools to h	All	8	0	Num
					1	Not difficult
					2	A little difficult
					3	Very difficult
					8	Impossible
						KAD
28	M3BC14E	Having difficulty in the following cases by him/herself without using tools to h	All	8		

			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
29 M3BC14F	Having difficulty in the following cases by him/herself without using tools to h	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
30 M3BC15	Need somebody else to help everyday life	All	8	
			1	Yes
			2	No
			9	Missing
31 M3BC16	Due to physical or emotional conditions, does...name have difficulty communicati	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
32 M3BC17	Having difficulty understanding what somebody else is talking to him/her?	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
33 M3BC18	Having difficulty starting and keeping a conversation going?	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
34 M3BC19	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
35 M3BC20A	Having difficulty seeing, even when wearing glasses?Reasons a?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
36 M3BC20B	Having difficulty seeing, even when wearing glasses?Reasons b?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
37 M3BC20C	Having difficulty seeing, even when wearing glasses?Reasons c?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident

			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
38 M3BC20D	Having difficulty seeing, even when wearing glasses?Reasons d?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
39 M3BC20E	Having difficulty seeing, even when wearing glasses?Reasons e?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
40 M3BC20F	Having difficulty seeing, even when wearing glasses?Reasons f?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
41 M3BC20G	Having difficulty seeing, even when wearing glasses?Reasons g?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
42 M3BC21A	How long has this problem occurred? Year	All	0-85; -1:Missing data by interviewer	Year
43 M3BC21B	How long has this problem occurred? Month	All	0-11	Month
44 M3BC22	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
45 M3BC23A	Having difficulty hearing, even when wearing hearing aid?Reasons a	All	8	
			1	Old or young age
			2	War
			3	Agent orange

			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
46 M3BC23B	Having difficulty hearing, even when wearing hearing aid?Reasons b	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
47 M3BC23C	Having difficulty hearing, even when wearing hearing aid?Reasons c	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
48 M3BC23D	Having difficulty hearing, even when wearing hearing aid?Reasons d	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
49 M3BC23E	Having difficulty hearing, even when wearing hearing aid?Reasons e	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
50 M3BC23F	Having difficulty hearing, even when wearing hearing aid?Reasons f	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident

			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
51 M3BC23G	Having difficulty hearing, even when wearing hearing aid?Reasons g	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
52 M3BC24A	How long has this problem occurred?Year	All	0-84; -1:Missing	
			8 data by interviewer	Year
53 M3BC24B	How long has this problem occurred?Month	All	8 0-11	Month
54 M3BC25	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
55 M3BC26A	Having difficulty remembering or concentrating?Reasons a?	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
56 M3BC26B	Having difficulty remembering or concentrating?Reasons b?		8	Num
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
57 M3BC26C	Having difficulty remembering or concentrating?Reasons c?		8	Num
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
58 M3BC26D	Having difficulty remembering or concentrating?Reasons d?		8	Num
			1	Old or young age
			2	War

			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
59 M3BC26E	Having difficulty remembering or concentrating?Reasons e?		8	Num
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
60 M3BC26F	Having difficulty remembering or concentrating?Reasons f?		8	Num
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
61 M3BC26G	Having difficulty remembering or concentrating?Reasons g?		8	Num
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
62 M3BC27A	How long has this problem occurred? Year	All	0-79; -1:Missing	Year
63 M3BC27B	How long has this problem occurred? Month	All	8 data by interviewer	Month
64 M3BC28	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
65 M3BC29A	Having difficulty going on foot or walking upstairs/downstairs?Reasons a	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamity
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons

66	M3BC29B	Having difficulty going on foot or walking upstairs/downstairs?Reasons b	All	8	
				1	Old or young age
				2	War
				3	Agent orange
				4	Natural calamity
				5	Road accident
				6	Work-related accident
				7	Birth defects
				8	Social vices
				9	Illness/disease
				10	Level of education
				11	Other disabilities
				12	Other reasons
67	M3BC29C	Having difficulty going on foot or walking upstairs/downstairs?Reasons c	All	8	
				1	Old or young age
				2	War
				3	Agent orange
				4	Natural calamity
				5	Road accident
				6	Work-related accident
				7	Birth defects
				8	Social vices
				9	Illness/disease
				10	Level of education
				11	Other disabilities
				12	Other reasons
68	M3BC29D	Having difficulty going on foot or walking upstairs/downstairs?Reasons d	All	8	
				1	Old or young age
				2	War
				3	Agent orange
				4	Natural calamity
				5	Road accident
				6	Work-related accident
				7	Birth defects
				8	Social vices
				9	Illness/disease
				10	Level of education
				11	Other disabilities
				12	Other reasons
69	M3BC29E	Having difficulty going on foot or walking upstairs/downstairs?Reasons e	All	8	
				1	Old or young age
				2	War
				3	Agent orange
				4	Natural calamity
				5	Road accident
				6	Work-related accident
				7	Birth defects
				8	Social vices
				9	Illness/disease
				10	Level of education
				11	Other disabilities
				12	Other reasons
70	M3BC29F	Having difficulty going on foot or walking upstairs/downstairs?Reasons f	All	8	
				1	Old or young age
				2	War
				3	Agent orange
				4	Natural calamity
				5	Road accident
				6	Work-related accident
				7	Birth defects
				8	Social vices
				9	Illness/disease
				10	Level of education
				11	Other disabilities
				12	Other reasons

71 M3BC29G	Having difficulty going on foot or walking upstairs/downstairs?Reasons g	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
72 M3BC30A	How long has this problem occurred?Year	All	0-79; -1:Missing	
73 M3BC30B	How long has this problem occurred?Month	All	8 data by interviewer	Year
74 M3BC31	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
75 M3BC32A	Having difficulty taking care of him/herself?Reason a	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
76 M3BC32B	Having difficulty taking care of him/herself?Reason b	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
77 M3BC32C	Having difficulty taking care of him/herself?Reason c	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
78 M3BC32D	Having difficulty taking care of him/herself?Reason d	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease

			10	Level of education
			11	Other disabilities
			12	Other reasons
79 M3BC32E	Having difficulty taking care of him/herself?Reason e	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
80 M3BC32F	Having difficulty taking care of him/herself?Reason f	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
81 M3BC32G	Having difficulty taking care of him/herself?Reason g	All	8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
82 M3BC33A	How long has this problem occurred? Year	All	0-79; -1:Missing data by interviewer	Year
83 M3BC33B	How long has this problem occurred? Month	All	8 0-11	Month
84 M3BC34	Code of response	All	8	
			0	Not difficult
			1	A little difficult
			2	Very difficult
			3	Impossible
85 M3BC35A	Due to his/her physical or emotional conditions, have difficulty communicating?R		8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident
			6	Work-related accident
			7	Birth defects
			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
86 M3BC35B	Due to his/her physical or emotional conditions, have difficulty communicating?R		8	
			1	Old or young age
			2	War
			3	Agent orange
			4	Natural calamityl
			5	Road accident

		6	Work-related accident
		7	Birth defects
		8	Social vices
		9	Illness/disease
		10	Level of education
		11	Other disabilities
		12	Other reasons
87 M3BC35C	Due to his/her physical or emotional conditions, have difficulty communicating?R	8	
		1	Old or young age
		2	War
		3	Agent orange
		4	Natural calamityl
		5	Road accident
		6	Work-related accident
		7	Birth defects
		8	Social vices
		9	Illness/disease
		10	Level of education
		11	Other disabilities
		12	Other reasons
88 M3BC35D	Due to his/her physical or emotional conditions, have difficulty communicating?R	8	
		1	Old or young age
		2	War
		3	Agent orange
		4	Natural calamityl
		5	Road accident
		6	Work-related accident
		7	Birth defects
		8	Social vices
		9	Illness/disease
		10	Level of education
		11	Other disabilities
		12	Other reasons
89 M3BC35E	Due to his/her physical or emotional conditions, have difficulty communicating?R	8	
		1	Old or young age
		2	War
		3	Agent orange
		4	Natural calamityl
		5	Road accident
		6	Work-related accident
		7	Birth defects
		8	Social vices
		9	Illness/disease
		10	Level of education
		11	Other disabilities
		12	Other reasons
90 M3BC35F	Due to his/her physical or emotional conditions, have difficulty communicating?R	8	
		1	Old or young age
		2	War
		3	Agent orange
		4	Natural calamityl
		5	Road accident
		6	Work-related accident
		7	Birth defects
		8	Social vices
		9	Illness/disease
		10	Level of education
		11	Other disabilities
		12	Other reasons
91 M3BC35G	Due to his/her physical or emotional conditions, have difficulty communicating?R	8	
		1	Old or young age
		2	War
		3	Agent orange
		4	Natural calamityl
		5	Road accident
		6	Work-related accident
		7	Birth defects

			8	Social vices
			9	Illness/disease
			10	Level of education
			11	Other disabilities
			12	Other reasons
			0-87; -1:Missing	
92 M3BC36A	How long has this problem occurred?Year	All	8 data by interviewer	Year
93 M3BC36B	How long has this problem occurred?Month	All	8 0-11	Month

Explanatory documents for the VHLSS 2006

Name of the data: MUC3C

variables

17

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3CC1	Having diarrhoea for past 4 weeks	People are younger than 6 years old	8		
				1		Yes
				2		No
8	M3CC2	Days had diarrhoea for last 4 weeks	People are younger than 6 years old	8	1-25	Days
9	M3CC3	Had a cough, flu or difficult to breath for the last 4 weeks?	People are younger than 6 years old	8		
				1		Yes
				2		No
10	M3CC4	Had a cough, flu, difficult to breath with a fever?	People are younger than 6 years old	8		
				1		Yes
				2		No
11	M3CC5	For last 4 weeks, Days had a cough, flu, difficult to breath?	People are younger than 6 years old	8	1-28	Days
12	M3CC6	Had other illness, injuries for the last 4 weeks?	People are younger than 6 years old	8		
				1		Yes
				2		No
13	M3CC7	Had diseases/illness or injuries for last 4 weeks?	People are older than 6 years old	8		
				1		Yes
				2		No
14	M3CC8	Days had illness or injuries for last 4 weeks?	People are older than 6 years old	8	1-28	Days
15	M3CC9	Days not able to carry out regular activities because of illness or injuries?	People are older than 6 years old	8	0-28	Days
16	M3CC10	days stay in bed or need someone take care of because of illness or injuries?	People are older than 6 years old	8	0-28	Days
17	M3CC11	Had long-time diseases?The diseases can't be treated	People are older than 6 years old	8		
				1		Yes
				2		No

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3D**

variables

15

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3DC1	Pregnant or prenanant for last 12 months?	All	8		
				1		Getting pregnant
				2		Got pregnant last 12 months
				3		No
8	M3DC2	plan to have birth	Women are not getting pregnant	8		
				1		Yes
				2		No
				3		Not decide
9	M3DC3	Currently using any menthოდ to delay or advoid getting pregnant	Women are not getting pregnant	8		
				1		Yes
				2		No
10	M3DC4A	Which menthოდ?Main	Women are not getting pregnant	8		
				1		Pill to avoid getting pregnant
				2		IUD
				3		Injection
				4		Implants
				5		Diagram/foam/jelly
				6		Condom
				7		Female sterilization
				8		Male sterilization
				9		Periodic abstinence
				10		With drawal
				11		Others
11	M3DC4B	Which menthოდ?Additional	Women are not getting pregnant	8		
				1		Pill to avoid getting pregnant
				2		IUD
				3		Injection
				4		Implants
				5		Diagram/foam/jelly
				6		Condom
				7		Female sterilization
				8		Male sterilization
				9		Periodic abstinence
				10		With drawal
				11		Others
12	M3DC5	Ever have had birth?	Women are not getting pregnant	8		
				1		Yes
				2		No
13	M3DC6	How many children have had birth?	Women are not getting pregnant	8	1-10	Number of children
14	M3DC7A	How many boys?	Women are not getting pregnant	8	0-7	Number of boys
15	M3DC7B	How many girls?	Women are not getting pregnant	8	0-7	Number of girls

Explanatory documents for the VHLSS 2006

Name of the datas **MUC3E**

variables

11

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3EC1	Ever smoked cigarette, or pipe tobacco?	People are older than 10 years old	8		
				1		Yes
				2		No
8	M3EC2	Any time when...smoked cigarette or pipe tobacco everyday?	People are older than 10 years old	8		
				1		Yes
				2		No
9	M3EC3	Smoke everyday, sometimes or already quit smoking?	People are older than 10 years old	8		
				1		Everyday
				2		Sometimes
				3		No smoking
				7-65; 999:	No relation to the	
10	M3EC4	When started smoking cigarette, pipe tobacco everyday? What age?	People are older than 10 years old	8	question	Years old
11	M3EC5	Often smoking at home?	People are older than 10 years old	8		
				1		Yes
				2		No

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3F**

variables

28

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	MATV	ID code	All		8 1-17	Numeric
7	M3FC1	Has free healthcare insurance card/certificate?	All		8	1 Required healthcare insurance 2 Voluntary healthcare insurance 3 Card/Certificate 4 No healthcare insurance care
8	M3FC2	Had required healthcare insurance?	All		8	1 Working in public sector Working in private/foreign 2 invested sector 3 Retired 4 Policy beneficiaries Poor people/ethnic 5 minority/P135 commune 6 Other social protection groups 7 Those over 90 8 Relatives of military officers 9 Others 10 No idea
9	M3FC3	Have voluntary healthcare insurance?	All		8	1 Yes 2 No
10	M3FC4A	Voluntary healthcare insurance or other types 1st?	All		8	1 Student/pupil health insurance Other types of student, pupil 2 health insurance Voluntary health insurance 3 provided by associate Voluntary health insurance 4 provided by commune Health insurance for family 5 members of required 6 Commercial health insurance 7 Others (specify) 8 No idea
11	M3FC4B	Voluntary healthcare insurance or other types 2nd?	All		8	1 Student/pupil health insurance Other types of student, pupil 2 health insurance Voluntary health insurance 3 provided by associate Voluntary health insurance 4 provided by commune Health insurance for family 5 members of required 6 Commercial health insurance 7 Others (specify) 8 No idea
12	M3FC5	Paying a year for voluntary health insurance premium	All		7-12000; -2:Don't know	Thousand dong/year
13	M3FC6A	Started having this health care insurance card/certificated?Required	All		8 1950-2006	Year
14	M3FC6B	Started having this health care insurance card/certificated?Voluntary	All		8 1984-2006	Year
15	M3FC7A	How long will this health insurance card/certificate be valid? Required	All		1-12; -1:Missing data by interviewer	Month

16	M3FC7B	How long will this health insurance card/certificate be valid? Voluntary	All	8	1-12	Month
17	M3FC8A	Was..given instruction on how to use this free healthcare insurance card/certifi	All	8	1	Yes
					2	No
18	M3FC8B	Was..given instruction on how to use this free healthcare insurance card/certifi	All	8	1	Yes
					2	No
19	M3FC9A	Which health facility did..originally register his/her free healthcare insurance	All	8	1	Village health center
					2	Regional general clinics
					3	District hospital
					4	Provincial hospital
					5	Central hospital
					6	Others state-owned hospitals
					7	Private hospital
					8	Other hospitals
					9	Private clinics
					10	Others (specify)
					11	No registration
20	M3FC9B	Which health facility did..originally register his/her free healthcare insurance	All	8	1	Village health center
					2	Regional general clinics
					3	District hospital
					4	Provincial hospital
					5	Central hospital
					6	Others state-owned hospitals
					7	Private hospital
					8	Other hospitals
					9	Private clinics
					10	Others (specify)
					11	No registration
21	M3FC9C	Which health facility did..originally register his/her free healthcare insurance	All	8	1	Village health center
					2	Regional general clinics
					3	District hospital
					4	Provincial hospital
					5	Central hospital
					6	Others state-owned hospitals
					7	Private hospital
					8	Other hospitals
					9	Private clinics
					10	Others (specify)
					11	No registration
22	M3FC10	Used free healthcare insurance card/certificate for diagnosis/treatment for last	All	8	1	Yes
					2	No
					3	No diagnosis
23	M3FC11A	Paying additional fees when using healthcare insurance for diagnosis/treatment?R	All	8	1	Yes
					2	No
					3	No idea
24	M3FC11B	Paying additional fees when using healthcare insurance for diagnosis/treatment?V	All	8	1	Yes
					2	No
					3	No idea
25	M3FC12	Was the card not used?	All	8	1	No using

				2	Health insurance not reimburse at health facility
				3	Lower quality when using health insurance card
				4	Cumbersome procedures
				5	Health insurance card/cer not available
				6	Others
26	M3FC13A	Didn't have health insurance?First	All	8	
				1	Healthy/No need
				2	Previously have but do not use
					Previously have but get
				3	unemployed
				4	Too expensive
				5	Can not afford
				6	Do not know where to buy
					Voluntary health insurance
				7	unavailable in commune
				8	Health services too poor
				9	No idea about health insurance
					Waiting for commune to issue
				10	insurance card
				11	Others (specify)
				12	No idea
27	M3FC13B	Didn't have health insurance?Second	All	8	
				1	Healthy/No need
				2	Previously have but do not use
					Previously have but get
				3	unemployed
				4	Too expensive
				5	Can not afford
				6	Do not know where to buy
					Voluntary health insurance
				7	unavailable in commune
				8	Health services too poor
				9	No idea about health insurance
					Waiting for commune to issue
				10	insurance card
				11	Others (specify)
				12	No idea
28	M3FC14	Annual health insurance of 80000VND is offered, willing to buy for?	All	8	
					1 Yes
					2 No

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC3G**

variables

28

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
					1-14; 99:None of household member use health insurance	
6	M3GMA	Order	All	8	insurance	Num
		Name of person using healthcare facilities	All	8	Name	Character
7	M3GC1B	Healthcare facilities code	All	8		
8	M3GC1D					
					1	Village health center
					2	Commune/ward health center
					3	Regional clinics
					4	District hospital
					5	Provincial/city hospital
					6	Central hospital
					7	Other public hospitals
					8	Private hospital
					9	Other hospitals
					10	Private clinics
					11	Medicine men
					12	Others
		Times used out-patient services at this facility, medical staff for last 4 weeks	All		0-20; -1:Missing	
9	M3GC2			8	data by interviewer	Times
		Times during that period has...been transferred to or from other healthcare facilities	All		0-10; -1:Missing	
10	M3GC3			8	data by interviewer	Times
		The reasons for using out-patient services over the last 4 weeks? 1st reason	All	8		
11	M3GC4A					
					1	Preventive services
					2	Treatment for coden
					3	Treatment for other diseases
					4	Traffic accidents
					5	Work accidents
					6	Other injuries/accidents
					7	Pre-natal checkup
					8	Delivery
					9	Abortion/family planning
					10	Check-up
					11	Rehabilitation
					12	Others (specify)
		The reasons for using out-patient services over the last 4 weeks? 2nd reason	All	8		Num
12	M3GC4B					
					1	Preventive services
					2	Treatment for coden
					3	Treatment for other diseases
					4	Traffic accidents
					5	Work accidents
					6	Other injuries/accidents
					7	Pre-natal checkup
					8	Delivery
					9	Abortion/family planning
					10	Check-up
					11	Rehabilitation
					12	Others (specify)
		The reasons for using out-patient services over the last 4 weeks? 3rd reason	All	8		Num
13	M3GC4C					
					1	Preventive services
					2	Treatment for coden
					3	Treatment for other diseases
					4	Traffic accidents
					5	Work accidents
					6	Other injuries/accidents
					7	Pre-natal checkup
					8	Delivery
					9	Abortion/family planning

			10	Check-up
			11	Rehabilitation
			12	Others (specify)
14 M3GC5A	Provided you with diagnosis/treatment?First	All	8	
			1	Doctor
			2	Physician
			3	Nurse
			4	Midwife
			5	Pharmacist
			6	Home-based midwife
			7	Traditional medicine man
			8	Others (specify)
			9	No idea
15 M3GC5B	Provided you with diagnosis/treatment?Second	All	8	Num
			1	Doctor
			2	Physician
			3	Nurse
			4	Midwife
			5	Pharmacist
			6	Home-based midwife
			7	Traditional medicine man
			8	Others (specify)
			9	No idea
16 M3GC5C	Provided you with diagnosis/treatment?Third	All	8	Num
			1	Doctor
			2	Physician
			3	Nurse
			4	Midwife
			5	Pharmacist
			6	Home-based midwife
			7	Traditional medicine man
			8	Others (specify)
			9	No idea
17 M3GC6	Out-patient diagnosis/treatment did...use services on demand	All	8	
			1	Yes
			2	No
18 M3GC7	How much did the household spend at this facility, pay medical staff	All	8	0-16000; -1:Missing data by interviewer
19 M3GC8	How much are the tips and reward given to medical staff	All	8	0-1200; -1:Missing data by interviewer
20 M3GC9	How much was paid for medication here?	All	8	0-11500; -2: Not clear
21 M3GC10	For last 4 weeks, times did the household buy medication outside this facility w	All	8	
			1	Yes
			2	No
22 M3GC11	How much did the household spend on medication for...outside this facility over	All	8	0-8400
23 M3GC12	How much did the household spend on travel, accomodation&meals for...and relativ	All	8	0-3000; -1:Missing data by interviewer
24 M3GC13	Of all the times using services at this facility over the last 4 weeks, was hous	All	8	
			1	Yes
			2	No
25 M3GC14	Of all times using services at this facility over the last 4 weeks, was the hous	All	8	
			1	Yes
			2	No
26 M3GC15	Of all the times using services at this facility over the last 4 weeks, did...us	All	8	
			1	Yes
			2	No
27 M3GC16	How much did the household spend on Xray, ultrasound, blood and other laboratory	All	8	0-4200
				Thousand dong

28 M3GC17	Did this facility transfer or introduce...to another one for treatment?	All	8	Yes
			1	
			2	No

Explanatory documents for the VHLSS 2006

Name of the data: MUC3H

variables

31

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M3HMA	Order	All	8	1-17; 99:No household member use health facilities	Numeric
7	M3HC1B	Name member received inpatient treatment	All	8	Name	Character
8	M3HC1D	Facility code	All	8		
				1		Village health center
				2		Commune health center
				3		Regional clinics
				4		District hospital
				5		Provincial/city hospital
				6		Central hospital
				7		Other state-owned hospitals
				8		Private hospital
				9		Other hospitals
				10		Private clinics
				11		Traditional herb doctor
				12		Other
9	M3HC2	In the last 12 months, how many times has..received in-patient treatment at this	All	8	0-12; -1:Missing data by interviewer	Times
10	M3HC3	In the last 12 months, how many times has..received in-patient treatment at this	All	8	0-5; -1:Missing data by interviewer	Times
11	M3HC4	In the last 12 months, how many days has...received in-patient treatment at this	All	8	1-335; -1:Missing data by interviewer	Days
12	M3HC5A	Reason for in-patient? Reason 1	All	8		
				1		Coden
				2		Other diseases
				3		Traffic accidents
				4		Work accidents
				5		Other injuries/accidents
				6		Patient monitoring
				7		Delivery
				8		Others (specify)
13	M3HC5B	Reason for in-patient? Reason 2	All	8		
				1		Coden
				2		Other diseases
				3		Traffic accidents
				4		Work accidents
				5		Other injuries/accidents
				6		Patient monitoring
				7		Delivery
				8		Others (specify)
14	M3HC5C	Reason for in-patient? Reason 3	All	8		
				1		Coden
				2		Other diseases
				3		Traffic accidents
				4		Work accidents
				5		Other injuries/accidents
				6		Patient monitoring
				7		Delivery
				8		Others (specify)
15	M3HC6A	Provided you with diagnosis/treatment? Healthworker 1	All	8		
				1		Doctor
				2		Physician
				3		Nurse
				4		Midwife
				5		Pharmacist
				6		Home-based midwife
				7		Traditional medicine man
				8		Others (specify)
				9		No idea
16	M3HC6B	Provided you with diagnosis/treatment? Healthworker 2	All	8		
				1		Doctor

			2	Physician
			3	Nurse
			4	Midwife
			5	Pharmacist
			6	Home-based midwife
			7	Traditional medicine man
			8	Others (specify)
			9	No idea
17	M3HC6C	Provided you with diagnosis/treatment? Healthworker 3	All	8
			1	Doctor
			2	Physician
			3	Nurse
			4	Midwife
			5	Pharmacist
			6	Home-based midwife
			7	Traditional medicine man
			8	Others (specify)
			9	No idea
18	M3HC7	During in-patient diagnosis/treatment did...use service on demand?	All	8
			1	Yes
			2	No
19	M3HC8	During in-patient diagnosis/treatment did...share bed with another patient?	All	8
			1	Yes
			2	No
20	M3HC9	How much did the household spend at this facility, pay medical staff at this fac	All	0-55000; -1:Missing data by 8 interviewer
		Of the total expense how much are the tips and rewards for medical staff of this	All	0-14700; -1:Missing data by 8 interviewer
21	M3HC10	Of the total expense at this facility how much was spent on medication?	All	0-54750; -1:Missing data by 8 interviewer
22	M3HC11	Times did the household buy medication outside this facility while receiving ser	All	8
23	M3HC12		1	Yes
			2	No
24	M3HC13	How much did the household spend on medication for...outside this facility over t	All	0-12000; -1:Missing data by 8 interviewer
		How much did the household spend on travel, accomodation and meals for...&relati	All	0-20000; -1:Missing data by 8 interviewer
25	M3HC14	Of all the times using in-patient services over the last 12 months, did...use Xr	All	8
26	M3HC15		1	Yes
			2	No
27	M3HC16	How much did the household spend on Xray, ultrasound, blood, other laboratory tes	All	0-8000; -1:Missing data by 8 interviewer
		Did this facility transfer or introduce...to another one for treatment?	All	8
28	M3HC17		1	Yes
			2	No
29	M3HC18	Was...transferred to another facility as requested by the doctor?	All	8
			1	Yes
			2	No
30	M3HC19	Why was...not transferred?	All	8
			1	Long-distance
			2	Economic difficulty
			3	Incurable disease
			4	Other reasons
31	M3HC20	During those in-patient diagnoses/treatments in last 12 months, has...been disch	All	8
			1	Yes
			2	No

Explanatory documents for the VHLSS 2006

Name of the dataset MUC3I

variables

16

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M3IC1	Did household buy medication for...according to the previous prescription without	All	8	1 2	Yes No
8	M3IC2A	During the last 4 weeks, how much did the household spend on medication for...ac	All	8	0-2600; -1:Missing data by interviewer	Thousand dong
9	M3IC2B	During the last 4 weeks, how much did the household spend on medication for...ac	All	8	0-3000	Thousand dong
10	M3IC3	During the last 4 weeks, did the household buy medication for...without diagnosis	All	8	1 2	Yes No
11	M3IC4A	Where did the household buy medication for...without? 1st	All	8	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Village health center Commune health center Regional clinics District hospital Provincial/city hospital Central hospital Other state-owned hospitals Private hospital Other hospitals Private clinics Traditional herb doctor Others Drugstore Home-made Vietnamese traditional medicine Others (specify)
12	M3IC4B	Where did the household buy medication for...without? 2nd	All	8	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Village health center Commune health center Regional clinics District hospital Provincial/city hospital Central hospital Other state-owned hospitals Private hospital Other hospitals Private clinics Traditional herb doctor Others Drugstore Home-made Vietnamese traditional medicine Others (specify)
13	M3IC4C	Where did the household buy medication for...without? 3rd	All	8	1 2 3 4 5 6 7 8 9 10 11 12	Village health center Commune health center Regional clinics District hospital Provincial/city hospital Central hospital Other state-owned hospitals Private hospital Other hospitals Private clinics Traditional herb doctor Others

			13	Drugstore
			14	Home-made Vietnamese
			15	traditional medicine
				Others (specify)
	During the last 4 weeks, how much		0-1000; -1:Missing	
14	did the household spend on	All	8 data by interviewer	Thousand dong
	medication without			
	During the last 4 weeks, how much		0-60000; -1:Missing	
15	did the household spend on	All	8 data by interviewer	Thousand dong
	medication without			
	During the last 4 weeks, did the			
16	household received free of-charge	All	8	
	oriental or w			1 Both
				2 Only western medicine
				3 Only oriental medicine
				4 No

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4A**

variables

52

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	MATV	ID code	All	8	1-17	Numeric
7	M4AC1A	Worked for wages/salaries?	Household members aged 6 and older	8		1 Yes 2 No
8	M4AC1B	Self-employed in agriculture?	Household members aged 6 and older	8		1 Yes 2 No
9	M4AC1C	Self-employed in non-farm activities?	Household members aged 6 and older	8		1 Yes 2 No
10	M4AC2	Working or not?	Household members aged 6 and older	8		1 Yes 2 No
11	M4AC3	Reasons for not working	Household members aged 6 and older are not working	8		1 Small/at school 2 Do housework 3 Too old, retired 4 Disabled 5 Ill 6 Unable to find a job 7 Others (specify)
12	M4AC4M	What is the most time-consuming job?Work description	Household members aged 6 and older	25	Name	Character
13	M4AC4	What is the most time-consuming job?Occupation code	Household members aged 6 and older	8	11-93	Numeric
14	M4AC5C	Name of organization/unit	Household members aged 6 and older	25	Name	Character
15	M4AC5M	Main functions/products	Household members aged 6 and older	25	Name	Character
16	M4AC5	Branch code	Household members aged 6 and older	8	1-99	Numeric
17	M4AC6	For how many months has...done it for the last 12 months	Household members aged 6 and older	8	1-12	Months
18	M4AC7	On average how many days does...usually work for a month?	Household members aged 6 and older	8	1-31	Days
19	M4AC8	On average how many hours does...usually work for a days	Household members aged 6 and older	8	1-20	Hours
20	M4AC9	For how many years has...been doing this work?	Household members aged 6 and older	8	0-70; -1:Missing data by interviewer	Years
21	M4AC10A	Employer or owner/By economic sector	Household members aged 6 and older	8		1 Self-employed/Private 2 Self-employed(Excluding private company) 3 For other households 4 State-owned economic sector 5 Collective economic sector 6 Private economic sector 7 Foreign-invested sector
22	M4AC10B	Official?	Household members aged 6 and older	8		1 Yes 2 No
23	M4AC11	Total wage/salaries received in past 12 months	Household members aged 6 and older	8	180-480000	Thousand dong
24	M4AC12A	Total bonus/ award received during public holidays	Household members aged 6 and older	8	0-31000; -2:Don't know/can't remember	Thousand dong
25	M4AC12B	Income from social allowances	Household members aged 6 and older	8	0-6800; -2:Don't know/can't remember	Thousand dong
26	M4AC12C	Income from maternity allowances	Household members aged 6 and older	8	0-9000; -2:Don't know/can't remember	Thousand dong
27	M4AC12D	Income from allowances for domestic/overseas business	Household members aged 6 and older	8	0-33390; -2:Don't know/can't remember	Thousand dong
28	M4AC12E	Other incomes	Household members aged 6 and older	8	0-39000; -2:Don't know/can't remember	Thousand dong

29	M4AC12F	Total income from wage employment	Household members aged 6 and older	8 0-84730	Thousand dong
30	M4AC13	Any other jobs?	Household members aged 6 and older	8	
				1	Yes
				2	No
31	M4AC14M	What is the second most time-consuming job?Work description	Household members aged 6 and older do any other job	25 Name	Character
32	M4AC14	What is the second most time-consuming job?Occupation code	Household members aged 6 and older do any other job	8 11-93	Numeric
33	M4AC15C	Branch this job belong to? Name of organization/unit	Household members aged 6 and older do any other job	25 Name	Character
34	M4AC15M	Branch this job belong to? Main functions/products	Household members aged 6 and older do any other job	25 Name	Character
35	M4AC15	Branch this job belong to? Branch code	Household members aged 6 and older do any other job	8 1-95	Numeric
36	M4AC16	For how many months has...been doing this job last 12 months	Household members aged 6 and older do any other job	8 1-12	Months
37	M4AC17	For how many days has...been doing this job for a month on average	Household members aged 6 and older do any other job	1-31; -1:Missing data 8 by interviewer	Days
38	M4AC18	For how many hours has...been doing this job for a day on average	Household members aged 6 and older do any other job	8 1-15	Hours
39	M4AC19	For how many years has...been doing this job	Household members aged 6 and older do any other job	1-56; -1:Missing data 8 by interviewer	Years
40	M4AC20	Employer/owner?	Household members aged 6 and older do any other job	8	
				1	Self-employed (for family's private company)
				2	Self-employed(Not for family's private company)
				3	Work for other households
				4	State-owned enterprises
				5	Collective economic sector
				6	Private economic sector
				7	Foreign-invested sector
41	M4AC21	Total Wage/salary received in the past 12 months- second job	Household members aged 6 and older do any other job	8 50-36000	Thousand dong
42	M4AC22A	Income from bonus/ award received during public holidays	Household members aged 6 and older do any other job	0-3000; -2:Don't 8 know/can't remember	Thousand dong
43	M4AC22B	Income from social allowances	Household members aged 6 and older do any other job	0-100; -2:Don't 8 know/can't remember	Thousand dong
44	M4AC22C	Maternity allowance	Household members aged 6 and older do any other job	8 0	Thousand dong
45	M4AC22D	Income from allowances for domestic/overseas business	Household members aged 6 and older do any other job	8 0-1440	Thousand dong
46	M4AC22E	Other incomes	Household members aged 6 and older do any other job	0-3000; -2:Don't 8 know/can't remember	Thousand dong
47	M4AC22F	Total income from wage employment	Household members aged 6 and older do any other job	8 0-3656	Thousand dong
48	M4AC23	Any other job?	Household members aged 6 and older do any other job	8	
				1	Yes
				2	No
49	M4AC24	Wages employment?	Household members aged 6 and older do any other job	8	
				1	Yes
				2	No
50	M4AC25	Total received the other jobs in the past 12 months	Household members aged 6 and older do any other job	8 100-9150	Thousand dong
51	M4AC26	Housework?	Household members aged 6 and older	8	Num
				1	Yes

52 M4AC27	No of hours per day	Household members aged 6 and older	2	No
			8 1-10	Hours

Explanatory documents for the VHLSS 2006

Name of the dataset: MUC4B0

variables

16

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B0MA	Code of land piece	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	1-15	Numeric
7	M4B0C3A	What id the area of this land piece?Code	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	1-96; -1:Missing data by interviewer	Numeric
8	M4B0C3B	Total area?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	10-396000	m ²
9	M4B0C4	Type of this land piece?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8		
				1		Land for annual trees
				2		Land for long-term tree
				3		Forestry land
				4		Water surface
				5		Grass field
				6		Adjacent garden/pond residential land
				7		Land for shifting
				8		Other (specify it)
10	M4B0C5	Type of irrigation used for this land piece?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8		
				1		Gravity
				2		Pump
				3		Manual
				4		No irragation
11	M4B0C6	Why do u have this land piece?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8		
				1		Long-term right use allocation
				2		Yield
				3		Inheritance
				4		Contracting
				5		Purchase
				6		Proclaiming
				7		Exchange
				8		Rent
				9		Borrow
				10		Other (specify it)
12	M4B0C7	Payment in cash and in-kind for land rent or contrcting in the last 12 months?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	1-40000	Thousand dong
13	M4B0C8	When is the first time do you use this land piece?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	1920-2006; -1:Missing data by interviewer	Year
14	M4B0C9	Do u takke planting or aquaculture activities in this land piece?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8		
				1		Yes
				2		No
15	M4B0C10	What do u do in this land piece in the last 12 months?	Households used or managed land for agriculture and forestry or water surface for aquaculture	8		
				1		Rental
				2		Lend without payment
				3		Exchange for other piece
				4		Fallowing
				5		Others (specify it)
16	M4B0C11	Amount in cash and in-kind obtained from land retal in the last 12 months	Households used or managed land for agriculture and forestry or water surface for aquaculture	8	7-36000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B11**

variables

19

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B11MA	Rice code	Households harvested any product from planting activities	8	1	Winter-spring ordinary rice
					2	Summer-autumn ordinary rice
					3	Tenth-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	Households harvested any product from planting activities	8	24-291600	m ²
8	M4B11C4	Output in KGs?	Households harvested any product from planting activities	8	15-183000	kg
9	M4B11C5	Amount in KGs lost due to pests/rotting...?	Households harvested any product from planting activities	8	0-800	kg
10	M4B11C6	Sold/bartered?	Households harvested any product from planting activities	8	1	Yes
					2	No
11	M4B11C7	Amount sold/bartered?	Households harvested any product from planting activities	8	5-143338	kg
12	M4B11C8	Value received from sold/bartered	Households harvested any product from planting activities	8	22-325528	Thousand dong
13	M4B11C9	To whom did the household sell/barter?	Households harvested any product from planting activities	8	1	State-owned enterprise
					2	Non-state enterprise
					3	Private traders
					4	Retail sales
					5	Others (specify it)
14	M4B11C10	Amount kept for retaining as seed	Households harvested any product from planting activities	8	0-4800	kg
15	M4B11C11	Amount kept for consumption	Households harvested any product from planting activities	8	0-5768	kg
16	M4B11C12	Amount used for feeding livestock	Households harvested any product from planting activities	8	0-11500	kg
17	M4B11C13	Amount used for gifts, lending/payment for hired laborers	Households harvested any product from planting activities	8	0-23200	kg
18	M4B11C14	Amount left for the future	Households harvested any product from planting activities	8	0-14400	kg
19	M4B11C15	Total value	Households harvested any product from planting activities	8	50-383600	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B12**

variables

12

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B12MA	Other fod crop code	Households harvested other starchy, vegetable	8		8 Maize/corn 9 Sweet potatoes 10 Cassava/manioc 11 Other starchy plants 12 Potatoes 13 Water spinach 14 Kohlrabi 15 Cabbage, cauliflower 16 Mustard greens of all kinds 17 Fresh beans of all kinds 18 Tomatoes 19 Spiced herbs 20 Other vegetables, tubers, fruits 21 Other annual crops (bonsai..)
7	M4B12C3	What is the area which you grew crop	Households harvested other starchy, vegetable	8	1-120000; -1:Missing data by interviewer	m ²
8	M4B12C4	Amount in KGs of the output	Households harvested other starchy, vegetable	8	0-240000	kg
9	M4B12C5	Amount sold/bartered?	Households harvested other starchy, vegetable	8	0-240000	kg
10	M4B12C6	Value received from sales/barter?	Households harvested other starchy, vegetable	8	0-100000	Thousand dong
11	M4B12C7	Amount kept for HH consumption?	Households harvested other starchy, vegetable	8	0-22500	kg
12	M4B12C8	What is the value of the output harvested for past 12 months?	Households harvested other starchy, vegetable	8	0-100000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B13**

variables

13

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B13MA	Annual & perenial industrial crops- Code	Households harvested any annual&perenial industrial crops	8		22 Soybeans 23 Peanuts 24 Sesame seeds 25 Suga cane 26 Tobacco 27 Cotton 28 Jute, ramie 29 Rush 30 Other annual industrial crops 31 Tea 32 Coffee 33 Rubber 34 Pepper 35 Coconut 36 Mulberry 37 Cashew 38 Other perennial industrial crops
7	M4B13C3A	What is the area or amount of plants and trees grown or taken care of by your household	Households harvested any annual&perenial industrial crops	8	1-100000	Numeric
8	M4B13C3B	What is the area or amount of plants and trees grown or taken care of by your household	Households harvested any annual&perenial industrial crops	8		1 m ² 2 Amount of crop
9	M4B13C4	How many kgs of...has your household harvested over last 12 months?	Households harvested any annual&perenial industrial crops	8	1-420000	kg
10	M4B13C5	How many kgs of...has your household sold or bartering for the last 12 months?	Households harvested any annual&perenial industrial crops	8	0-420000	kg
11	M4B13C6	What is the total of...amount your household obtained from selling/bartering for	Households harvested any annual&perenial industrial crops	8	0-816000	Thousand dong
12	M4B13C7	How many kgs of the...output have been retained for consumption?	Households harvested any annual&perenial industrial crops	8	0-20000	kg
13	M4B13C8	What is the value of the output harvested for the past 12 months?	Households harvested any annual&perenial industrial crops	8	4-816000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset: MUC4B14

variables

13

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B14MA	Fruit crops-Code	Households harvested any fruit crops	8		39 Citrus fruits 40 Pineapples 41 Bananas 42 Mangoes 43 Apples 44 Grapes 45 Plums 46 Papayas 47 Longans, litchis, rambutans 48 Sapodillas 49 Custard apples 50 Jackfruits, durians 51 Mangosteens 52 Other fruit trees 53 Other perennial trees 54 Breeding trees 55 Bonsai
7	M4B14C3A	What is the area & how many..tree household grow or take care of?Amount	Households harvested any fruit crops	8	1-24000; -1:Missing data by interviewer	Numeric
8	M4B14C3B	What is the area & how many..tree household grow or take care of?Code	Households harvested any fruit crops	8		1 Yes 2 No
9	M4B14C4	How many kgs of...has your household harvested over last 12 months?	Households harvested any fruit crops	8	1-50300	kg
10	M4B14C5	How many kgs of...has your household sold or bartering for the last 12 months?	Households harvested any fruit crops	8	0-50000	kg
11	M4B14C6	What is the total of...amount your household obtained from selling/bartering for	Households harvested any fruit crops	8	0-2000000	Thousand dong
12	M4B14C7	How many kgs of the...output have been retained for consumption?	Households harvested any fruit crops	8	0-1000	Thousand dong
13	M4B14C8	What is the value of the output harvested for the past 12 months?	Households harvested any fruit crops	8	1-2000000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B15**

variables

10

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B15MA	Crop by-products code	Households have income from crops by products	8		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 (from agricultural plants) 9 Other crop by-products
7	M4B15C2	Value from sales/barter	Households have income from crops by products	8	0-15000	Thousand dong
8	M4B15C3	Value kept for household's animal consumption	Households have income from crops by products	8	0-4870	Thousand dong
9	M4B15C4	Value kept for other purposes?	Households have income from crops by products	8	0-4080	Thousand dong
10	M4B15C5	Total value	Households have income from crops by products	8	2-15000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset MUC4B16

variables

11

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B16MA	Crop planting expense code	Households those have crop planting expenditure	8		1 Seeds 2 Saplings Chemical fertilizers (nitrogenous, phosphat, potassium, NPK, etc) 3 Organic fertilizers (self-provided) 4 Organic fertilizers (bought) 5 Pesticides 6 Pesticides 7 Herbicides Small, non-durable tools (sickles, shears, shovels, bamboo baskets...) 8 Energy, fuel (electricity, petrol, oil, lubricant, burning fuel...) 9 Minor repairs, maintenance 10 Depreciation of fixed assets 11 Land rental or contracting Rental of asset, mechnery, equipment and means of transport 12 Rental of cattle for ployghing Expense for outside hired laborers 13 Irrigational fee 14 Agricultural taxes Payment for cultivation loan 15 interest Other costs (postage, advertisement, marketing, production insurance contributions to Plant Protection Fund, field improvement, extension, administrative management, food for working cattle) 16
7	M4B16C2A	Expenditure on rice crop	Households those have crop planting expenditure	8	0-59500; -2: Don't remember	Thousand dong
8	M4B16C2B	Expenditure on starchy and other food crops	Households those have crop planting expenditure	8	0-29570; -2: Don't remember	Thousand dong
9	M4B16C2C	Expenditure on industrial crops	Households those have crop planting expenditure	8	0-91500; -2: Don't remember	Thousand dong
10	M4B16C2D	Expenditure on fruit crops	Households those have crop planting expenditure	8	0-1600000; -2: Don't remember	Thousand dong
11	M4B16C2E	Total Crop Planting Expenditure	Households those have crop planting expenditure	8	1-1600000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B161**

variables

11

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	M4B161MA	Number-Quantity of chemical fertilizers used for types of trees	Households those used chemical fertilizer	8		1 Nitrogenous 2 Phosphat 3 Potassium 4 NPK 5 Other chemical fertilizers
7	M4B161C2	Rice	Households those used chemical fertilizer	8	0-11500; -1: Missing data by interviewer	Kg
8	M4B161C3	Other staple and food trees	Households those used chemical fertilizer	8	0-4400; -1: Missing data by interviewer	Kg
9	M4B161C4	Industrial trees	Households those used chemical fertilizer	8	0-15000; -1: Missing data by interviewer	Kg
10	M4B161C5	Fruit trees and others, excluding forestry trees	Households those used chemical fertilizer	8	0-3000; -1: Missing data by interviewer	Kg
11	M4B161C6	Total quantity of chemical fertilizers used for types of trees	Households those used chemical fertilizer	8	1-15500	Kg

Explanatory documents for the VHLSS 2006

Name of the dataset MUC4B21

variables

14

No	Variable name in	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B21MA	Livestock breeding code	Households raised or owned cattle, poultry and pets	8		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 livestock (bears, deer, rabbits) 12 Poultry eggs (chickens, ducks...) 13 Fresh milk 14 Silkworm cocoons 15 Bee's honey (house-raising) 16 Other livestock (non-slaughtered) 17 Other livestock from breeding 18 Livestock breeding by-products
7	M4B21C3A	Quantity sold/bartered	Households raised or owned cattle, poultry and pets	8	0-660000	Kg-Number - Litre
8	M4B21C3B	Value sold/bartered	Households raised or owned cattle, poultry and pets	8	0-660000	Thousand dong
9	M4B21C4A	Quantity kept for HH consumption	Households raised or owned cattle, poultry and pets	8	0-5200	Kg-Number - Litre
10	M4B21C4B	Value kept for HH consumption	Households raised or owned cattle, poultry and pets	8	0-93600	Thousand dong
11	M4B21C5A	Quantity kept for other purposes	Households raised or owned cattle, poultry and pets	8	0-207930	Kg-Number - Litre
12	M4B21C5B	Value kept for other purposes	Households raised or owned cattle, poultry and pets	8	0-228723	Thousand dong
13	M4B21C6A	Total quantity from live stock breeding	Households raised or owned cattle, poultry and pets	8	0-660300	Kg-Number - Litre
14	M4B21C6B	Total value from livestock breeding	Households raised or owned cattle, poultry and pets	8	3-660300	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B22**

variables

18

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B22MA	Livestock breed code	Households those have livestock breeding expenditure	8		1 Pigs 2 Buffalos, cows 3 Horses 4 Sheep, goats 5 Chickens 6 Ducks, Thai ducks, geese 7 Other poultry 8 Bees 9 Silkworms 10 Others (specify it)
7	M4B22C7	Expenditure on Livestock breeding	Households those have livestock breeding expenditure	8	0-100000	Thousand dong
8	M4B22C8	Expenditure on feeding	Households those have livestock breeding expenditure	8	0-400000	Thousand dong
9	M4B22C9	Expenditure on Medicine for cattle, poultry	Households those have livestock breeding expenditure	8	0-24000	Thousand dong
10	M4B22C10	Expenditure on Energy, fuel	Households those have livestock breeding expenditure	8	0-13800; -2:Don't remember	Thousand dong
11	M4B22C11	Expenditure on fixed assets Depreciation	Households those have livestock breeding expenditure	8	0-14000; -2:Don't know	Thousand dong
12	M4B22C12	Expenditure on Land rental and contracting	Households those have livestock breeding expenditure	8	0-10000	Thousand dong
13	M4B22C13	Expenditure on Rental of assets, machinery, equipment	Households those have livestock breeding expenditure	8	0-3200	Thousand dong
14	M4B22C14	Payment for hired laborers	Households those have livestock breeding expenditure	8	0-36000	Thousand dong
15	M4B22C15	Payment for loan interest for breeding	Households those have livestock breeding expenditure	8	0-7640	Thousand dong
16	M4B22C16	Business taxes	Households those have livestock breeding expenditure	8	0-1000	Thousand dong
17	M4B22C17	Other expenses	Households those have livestock breeding expenditure	8	0-9000	Thousand dong
18	M4B22C18	Total livestock breeding expenditure	Households those have livestock breeding expenditure	8	5-550720	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B31**

variables

9

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B31MA	Agricultural Service code	Households used machines, equipments or tools for farm services	8		
					1	Soil preparation
					2	Irrigation
					3	Pest and disease control
					4	Rice plucking, semi-processing
					5	Other services (artificial insemination, castration)
7	M4B31C3	Number of operating months	Households used machines, equipments or tools for farm services	8	1-12	Months
8	M4B31C4	Average monthly income	Households used machines, equipments or tools for farm services	8	60-52360	Thousand dong
9	M4B31C5	Total Agricultural Service Income	Households used machines, equipments or tools for farm services	8	100-471240	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B32**

variables

17

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B31MA	Agricultural Services expense code	Households have expenditure on agriculture services	8		
				1		Soil preparation
				2		Irrigation
				3		Pest and disease control
				4		Rice plucking, semi-processing
				5		Other services (artificial insemination, castration)
7	M4B32C7	Expenditure on materials	Households have expenditure on agriculture services	8	0-315000	Thousand dong
8	M4B32C8	Expenditure on small, non-durable items	Households have expenditure on agriculture services	8	0-6750	Thousand dong
9	M4B32C9	Expenditure on energy, fuel	Households have expenditure on agriculture services	8	0-92500; -2:Don't remember	Thousand dong
10	M4B32C10	Expenditure on minor repairs, maintenance	Households have expenditure on agriculture services	8	0-27000; -2:Don't remember	Thousand dong
11	M4B32C11	Fixed assets depreciation	Households have expenditure on agriculture services	8	0-10000	Thousand dong
12	M4B32C12	Expenditure on rental of house, workshops,...	Households have expenditure on agriculture services	8	0-600	Thousand dong
13	M4B32C13	Payment for hires outside laborers	Households have expenditure on agriculture services	8	0-43200	Thousand dong
14	M4B32C14	Payment for loan interest	Households have expenditure on agriculture services	8	0-18000	Thousand dong
15	M4B32C15	Business taxes	Households have expenditure on agriculture services	8	0-4500	Thousand dong
16	M4B32C16	Other expenditure	Households have expenditure on agriculture services	8	0-11700; -2:Don't remember	Thousand dong
17	M4B32C17	Total Agricultural Services Expenditure	Households have expenditure on agriculture services	8	5-437895	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B41**

variables

13

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B41MA	Forestry product code	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8		
					1	Mu oil trees
					2	Cinnamon
					3	Anise
					4	Pine
					5	Varnish trees
					6	Trees for wood
					7	Bamboo
					8	Fan palm trees
					9	Water coconut
					10	Other forestry trees (specify them)
					11	Wood
					12	Forest plantation, protection, maintenance, improvement
					13	Trees for breeding and other products collected from forests
					14	Other forestry services (protection, management...)
7	M4B41C3A	Value of revenue and harvested output/Forestry land for production allocated to	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8	0-105000; -2:Don't remember	Thousand dong
8	M4B41C3B	Value of revenue and harvested output/Forestry land for production not allocated	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8	0-9000	Thousand dong
9	M4B41C3C	Value of revenue and harvested output/Protective forestry land allocated to hous	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8	0-22500; -2:Don't remember	Thousand dong

10	M4B41C3D	Value of revenue and harvested output/Protective forestry land not allocated to	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	0-6500; -2:Don't remember	Thousand dong
11	M4B41C3E	Value of revenue and harvested output/Other forestry land	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	0-30000; -2:Don't remember	Thousand dong
12	M4B41C3F	Value of revenue and harvested output/Total	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8 15-105000	Thousand dong
13	M4B41C4	Value of sales/bartered	Households have income from planting/managing/protecting/maintaining forest/germinating forestry seedlings, collecting products from forest/harvesting forestry	8 0-105000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset MUC4B42

variables

20

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B42MA	Forestry activity code	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8		1 Forestry activities 2 Forestry services Hunting, trapping, domesticating 3 forest animals, birds
7	M4B42C1	Expenditure on seeds, breeds	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-4000	Thousand dong
8	M4B42C2	Expenditure on various type of fertilizers	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-5500	Thousand dong
9	M4B42C3	Expenditure on small, non-durable tools	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-1300; -2:Don't remember	Thousand dong
10	M4B42C4	Expenditure on energy, fuel	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-1800	Thousand dong
11	M4B42C5	Expenditure on small repairs, maintenance	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-450; -2:Don't remember	Thousand dong
12	M4B42C6	Fixed assets depreciation	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-1500; -2:Don't remember	Thousand dong
13	M4B42C7	Expenditure on rental and bid lan	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-300	Thousand dong
14	M4B42C8	Expenditure on rent of assets, machinery,..	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-3000	Thousand dong
15	M4B42C9	Expenditure on hire animals for droughing and pulling	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-1200	Thousand dong
16	M4B42C10	Hide laborers from outside laborers	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-9000	Thousand dong
17	M4B42C11	Loan interest	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-340	Thousand dong
18	M4B42C12	Business taxes	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8	0-1200	Thousand dong

19	M4B42C13	Other expenditure	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	0-6000; -2:Don't remember	Thousand dong
20	M4B42C14	Total expenditure for forestry ...	Expenditure for forestry and hunting, trapping and domesticating forest animal and birds	8 0-16500	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B51**

variables

14

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B51MA	Aquaculture code	Households bred and reared fish, shrimp and other aquaculture products	8		1 Aquaculture raising 1.1 Fish 1.2 Shrimp 1.3 Shrimp and fish for breed Other aquacultural products 1.4 (specify them) 2 Aquacultural catching 2.1 Fish 2.2 Shrimp Other aquacultural products 2.3 (specify them) 3 Aquacultural services
7	M4B51C3A	Quantity sold/bartered	Households bred and reared fish, shrimp and other aquaculture products	8	0-276350	Kg
8	M4B51C3B	Value sold/bartered	Households bred and reared fish, shrimp and other aquaculture products	8	0-3288565	Thousand dong
9	M4B51C4A	Quantity kept for HH consumption	Households bred and reared fish, shrimp and other aquaculture products	8	0-1200	Kg
10	M4B51C4B	Value kept for HH consumption	Households bred and reared fish, shrimp and other aquaculture products	8	0-12000	Thousand dong
11	M4B51C5A	Quantity kept for other purposes	Households bred and reared fish, shrimp and other aquaculture products	8	0-900	Kg
12	M4B51C5B	Value kept for other purposes	Households bred and reared fish, shrimp and other aquaculture products	8	0-3800	Thousand dong
13	M4B51C6A	Total quantity of aquaculture	Households bred and reared fish, shrimp and other aquaculture products	8	1-276450	Kg
14	M4B51C6B	Total value from aquaculture	Households bred and reared fish, shrimp and other aquaculture products	8	10-3289755	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4B52**

variables

19

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4B52MA	Aquacultural breed code	Households have expenditure on aquaculture	8	1 2 3	
7	M4B52C7	Expenditure on aquacultural breeds	Households have expenditure on aquaculture	8	0-790331	Thousand dong
8	M4B52C8	Expenditure on feeds	Households have expenditure on aquaculture	8	0-1755699	Thousand dong
9	M4B52C9	Expenditure on small, non-durable tools	Households have expenditure on aquaculture	8	0-16500	Thousand dong
10	M4B52C10	Expenditure on energy, fuel	Households have expenditure on aquaculture	8	0-650000	Thousand dong
11	M4B52C11	Expenditure on small repairs, maintenance	Households have expenditure on aquaculture	8	0-66000	Thousand dong
12	M4B52C12	Expenditure on Fixed assets depreciation	Households have expenditure on aquaculture	8	0-75000	Thousand dong
13	M4B52C13	Expenditure on land rental and constructing	Households have expenditure on aquaculture	8	0-48000	Thousand dong
14	M4B52C14	Expenditure on rental of assets, machinery, equipment	Households have expenditure on aquaculture	8	0-20500	Thousand dong
15	M4B52C15	Payment for hired laborers	Households have expenditure on aquaculture	8	0-331200	Thousand dong
16	M4B52C16	Payment for loan interest	Households have expenditure on aquaculture	8	0-72000	Thousand dong
17	M4B52C17	Business taxes	Households have expenditure on aquaculture	8	0-8975	Thousand dong
18	M4B52C18	Other expenses	Households have expenditure on aquaculture	8	0-130116	Thousand dong
19	M4B52C19	Total aquacultural expenditure	Households have expenditure on aquaculture	8	1-2763394	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset MUC4C

variables

33

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4C1MA	Order activities	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1-4	Numeric
7	M4C1C2	Branch code of activities	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	10-93	Numeric
8	M4C1C3	Code of person managed/controlled of almost information of activity?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1-12; 99: Does not HH member/Does not activities	Numeric
9	M4C1C4	Months was this activity under operation for the past 12 months	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1-12	Month
10	M4C1C5	During these months, on average, how many days per month was this activity under	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1-30	Days
11	M4C1C6	Owned all of this business	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1 2	Yes No
12	M4C1C7	How many households including yours own this business?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	2-15; -1: Missing data by interviewer	Households
13	M4C1C8	% of income from this business received by your household	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	10-100	%
14	M4C1C9A	Where is this activity taken place?First	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	1 2 3 4 5 6 7	At home Industrial zone Trade center Market Other shops Other permanent place Non-permanent place

15	M4C1C9B	Where is this activity taken place?Second	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	
				1	At home
				2	Industrial zone
				3	Trade center
				4	Market
				5	Other shops
				6	Other permanent place
				7	Non-permanent place
16	M4C1C9C	Where is this activity taken place?Third	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	
				1	At home
				2	Industrial zone
				3	Trade center
				4	Market
				5	Other shops
				6	Other permanent place
				7	Non-permanent place
17	M4C1C10	Total number of laborers doing this activity during the last 12 months?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 1-36	Persons
			Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades		
18	M4C1C11	In which how many are members of households	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-8	Persons
			Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades		
19	M4C1C12	How many laborers are paid?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-34	Persons
			Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades		
20	M4C1C13	In which, how many laborers paid are member of household?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-5	Persons
			Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades		
21	M4C1C14	When is this activity taken place?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 1901-2006; - 1:Missing data by interviewer	Year
			Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades		
22	M4C1C15	Does this activity have business license	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8	
				1	Yes, enterprise
				2	Yes, private trading
23	M4C1C16	Is the product of this activity for selling or bartering or supplying services?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	3	No
				8	
				1	Yes
				2	No

24	M4C1C17	For months business under operation for past 12 months, what was the average mon	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-583000	Thousand dong
25	M4C1C18	What is the revenue for the past 12 months	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-6996000	Thousand dong
26	M4C1C19	Over the past 12 months, have you exchanged goods and services produce by this b	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 1 2	Yes No
27	M4C1C20	What is the value of exchanged goods and services for past 12 months?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 7-5800	Thousand dong
28	M4C1C21	Has your HH consumed any goods and sevice produced by this business for past 12	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 1 2	Yes No
29	M4C1C22	What is the value of goods and services consumed by your HH past 12 months?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 4-26625	Thousand dong
30	M4C1C23	Has your HH consumed or sold and by-products produced by this business for the p	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 1 2	Yes No
31	M4C1C24	What is the value of by-products consumed or sold by your HH for past 12 months?	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 6-24500	Thousand dong
32	M4C1C25	Total income	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-6996000	Thousand dong
33	M4C1C25A	Total income allocated for HH	Households those do any non-agriculture, non-forestry, non-aquaculture business and production trades	8 0-6996000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset MUC4C2

variables

9

No	Variable name in	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4C1MA	Order activities	Households those have non-agriculture, non-forestry, non-agriculture business and production trades	8	1-4	Numeric
7	M4C2C26	Code of expenditure for trading and service activities for last 12 months?	Households those have non-agriculture, non-forestry, non-agriculture business and production trades	8		
				1		Materials, sub-materials
				2		Small and non-durable tools
				3		Electricity
				4		Water
				5		Gasoline, oil, petrol, lubricants, burning fuels,...
				6		Small repair and maintenance
				7		Fixed asset depreciation
						Rental land, workshops, shops, machines, and other production means
				8		Transportation (rent and fee)
				9		Labor costs (wage, salary; social insurance; health insurance; trade union fees;...)
				10		Loan interest
				11		Taxes, fees, and other fees considered as taxes
				12		Expenditure on water and solid sewage disposal
				13		Other expenditures (postage, transportation, ad., marketing, model purchases, design, production insurance,...)
				14		Total expenditure (1-14)
				15		Total expenditure allocated for the household
				16		
8	M4C2C27	Average expenditure per month	Households those have non-agriculture, non-forestry, non-agriculture business and production trades	8	1-405000; -1: Missing data by interviewer	Thousand dong
9	M4C2C28	Expenditure for last 12 months	Households those have non-agriculture, non-forestry, non-agriculture business and production trades	8	3-5956800	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC4D**

variables

22

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M4D1C2_01	Overseas remittance received in both cash and kinds	All	8	0-600000	Thousand dong
7	M4D1C2_02	Domestic remittance received in both cash and kind	All	8	0-95000	Thousand dong
8	M4D1C2_03	Pension, one-time sickness and job loss allowance	All	8	0-55200	Thousand dong
9	M4D1C2_04	Social welfare allowance	All	8	0-17160	Thousand dong
10	M4D1C2_05	Lump sum retirement allowance	All	8	0-93000	Thousand dong
11	M4D1C2_06	Other social welfare allowance	All	8	0-29000	Thousand dong
12	M4D1C2_07	Allowance for recovery from disaster, fire	All	8	0-22000	Thousand dong
13	M4D1C2_08	Income from various types of insurance	All	8	0-24000	Thousand dong
14	M4D1C2_09	Interest of savings, shares, bonds, loans	All	8	0-70000	Thousand dong
15	M4D1C2_10	Income from leasing workshops, machines, assets, equipment	All	8	0-80000	Thousand dong
16	M4D1C2_11	Income and support from charity organization, associations, or firms	All	8	0-25000	Thousand dong
17	M4D1C2_12	Others	All	8	0-225000	Thousand dong
18	M4D2C2_1	Selling means of production, houses, assets, exchanging lands	All	8	0-850000	Thousand dong
19	M4D2C2_2	Selling gold, silver, precious stone, jewelry	All	8	0-320000	Thousand dong
20	M4D2C2_3	Withdrawal from saving, stocks, obtaining debts	All	8	0-650000	Thousand dong
21	M4D2C2_4	Borrowing on interest, advance payment	All	8	0-980000	Thousand dong
22	M4D2C2_5	Other	All	8	0-1200000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC5A1**

variables

10

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	M5A1C1	Code of things HH consumed during holidays last 12 months?	All	8		101 Fragrant, specialty rice? 102 Glutinous rice ? 110 Pork? (inedible parts removed) 111 Beef? 112 Buffalo's meat? 113 Chicken? 114 Duck and other poultry meat? Other meat? (goat, dog, lamb, 115 game meat, bird,...) Processed meat? (meat pies, 116 fried meat pies, sausage,...) 118 Fresh fish, shrimp? 120 Other seafoods (crab, snails..) 121 Chicken or duck eggs? 124 Beans? 134 Fruit? 139 Sugar, molasses? 140 Cakes, candy, jam? 144 Liquor of all kinds 145 Beers of all kinds? 146 Canned or bottled refreshment? 151 Coffee? 153 Tea? 154 Cigarettes, tobacco 156 Outdoors eating Other things (processed foods, 157 spices, additives ...) Kg - Numbers - Litre
7	M5A1C2A	Quantity bought/bartered	All	8	0-250	Thousand dong
8	M5A1C2B	Value bought/bartered	All	8	0-6000 0-160; -1:Missing	Thousand dong
9	M5A1C3A	Quantity self-supplied/received	All	8	data by interviewer	Kg - Numbers - Litre
10	M5A1C3B	Value self-supplied/received	All	8	0-3150	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset: MUC5A2

variables

15

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M5A2C1	Things has HH consumed for last 12 months	All	8		Ordinary rice? (incl. fragrant, specialty) 101 specialty) 102 Glutinous rice ? 103 Corn/maize? (as kemels) 104 Cassava? (as fresh) Various types of potatoes? (as fresh) 105 fresh) 106 Bread, wheat or wheat flour? Noodle, pho noodle, instant rice 107 soup? 108 Rice noodle? 109 Vermicelli? 110 Pork? (inedible parts removed) 111 Beef? 112 Buffalo's meat? 113 Chicken? 114 Duck and other poultry meat? Other meat? (goats, dogs, lamb, wild beasts, birds,...) 115 wild beasts, birds,...) 116 Processed meat? 117 Animal fat, vegetable oil 118 Fresh fish, shrimp? Dried and processed fish and shrimp? 119 shrimp? 120 Other seafoods (crab, snails..)? 121 Chicken or duck eggs? 122 Tofu? 123 Peanuts, sesame seeds? 124 Beans? 125 Various kinds of fresh pea ? 126 Water morning glory? 127 Kohlrabi? 128 Cabbage? 129 Tomatoes? Other vegetables? (calabash, pumpkin, cucumber) 130 pumpkin, cucumber) 131 Oranges? 132 Bananas? 133 Mangoes? Other fruit? (rambutan, papaya, melon...) 134 melon...) 135 Fish sauce and dipping sauce? 136 Salt? 137 Spices, powdered soup 138 Food seasoning? 139 Sugar, molasses? 140 Cakes, jam, sweets 141 Condensed milk, powdered milk 142 Icecreams, yoghurt? 143 Fresh milk? 144 Liquor of all kinds? 145 Beer? 146 Bottled & canned refreshment Bottled, canned non-carbonated fruit juices? 147 fruit juices? 148 Bottled & canned purified water 149 Bottled & canned tonic water 150 Instant coffee ? 151 Powdered coffee 152 Powdered tea/instant tea? 153 Dried tea? 154 Cigarettes, tobacco?

				155 Betel leaf, areca nut, lime?
				Outdoors meals (breakfast,
				156 lunch, dinner)
				157 Others?
				0-12; -1:Missing
				data by
7 M5A2C2	How many months	All	8 interviewer	Months
8 M5A2C3	bought/bartered	All	8 1-60	Times
	Times bought/bartered per month			0.1-322; -
				1:Missing data by
9 M5A2C4	Average quantity per time	All	8 interviewer	Kg, Liter, number
	bought/bartered			0.2-1512; -
				1:Missing data by
10 M5A2C5	Average value per time	All	8 interviewer	Thousand dong/time
11 M5A2C6	bought/bartered	All	8 1-50000	Thousand dong/year
	Value per year bought/bartered			
	Consumed any self- product or			
12 M5A2C7	given goods?	All	8	
			1	Yes
			2	No
				1-12; -1:Missing
				data by
13 M5A2C8	No of months consumed	All	8 interviewer	Months
				0.1-3500; -
				1:Missing data by
14 M5A2C9	Quantity of consumption	All	8 interviewer	Kg, Liter, number
15 M5A2C10	Consumption Value	All	8 0.5-12000	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC5B1**

variables

10

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M5B1C1	Items has your HH consumed for last 12 months?	All	8		201 Allowance for children? Coal,firewood, rice husk, 202 sawdust...? in which: agricultural by-products (straw, thatch, leaves of sugarcane, body of maize, jute, 299 rush...) 203 Gas 204 Parafin? (lighting, cooking) Gasoline, lubricant and grease for cars, motorcycle, other 205 equipments? Parking fees? (bicycles, 206 motorbikes, cars) 207 Matches, candles, flint, lighters? Washing powder softening liquid 208 ? Dish washing liquid, house 209 cleaning liquid? 210 Shampoo, conditioning? 211 Bath soap, lotion 212 Cream, powder & lipsticks 213 Toothpaste, tooth brushes? 214 Tissue/blades 215 Books, newspapers, magazines? 216 Flowers? Entertainment? (cinema, music, 217 video, sports) 218 Lottery? 219 Items of worship? 220 Haircut, hairdressing? 221 Other daily expenses 0-12; -1:Missing data by 8 interviewer Months 8 0.2-3000 Thousand dong/month 1-36000; -1:Missing data 8 by interviewer Thousand dong/year 8 0-5760 Thousand dong
7	M5B1C2	No of months bought	All	8		
8	M5B1C3	Value bought per month	All	8	0.2-3000	Thousand dong/month
9	M5B1C4	Value bought for last 12 months	All	8		
10	M5B1C5	Self-product/given value	All	8	0-5760	Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC5B2**

variables

8

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M5B2C1	Item HH has consumed for last 12 months?	All	8		301 Textile materials of all kinds? Ready-made clothing (incl. 302 underwear)? 303 Mosquito net and netting? 304 Face towels, scarves? Rush mats, blankets, bed sheets, 305 pillow, table cloth, curtains 306 Other garments? (thread, socks...) 307 Tailoring or laundry service? 308 Shoes, sandals, wooden clogs? 309 Nylon sheeting, hats, umbrellas? Electric devices: light bulbs, electric 310 wire, plugs, fuse? Earthenware, porcelain and glass: 311 bowls, plates, teapots and cups,... 312 Pans, pots, bins, buckets, basins? 313 Thermos? 314 Bags and baskets? Flashlights and batteries for lighting, 315 TV, radios? 316 Cradles, hammocks, prams? Other household items? (excluding 317 durable goods)-(Specify-----) 318 Bicycle tires, tubes and spare parts? Automotive tires, tubes and spare 319 parts? Maintenance and repairs of 320 household appliances Travel fees (boat, bus, train, taxi, car 321 ...)? 322 Pictures, photos, bonsai? 323 Sport instruments? 324 Toys? Envelopes, stamps, telephone, 325 postage? 399 The Internet 326 Internet 327 Cosmetic surgery, body building? 328 Domestic excursions, holidays? 329 Foreign excursions, holidays? 330 Jewelry, watches, glasses? 331 Other cultural activities? 332 Hiring servants for the family? 333 Other annual expenses (specify) Thousand dong/year
7	M5B2C2	Value bought per year	All	8	0-40000	Thousand dong/year
8	M5B2C3	Self generated/given value per year	All	8	0-20000	Thousand dong/year

Explanatory documents for the VHLSS 2006

Name of the dataset: **MUC5B3_4**

variables

23

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	M5B3C2_01	Contributions to various funds	All		8 0-25000	Thousand dong
		Amount paid in replacement of				
7	M5B3C2_02	compulsory public labor	All		8 0-12000	Thousand dong
8	M5B3C2_03	All kinds of taxes	All		8 0-2100	Thousand dong
		Wedding of a household				
9	M5B3C2_04	member	All		8 0-5000	Thousand dong
		Funeral and death				
		anniversaries of household				
10	M5B3C2_05	members	All		8 0-60000	Thousand dong
11	M5B3C2_06	Entertainment	All		8 0-100000	Thousand dong
12	M5B3C2_07	Gifts, donation, support	All		8 0-42000	Thousand dong
13	M5B3C2_08	Other expenses	All		8 0-358500	Thousand dong
		in which: cost for persons who				
		used to be HH member to				
14	M5B3C2_09	study or be medically treated	All		8 0-350000	Thousand dong
		Fee, administrative and legal				
15	M5B3C2_10	service for life	All		8 0-105000	Thousand dong
		Debt repayment,				
		reimbursement, advance				
16	M5B4C2_1	payment	All		8 0-620000	Thousand dong
		Lending, contributing to				
17	M5B4C2_2	revolving credit groups	All		8 0-300000	Thousand dong
18	M5B4C2_3	Buying gold, silver, gemstone	All		8 0-300000	Thousand dong
19	M5B4C2_4	Depositing in savings accounts	All		8 0-300000	Thousand dong
		Buying life and security				
20	M5B4C2_5	insurances	All		8 0-52500	Thousand dong
21	M5B4C2_6	Other insurances	All		8 0-10000	Thousand dong
22	M5B4C2_7	investment of completed	All		8 0-700000	Thousand dong
23	M5B4C2_8	Others	All		8 0-1203476	Thousand dong

(This list was revised by the author.)

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M6MA1_01	Code of fixed assets and durable appliances which you have	All	8		1 Perennial crop gardens
:	:					2 Aquaculture farms
67	M6MA1_62	Same as the above				3 Fish/shrimp-rearing cages/rafts
						4 Land for doing other business
						5 Drawing, ploughing and breeding cattle
						6 Breeding pigs
						7 Basic herds of poultry and cattle
						8 Breeding facilities
						9 Feed grinding machines
						10 Rice milling machines
						11 Grain harvesting machines
						12 Pesticide sprayers
						13 Houses and workshops
						14 Shops
						15 Other production facilities
						16 Cars
						17 Tractors of all kinds
						18 Trailers
						19 Tractor ploughs
						20 Motorbikes
						21 Bicycles
						22 Carts
						23 Motor boats, ferries ...
						24 Rowing boats, ferries..
						25 Other means of transportation
						26 Lathes and welding and milling machines
						27 Punchers
						28 Wooden sawing machines
						29 Pumps
						30 Power generators
						31 Printers, photocopiers
						32 Fax machines
						33 Telephone sets
						34 Mobilephones
						35 Sewing, weaving, embroidering machines
						36 Other machines and equipment
						37 Fishing net
						38 Durable containers for storage
						39 Other specify equipments
						40 Video cassette players
						41 Color T.V sets
						42 Black and white T.V sets
						43 Multi-tier stereos
						44 Radios/Cassette players
						45 Recorders/Disc players
						46 Computers
						47 Cameras, camcorders
						48 Refrizerators, freezers
						49 Air-conditioners
						50 Washing machines and driers
						51 Electric fans
						52 Water heaters
						53 Gas cookers
						54 Electric cookers, rice cookers, pressure cookers
						55 Trollers of all kinds

- 56 Wardrobes of all kinds
- 57 Beds
- 58 Tables, chairs, sofas ...
- 59 Vacuum cleaners, water filters
- 60 Microwaves, baking stoves
- 61 Fruit blenders, juicers
- 62 Other valuable things (Antiques, pianos, dressing tables...)
- 63 Specify it (_____)

Note: Response categories are the same for all variables.

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC6A**

variables

12

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M6AMA	Asset code	All	8		1 Perennial crop gardens 2 Aquaculture farms 3 Fish/shrimp-rearing cages/rafts 4 Land for doing other business 5 Drawing, ploughing and breeding cattle 6 Breeding pigs 7 Basic herds of poultry and cattle 8 Breeding facilities 9 Feed grinding machines 10 Rice milling machines 11 Grain harvesting machines 12 Pesticide sprayers 13 Houses and workshops 14 Shops 15 Other production facilities 16 Cars 17 Tractors of all kinds 18 Trailers 19 Tractor ploughs 20 Motorbikes 21 Bicycles 22 Carts 23 Motor boats, ferries ... 24 Rowing boats, ferries.. 25 Other means of transportation 26 Lathes and welding and milling machines 27 Punchers 28 Wooden sawing machines 29 Pumps 30 Power generators 31 Printers, photocopiers 32 Fax machines 33 Telephone sets 34 Mobilephones 35 Sewing, weaving, embroidering machines 36 Other machines and equipment 37 Fishing net 38 Durable containers for storage 39 Other specify equipments 40 Video cassette players 41 Color T.V sets 42 Black and white T.V sets 43 Multi-tier stereos 44 Radios/Cassette players 45 Recorders/Disc players 46 Computers 47 Cameras, camcorders 48 Refrigerators, freezers 49 Air-conditioners 50 Washing machines and driers 51 Electric fans 52 Water heaters 53 Gas cookers 54 Electric cookers, rice cookers, pressure cookers 55 Trollers of all kinds 56 Wardrobes of all kinds 57 Beds 58 Tables, chairs, sofas ... 59 Vacuum cleaners, water filters 60 Microwaves, baking stoves 61 Fruit blenders, juicers 62 Other valuable things (Antiques, pianos, dressing tables...) 63 Specify it (_____)
7	M6AC3	Quantities	All	8	1-60	Number
8	M6AC4A	Purchased month	All	8	0-12 1932-2006; - 1:Missing data by	Month
9	M6AC4B	Purchased year	All	8	interviewer 3-1500000; - 1:Missing data by	Year
10	M6AC5	The value at the time of purchasing/receiving	All	8	interviewer 10-15000000; - 1:Missing data by	Thousand dong
11	M6AC6	The value at the current price	All	8	interviewer	Thousand dong
12	M6AC7	The percentage of the household ownership	All	8	3-100	%

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC6B**

variables

11

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	M6BMA	Asset code	All		8	
						1 Perennial crop gardens
						2 Aquaculture farms
						3 Fish/shrimp-rearing cages/rafts
						4 Land for doing other business
						Drawing, ploughing and breeding
						5 cattle
						6 Breeding pigs
						7 Basic herds of poultry and cattle
						8 Breeding facilities
						9 Feed grinding machines
						10 Rice milling machines
						11 Grain harvesting machines
						12 Pesticide sprayers
						13 Houses and workshops
						14 Shops
						15 Other production facilities
						16 Cars
						17 Tractors of all kinds
						18 Trailers
						19 Tractor ploughs
						20 Motorbikes
						21 Bicycles
						22 Carts
						23 Motor boats, ferries ...
						24 Rowing boats, ferries..
						25 Other means of transportation
						Lathes and welding and milling
						26 machines
						27 Punchers
						28 Wooden sawing machines
						29 Pumps
						30 Power generators
						31 Printers, photocopiers
						32 Fax machines
						33 Telephone sets
						34 Mobilephones
						Sewing, weaving, embroidering
						35 machines
						36 Other machines and equipment
						37 Fishing net
						38 Durable containers for storage
						39 Other specify equipments
						40 Video cassette players
						41 Color T.V sets
						42 Black and white T.V sets
						43 Multi-tier stereos
						44 Radios/Cassette players
						45 Recorders/Disc players
						46 Computers
						47 Cameras, camcorders
						48 Refrizerators, freezers
						49 Air-conditioners
						50 Washing machines and driers
						51 Electric fans
						52 Water heaters
						53 Gas cookers

					Electric cookers, rice cookers,
					54 pressure cookers
					55 Trollers of all kinds
					56 Wardrobes of all kinds
					57 Beds
					58 Tables, chairs, sofas ...
					59 Vacuum cleaners, water filters
					60 Microwaves, baking stoves
					61 Fruit blenders, juicers
					Other valuable things (Antiques,
					62 pianos, dressing tables...)
					63 Specify it (_____)
7 M6BC3	Quantities	All	8 1-13		Number
8 M6BC4A	Purchased month	All	8 0-12		Month
			1911-2006; -		
			1:Missing data by		
9 M6BC4B	Purchased year	All	8 interviewer		Year
	The value at the time of				
10 M6BC5	purchasing/receiving	All	8 1-980000		Thousand dong
			1-1000000; -		
			1:Missing data by		
11 M6BC6	The value at the current price	All	8 interviewer		Thousand dong

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC7**

variables

51

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All		3 101-823	Character
2	HUYEN	District	All		2 01-53	Character
3	XA	Commune	All		2 01-95	Character
4	DIABAN	Enumerator area	All		3 001-105	Character
5	HOSO	Household code	All		8 13-25	Numeric
6	M7C1	No of houses/flats HH living in	All		8 0-11	Houses/flats
7	M7C2	Total living area?	Households those have house		8 5-425	sqm
8	M7C3	The type of house?	Households those have house		8	1 Villas Strong houses with a private kitchen and bathroom/toilet 2 Strong houses with a shared kitchen or bathroom/toilet 3 Semi-permanent houses Shift-made and other types of houses 5
9	M7C4	How long has your household been living in this house?	Households those have house		1898-2006; -1:Missing data by interviewer	Year
10	M7C5	Before that, what type of house did you lived in?	Households those live in the house after 2000		8	1 Villas Strong houses with a private kitchen and bathroom/toilet 2 Strong houses with a shared kitchen or bathroom/toilet 3 Semi-permanent houses Shift-made and other types of houses 5
11	M7C6	HH owned this dwelling?	Households those have house		8	1 Yes, fully 2 Yes, partly 3 No
12	M7C7	HH paid for renting this dwelling?	Households those have house		8	1 Yes 2 No
13	M7C8	HH paid to whom?	Households those have house		8	1 The State 2 relatives 3 private landlords 4 others (specify it: _____)
14	M7C9	Amount paid the past 12 months?	Households those have house		8 50-14400	Thousand dong
15	M7C10	No of months was the rent paid for?	Households those have house		8 3-12	Months
16	M7C11	No of months HH lived in rented house in the past 12 months?	Households those have house		8 3-12 10-15000000; -1:Missing data by interviewer	Months
17	M7C12	Cost of the house HH living in?	Households those have house		8	Thousand dong
18	M7C13	Does HH have any other land plots or houses/flats?	Households those have house		1 2	Yes No
19	M7C14	income from leasing those land plots or houses/flats?	Households those have extra houses		8 1 2	Yes No
20	M7C15	Amount received the past 12 months for renting out land or house?	Households those have extra houses		8 300-100000	Thousand dong
21	M7C16	How many months was this sum paid for?	Households those have extra houses		8 1-12	Months
22	M7C17	For how many months HH rented out those land plots/houses?	Households those have extra houses		8 1-12	Months

23	M7C18	Cost of those land at the current price?	Households those have extra houses Households those have house	200-10000000; -1:Missing data by interviewer	Thousand dong
24	M7C19	Is there any that HH bought?	House	8 1 2	Yes No
25	M7C20A	MONTH brought recent land/house?	Households those bought extra house	1-12; -1:Missing data by interviewer	Month
26	M7C20B	YEAR brought recent land/house	Households those bought extra house Households those bought extra house	1952-2006; -1:Missing data by interviewer	Year
27	M7C21	Amount paid for it house built in the past 12 months	Households those have house	8 6000-1200000	Thousand dong
28	M7C22			8 1 2	Yes No
29	M7C23	Costs of building?	Households those have house	8 0-800000	Thousand dong
30	M7C23A	Last 12 months' costs alone	Households those have house	8 0-800000	Thousand dong
31	M7C24	The cost of major house repair or upgrade	Households those have house	8 0-280000	Thousand dong
32	M7C25	The cost of minor house repair	Households those have house	8 0-20000	Thousand dong
33	M7C26	Main source of cooking/drinking water?		8 1 2 3 4 5 6 7 8 9 10 11 12 13 14	private tap water, inside the house public tap water, outside the house Public tap water water pumped from deep drill wells water from hand-dug and reinforced wells water from hand-dug, non-reinforced and covered wells Protect spring sources Unprotected spring sources Rain water Bought water (in tank, bottle) Small water tank Water tank Rivers, lakes, ponds others (specify:_____)
34	M7C27	Use a filter/chemicals to refine drinking water?	Households those use filtered water	8 1 2	Yes No
35	M7C28	Boil drinking water?	All	8 1 2 3 4 5	Yes, always Yes, usually Yes, sometimes Yes, rarely Never
36	M7C29	Main source of water for daily use?	All	8 1 2 3 4 5 6 7 8 9 10 11 12 13 14	private tap water, inside the house public tap water, outside the house Public tap water water pumped from deep drill wells water from hand-dug and reinforced wells water from hand-dug, non-reinforced and covered wells Protect spring sources Unprotected spring sources Rain water Bought water (in tank, bottle) Small water tank Water tank Rivers, lakes, ponds others (specify:_____)

37	M7C30	Use a filter/chemicals to refine water?	Households those use filtered water	8	
				1	Yes
				2	No
38	M7C31	Does HH pay for water?	All	8	
				1	Yes
				2	No
39	M7C32	Amount paid in the past 12 months	Households those pay for water	8	8-18000
40	M7C33	Type of toilet?	All	8	Thousand dong
				1	flush toilet with septic tank/sewage pipes
				2	suilabh
				3	double vault compost latrine
				4	toilet directly over the water
				5	others
				6	no toilet
41	M7C34	Main source of lighting?	All	8	
				1	Grid electricity
				2	Power from batteries, generators
				3	gas, oil, kerosene lamps
				4	others (specify it: _____)
42	M7C35	Does HH pay for electricity?	All	8	
				1	Yes
				2	No
43	M7C36	Amount paid for electricity in the past 12 months	Households those pay for electricity	8	10-36000
44	M7C37	How has HH disposed garbage?	All	8	Thousand dong
				1	collected
				2	dumped in rivers/lakes
				3	dumped in a site nearby
				4	others (specify it _____)
45	M7C38	Does HH pay for garbage collection?	All	8	
				1	Yes
				2	No
46	M7C39	Amount paid for garbage collection in the past 12 months?	Households those pay for garbage collection	8	2-720
					Thousand dong
47	M7C40	Total expenses on housing, electricity, water	All	8	0-1203708
48	M7C41	Does HH have a computer?	All	8	Thousand dong
				1	Yes
				2	No
49	M7C42	Computer connected to the Internet?	Households those have computer	8	
				1	Yes
				2	No
50	M7C43	No of months HH using internet in the past 12 months?	Households those have computer	8	0-12
					Month
					20-20000; -1:Missing
51	M7C44	No of minutes HH used internet per month?	Households those have computer	8	data by interviewer
					Minutes/month

Explanatory documents for the VHLSS 2006

Name of the dataset: **MUC8**

variables

37

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M8C1A	HH classified as a poor of the commune/ward in the following y2004?	All	8		
				1		Yes
				2		No
7	M8C1B	HH classified as a poor of the commune/ward in the following y2005?	All	8		
				1		Yes
				2		No
8	M8C1C	HH classified as a poor of the commune/ward in the following y2006?	All	8		
				1		Yes
				2		No
9	M8C2A	HH involved in classifying poor HH of the commune/ward in recent y2004	All	8		
				1		Yes
				2		No
10	M8C2B	HH involved in classifying poor HH of the commune/ward in recent y2005	All	8		
				1		Yes
				2		No
11	M8C2C	HH involved in classifying poor HH of the commune/ward in recent y2006	All	8		
				1		Yes
				2		No
12	M8C3A_1	HH benefit from the Preferential credit of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
13	M8C3A_2	HH benefit from the Free healthcare of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
14	M8C3A_3	HH benefit from the Tuition exemption of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
15	M8C3A_4	HH benefit from the Vocational training of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
16	M8C3A_5	HH benefit from the Provision of cultivation land for ethnic HH of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
17	M8C3A_6	HH benefit from the Agro-Forestry and fishery promotion of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
18	M8C3A_7	HH benefit from the Accommodation support of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
19	M8C3A_8	HH benefit from the Provision of clean and clear water of 2005	Households benefit from the project/policy 2005	8		
				1		Yes
				2		No
				3		Unaware of it
20	M8C3B_1	HH benefit from the Preferential credit of 2006	Households benefit from the project/policy 2006	8		
				1		Yes
				2		No
				3		Unaware of it

21 M8C3B_2	HH benefit from the Free healthcare of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
22 M8C3B_3	HH benefit from the Tuition exemption of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
23 M8C3B_4	HH benefit from the Vocational training of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
24 M8C3B_5	HH benefit from the Provision of cultivation land for ethnic HH of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
25 M8C3B_6	HH benefit from the Agro-Forestry and fishery promotion of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
26 M8C3B_7	HH benefit from the Accomodation support of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
27 M8C3B_8	HH benefit from the Provision of clean and clear water of 2006	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
28 M8C4A_1	HH involved in classifying beneficiaries of Access to loans at a preferential int	Households benefit from the project/policy 2005	8 1 2 3	Yes No Unaware of it
29 M8C4A_2	HH involved in classifying beneficiaries of Vocational training for the poor of 2	Households benefit from the project/policy 2005	8 1 2 3	Yes No Unaware of it
30 M8C4A_3	HH involved in classifying beneficiaries Agro-forestry and fishery extention for	Households benefit from the project/policy 2005	8 1 2 3	Yes No Unaware of it
31 M8C4B_1	HH involved in classifying beneficiaries of Access to loans at a preferential int	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
32 M8C4B_2	HH involved in classifying beneficiaries of Vocational training for the poor of 2	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
33 M8C4B_3	HH involved in classifying beneficiaries Agro-forestry and fishery extention for	Households benefit from the project/policy 2006	8 1 2 3	Yes No Unaware of it
34 M8C5	Compared with 2001, has HH member's life been improved?	All	8 1 2 3 4	Yes, very much Yes Unchanged Worse
35 M8C6A	If unchanged or worse, please let us know why? First	Households with member's life been unchanged or worse	8 1 2 3 4 5	Negligible aid Sick people in the household Natural disasters or difficulties in production Too much expenditure on a funeral in the household Others (specify it _____)
36 M8C6B	If unchanged or worse, please let us know why? Second	Households with member's life been unchanged or worse	8 1 2	Negligible aid Sick people in the household

			3	Natural disasters or difficulties in production
			4	Too much expenditure on a funeral in the household
			5	Others (specify it_____)
37 M8C6C	If unchanged or worse, please let us know why? Third	Households with member's life been unchanged or worse	8	
			1	Negligible aid
			2	Sick people in the household
			3	Natural disasters or difficulties in production
			4	Too much expenditure on a funeral in the household
			5	Others (specify it_____)

Explanatory documents for the VHLSS 2006

Name of the dataset **MUC8_VAYVON**

variables

20

No	Variable name	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	M8MA	Debt code	Households borrowed money	8	1-7	Numeric
7	M8C8	Item of loan	Households borrowed money	8		
				1		Social policy bank
				2		agriculture and rural dev. bank
				3		other banks
				4		employment support fund
				5		credit organizations
				6		socio-political organizations
				7		individual creditors
				8		friends, relatives
				9		others (specify it_____)
8	M8C9	How many HH in your credit group?	Households borrowed money	8	1-7000 100-1300000; -	Number of households
9	M8C10A	What is the value of the loan? Principal	Households borrowed money	8	1:Missing data by interviewer 0-1800000; -	Thousand dong
10	M8C10B	What is the value of the loan? Principal interest	Households borrowed money	8	1:Missing data by interviewer	Thousand dong
11	M8C11A	When did HH members borrow it?Month	Households borrowed money	8	1-12; -1:Missing data by interviewer	Month
12	M8C11B	When did HH members borrow it?Year	Households borrowed money	8	1990-2006; - 1:Missing data by interviewer	Year
13	M8C12	How many months was this credit valid for?	Households borrowed money	8	1-144	Months
14	M8C13	Why did HH member borrow?	Households borrowed money	8		
				1		Production capital
				2		Capital investment
				3		debt repayment
				4		house purchase/construction
				5		weddings/funerals
				6		study
				7		medical treatment
				8		general consumption
				9		buying food between crops
				10		buying durable goods
				11		improving water supplies
				12		improving sanitation
				13		Others (specify it_____)
15	M8C14	On which sector is the spent?	Households borrowed money	8		
						1 Agro/forestry/fishery
						2 Business and trading
						3 services
						4 other business production
16	M8C15A	Interest rate %	Households borrowed money	8	0-50	%
17	M8C15B	Interest rate Time unit	Households borrowed money	8		
				3		Date
				4		Week
				5		Month
				6		Quarter
				7		Half-yearly
				8		Year
18	M8C16	Paid for this loan in the past 12 months	Households borrowed money	8	0-715040	Thousand dong

19 M8C17A	HH members pay all the debt?Month	Households borrowed money	1-12; -1:Missing data by interviewer; 8 -2:Don't know 2001-2016; -1:Missing data by interviewer; -2:Don't know	Month
20 M8C17B	HH members pay all the debt?Year	Households borrowed money	1-12; -1:Missing data by interviewer; 8 -2:Don't know 2001-2016; -1:Missing data by interviewer; -2:Don't know	Year

Explanatory documents for the VHLSS 2006

Name of the dataset TTCHUNG

variables

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No	Variable name in	Topics	Scope	Length	Code	Description
1	TINH	Province	All	3	101-823	Character
2	HUYEN	District	All	2	01-53	Character
3	XA	Commune	All	2	01-95	Character
4	DIABAN	Enumerator area	All	3	001-105	Character
5	HOSO	Household code	All	8	13-25	Numeric
6	QUYEN	Income/Income & Expenditure	All	8		1 Numeric
7	TTNT	Urban/Rural	All	8		
				1		Urban
				2		Rural
8	DANTOC	Household head's ethnicity	All	8		
				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
9	PHDICH	Interpretation	All	8		

			1	Yes
			2	No
10 DTV	Surveyor's ID code	All	8 1-87	Numeric
11 DT	Team leader' ID code	All	8 1-81	Numeric
12 TINH04	Province code in 2004?	All	8 101-823; 0	Numeric
13 HUYEN04	District code in 2004	All	8 1-51	Numeric
14 XA04	Commune code in 2004	All	8 1-85	Numeric
15 DIABAN04	EA code in 2004	All	8 1-105	Numeric
16 TTNT04	Urban/Rural in 2004	All	8	
			1	Urban
			2	Rural
17 HOSO04	Household code in 2004	All	8 1-21	Numeric
18 GHEPHO	Matched with VHLSS2004	All	8	
			1	Yes
			0	No
19 NGAYDT	Date of survey	All	8 1-31	Date
20 THANGDT	Month of survey	All	8 1-12	Month
21 TSNGUOI	Hosehold size	All	8 1-17	Persons
22 M1C1	HH surveyed in 2004?	All	8	
			1	Yes
			2	No
23 M2ACT	Education expenditure: 2CT	All	8 0-32000	Thousand dong
24 M2ATN	Education income: 2TN	All	8 0-19200	Thousand dong
25 M3AC6	Q6 section 3: went to health centres...	All	8	
			1	Yes
			2	No
26 M3AC16	Health Expend. on medicine for self-treatment	All	8 0-25000	Thousand dong
27 M3AC17	Health Expend. on medical tools	All	8 0-9490	Thousand dong
28 M3AC18	Health Expend. on insurance	All	8 0-4500	Thousand dong
29 M3AC19	Subsidy received for sick members	All	8 0-96780	Thousand dong
30 M3ACT1	Total of Q10-section 3	All	8 0-106680	Thousand dong
31 M3ACT2	Total of Q12 section 3	All	8 0-60000	Thousand dong
32 M3ACT	Total of health expend.	All	8 0-116560	Thousand dong
33 M3FC15	Exemption due to costly user-fees last 12 months	All	8	
			1	Yes
			2	No
34 M3FC16	Result of exemption	All	8	
			1	Get exemption
			2	Obtain reduction in fees
			3	Refusal
			4	Waiting for response
35 M3FC17	Enjoyed charity, fee exemption/reduction health service	All	8	
			1	Yes
			2	No
36 M3FC18	Payment for access to charity services	All	8 0-1500	Thousand dong
37 M4ATN1	Total of Q11-section 4A	All	8 0-490800	Thousand dong
38 M4ATN2	Total of Q12f-section 4A	All	8 0-121230	Thousand dong
39 M4ATN3	Total of Q21-section 4A	All	8 0-43600	Thousand dong
40 M4ATN4	Total of Q22f section 4A: 4ATN4	All	8 0-4202	Thousand dong
41 M4ATN5	Total of Q25 section 4A: 4ATN5	All	8 0-14100	Thousand dong
42 M4ATN	Total income from wages	All	8 0-496800	Thousand dong
43 M4B0C1	Used or managed land for agri&forestry or water surface aquaculture	All	8	
			1	Yes
			2	No
44 M4B0T1	Total of Q7-section 4B0	All	8 0-40000	Thousand dong
45 M4B0T2	Total of Q11-section 4B0	All	8 0-44000	Thousand dong
46 M4B1	Harvested in past 12 month?	All	8	
			1	Yes
			2	No

47	M4B11T	Total of Q15 section 4B1.1	All	8 0-383600	Thousand dong
48	M4B12T	Total of Q8 section 4B1.2	All	8 0-104352	Thousand dong
49	M4B13T	Total of Q8 section 4B1.3	All	8 0-816000	Thousand dong
50	M4B14T	Total of Q8 section 4B1.4	All	8 0-2000000	Thousand dong
51	M4B15T	Total of Q5 section 4B1.5	All	8 0-15000	Thousand dong
52	M4B1T	Total revenues from crops	All	8 0-2000000	Thousand dong
53	M4B1C	Total cost of crops	All	8 0-1652110	Thousand dong
54	M4B1TN	Income from crops	All	8 -1636-661650	Thousand dong
		Raised livestock in past 12 month?			
55	M4B21		All	8	
				1	Yes
				2	No
		Total revenue from Livestock	All	8 0-668300	Thousand dong
56	M4B2T		All	8 0-668300	Thousand dong
57	M4B2C	Total expense on Livestock	All	8 0-567970	Thousand dong
58	M4B2TN	Income from Livestock	All	8 -8330-209738	Thousand dong
		Agricul. services in past 12 months?			
59	M4B31		All	8	
				1	Yes
				2	No
		Total revenue from Agri Services	All	8 0-471240	Thousand dong
60	M4B3T		All	8 0-471240	Thousand dong
		Total expense on Agri Services	All	8 0-437895	Thousand dong
61	M4B3C		All	8 0-437895	Thousand dong
62	M4B3TN	Income from Agri services	All	8 80-62264	Thousand dong
		Revenue from forestry activities?			
63	M4B41		All	8	
				1	Yes
				2	No
64	M4B4T	Total revenue from Forestry	All	8 0-133800	Thousand dong
65	M4B4C	Total expense on Forestry	All	8 0-16500	Thousand dong
66	M4B41TN	Income from Forestry	All	8 0-120140	Thousand dong
		Income from hunting, trapping,... forest animals,...			
67	M4B42TN		All	8 0-6880	Thousand dong
		Aquatic activities in past 12 months?			
68	M4B51		All	8	
				1	Yes
				2	No
		Total revenue from Aquaculture	All	8 0-3289755	Thousand dong
69	M4B5T		All	8 0-3289755	Thousand dong
		Total expense on Aquaculture	All	8 0-2763394	Thousand dong
70	M4B5C		All	8 0-2763394	Thousand dong
71	M4B5TN	Income from Aquaculture	All	8 -90840-526361	Thousand dong
72	M4C1	Non-farm activities?	All	8	
				1	Yes
				2	No
73	M4CTT	Total revenue from non-farm	All	8 0-6996000	Thousand dong
		Total revenue belongs to household			
74	M4CT		All	8 0-6996000	Thousand dong
75	M4CCT	Total expense on non-farm	All	8 0-5956800	Thousand dong
		Total expense on non-farm allocated for HH			
76	M4CC		All	8 0-5956800	Thousand dong
77	M4CTNT	Income from non-farm	All	8 -1170-1039200	Thousand dong
		Income from non-farm HH received			
78	M4CTN		All	8 -1170-1039200	Thousand dong
79	M4D1TN	Income from other sources	All	8 0-600000	Thousand dong
		Money received but not considered as income			
80	M4D2T		All	8 0-1200000	Thousand dong
81	TONGTHU_01	Total of household revenue	All	8 1318-6997500	Thousand dong
		Income from subsidies, scholarship			
82	TONGTHU_02		All	8 0-19200	Thousand dong
		Income from health subsidies			
83	TONGTHU_03		All	8 0-96780	Thousand dong
84	TONGTHU_04	Income from wage	All	8 0-496800	Thousand dong
85	TONGTHU_05	revenue from crops	All	8 0-2000000	Thousand dong
86	TONGTHU_06	Revenue from livestock	All	8 0-668300	Thousand dong
		Revenue from Agricultural Services			
87	TONGTHU_07		All	8 0-471240	Thousand dong
		Revenue from hunting, trapping			
88	TONGTHU_08		All	8 0-9600	Thousand dong
89	TONGTHU_09	Revenue from forestry	All	8 0-133800	Thousand dong
90	TONGTHU_10	Revenue from aquaculture	All	8 0-3289755	Thousand dong

91	TONGTHU_11	Revenue from non-farm business	All	8 0-6996000	Thousand dong
92	TONGTHU_12	Other income	All	8 0-600000	Thousand dong
93	TONGTHU_13	Other money received, not considered as income	All	8 0-1200000	Thousand dong
94	TONGTHU_14	Income from house and land renting out	All	8 0-100000	Thousand dong
95	TONGTHU_15	Income from business land renting	All	8 0-44000	Thousand dong
96	M6AC8	Spending on major repairs of fixed assets	All	8 0-60000	Thousand dong
97	M6AC9	Total of spending on purchased fixed assets	All	8 0-520000	Thousand dong
98	M6BC7	Total of spending on purchased durable goods	All	8 0-464000	Thousand dong
99	M8C7	Borrowed in the past 12 month?	All	8	
				1	Yes
				2	No
100	CHISXKD_1	Expenditure on business	All	8 0-5956800	Thousand dong
101	CHISXKD_2	Expenditure on crops	All	8 0-1652110	Thousand dong
102	CHISXKD_3	Expenditure on livestock	All	8 0-567970	Thousand dong
103	CHISXKD_4	Expenditure on agricultural services	All	8 0-437895	Thousand dong
104	CHISXKD_5	Expenditure on hunting, trapping..	All	8 0-2720	Thousand dong
105	CHISXKD_6	Expenditure on forestry	All	8 0-16500	Thousand dong
106	CHISXKD_7	Expenditure on aquaculture	All	8 0-2763394	Thousand dong
107	CHISXKD_8	Expenditure on non-farm business	All	8 0-5956800	Thousand dong
108	CHIKHAC_01	Expenditure and other expenditure	All	8 0-2018034	Thousand dong
109	CHIKHAC_02	Expenditure on education	All	8 0-32000	Thousand dong
110	CHIKHAC_03	Expenditure on health	All	8 0-116560	Thousand dong
111	CHIKHAC_04	Expenditure on foods and drinks during holidays	All	8 0-12100	Thousand dong
112	CHIKHAC_05	Daily expenditure on foods and drinks	All	8 0-102405	Thousand dong
113	CHIKHAC_06	Daily expenditure on non-food	All	8 0-57000	Thousand dong
114	CHIKHAC_07	Yearly Non-food expenditure	All	8 0-85000	Thousand dong
115	CHIKHAC_08	Other expenditure considered as household expenditure, but not as consumption expenditure	All	8 0-362530	Thousand dong
116	CHIKHAC_09	Other expenditure not considered as household expenditure	All	8 0-1313476	Thousand dong
117	CHIKHAC_10	Expenditure on major repairs of fixed assets	All	8 0-60000	Thousand dong
118	CHIKHAC_11	Expenditure on purchased fixed assets	All	8 0-520000	Thousand dong
119	CHIKHAC_12	Expenditure on purchased durable goods	All	8 0-464000	Thousand dong
120	CHIKHAC_13	Expenditure on purchased/ repaired house/ land	All	8 0-1200000	Thousand dong
121	CHIKHAC_14	Expenditure on housing, electricity, water and garbage collection	All	8 0-54120	Thousand dong
122	THUNHAP	Total Income	All	8 -64-1040700	Thousand dong
123	THUBQ	income per capita per month	All	8 -1-28908	Thousand dong
124	CHITIEU	Total household expenditure	All	8 1180-583104	Thousand dong
125	CHIDS	consumption expenditure	All	8 1136-575918	Thousand dong
126	CHIBQ	household expenditure per capita per month	All	8 51-11279	Thousand dong
127	CHIDSBQ	consumption expenditure per capita per month	All	8 49-11204	Thousand dong
128	M5A1CT	Total of Q4 and Q5 section 5A1	All	8 0-12100	Thousand dong
129	M5A1C4	Total of Q2B section 5A1	All	8 0-11095	Thousand dong
130	M5A1C5	Total of Q3B section 5A1	All	8 0-5090	Thousand dong

	Total of Q11 and Q12			
131 M5A2CT	section 5A2	All	8 540.3-102405	Thousand dong
132 M5A2C11	Total of Q6 section 5A2	All	8 0-101045	Thousand dong
133 M5A2C12	Total of Q10 section 5A2	All	8 0-15093	Thousand dong
	Total of Q6 and Q7 section			
134 M5B1CT	5B1	All	8 25-57000	Thousand dong
135 M5B1C6	Total of Q4 section 5B1	All	8 0-57000	Thousand dong
136 M5B1C7	Total of Q5 section 5B1	All	8 0-5760	Thousand dong
	Toatal of Q4 and Q5 section			
137 M5B2CT	5B2	All	8 0-85000	Thousand dong
138 M5B2C4	Total of Q2 section 5B2	All	8 0-85000	Thousand dong
139 M5B2C5	Total of Q3 section 5B2	All	8 0-46200	Thousand dong
140 M5B3CT	Total of Q2 section 5B3	All	8 0-362530	Thousand dong
141 M5B4C	Total of Q2 section 5B4	All	8 0-1313476	Thousand dong

Attachment 3. Map of Provinces and Regions (as of 2006)

Map of Provinces

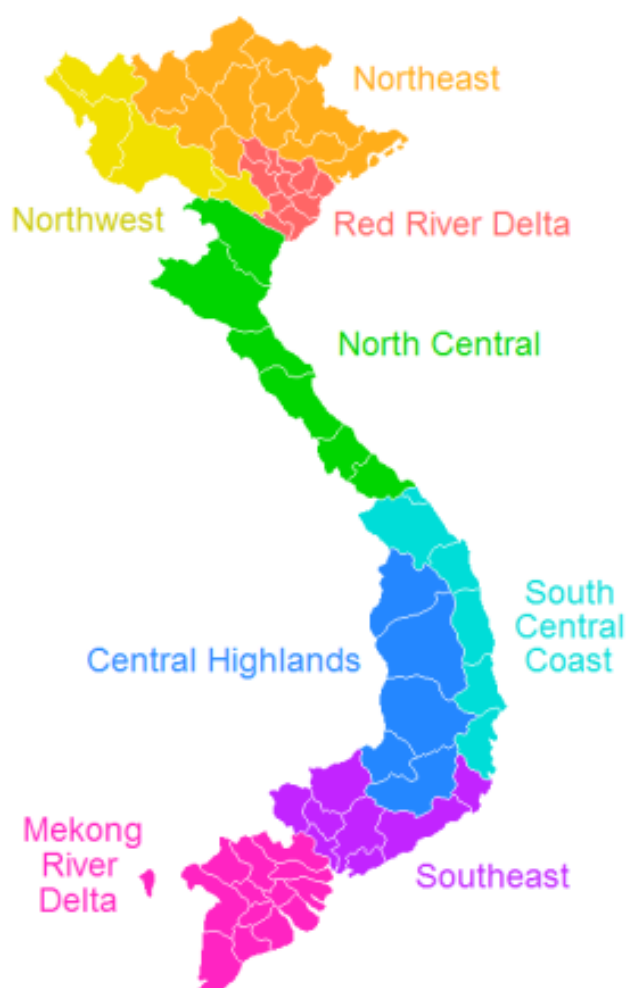
The below map of Vietnam exhibiting its 59 provinces and 5 centrally controlled municipalities at the time of VHLSS 2004 and 2006. Ha Tay province, located in the south west of “2 Ha Noi” was merged with Ha Noi municipality in 2008. The number of provinces is 63 in 2014.



Map of regions

Provinces are grouped into eight regions.

Code	Region	Province codes
1	Red River Delta	101-117
2	North East	201-225
3	North West	301-305
4	North Central	401-411
5	South Central Coast	501-511
6	Central Highlands	601-607
7	South East	701-717
8	Mekong River Delta	801-823



GENERAL STATISTIC OFFICE
No 317/PA-TCTK-XHMT

THE SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom - Happiness

Hanoi, 14 April 2006

PLAN OF THE VIETNAM HOUSEHOLD LIVING STANDARD SURVEY (VHLSS) 2006

*(Promulgated with Decision No 308/QĐ-TCTK dated 5/4/2006 of the
Director General of General Statistics Office)*

I. OBJECTIVES

VHLSS 2006 collects information to be used as basis for assessment of living standard, including poverty and the gap between the rich and the poor serving for policy making, planning and national targeted programs of the party and the State in order to continuously improve the living standard of population across the country, in all regions and localities.

In addition to that, information is collected to serve for research, analysis of some topics on health, education, employment and to calculate weight to compile consumer price index and national account.

II. CONTENT

VHLSS 2006 includes main content reflecting living standard of households in the entire country, and main socio-economic conditions of communes in the rural areas which affect living standard of population in their particular area. Specific content consists of:

2.1. For household

- Some demographic characteristics of household's members including age, sex, ethnicity, marital status.
- Household's income includes: income level; income by different sources (salary, wage; self- agricultural, forestry, fishery production; self-household's business production/service; others); income by economic sector and industry.
- Household's expenditure: expenditure level, expenditure by purpose and item (expenditure on food, clothes, accommodation, travel, education, health, culture, etc... and others.
- Education level, professional level of each household's member.
- Illness and use of type of health clinic.
- Employment status, working hours.
- Assets, housing and facilities, such as appliances, electricity, water, sanitation

condition.

- Participation in hunger elimination and poverty reduction, credit status.

If budget is available, extended content on education and health will be surveyed.

2.2. For commune

- Some information on demography, ethnicity.
- Basic socio-economic infrastructure including: situation of electricity, roads, schools, medical stations, markets, post offices, water sources.
- Economic situation, including: Agriculture production (land, production increase/decrease tendency of some main crops and causes, assistances for production development such as irrigation, agricultural encouragement); non-agricultural job opportunities.
- Some main information on social order and safety.

III. QUESTIONNAIRES, FORMS AND LIST OF CLASSIFICATIONS

3.1. Questionnaires

- Questionnaire 1A-PVH/KSMS06: For households (income survey).
- Questionnaire 1B-PVH/KSMS06: For households (income and expenditure survey)
- Questionnaire 2A-PVX/KSMS06: For communes.
- Questionnaire 2B-PVX/KSMS06: For schools (extended content)
- Questionnaire 2C-PVX/KSMS06: For health stations/clinics (extended content)
- Form 3A-KSCL/KSMS06: For assignment of work
- Form 3B-KSCL/KSMS06: Supervision report at EAs.
- Form 3C-KSCL/KSMS06: For checking of questionnaire.
- Form 3D-KSCL/KSMS06: For participating in household interview.
- Form 4-PT/KSMS06: For verifying with households.
- Form 5A-ĐCBC/KSMS06: For reporting on training courses and field work.
- Form 5B-ĐCBC/KSMS06: For progress report.

3.2. . List of classifications

- Ethnic code classification (Printed in the questionnaire).
- Occupation classification (2-digit code printed in the questionnaire).
- Vietnam Standard Industry Classification (2-digit code printed in the questionnaire).
- Education and Training Classification of the national education system (2-digit code printed in the questionnaire).
- List of Vietnam's administrative units (using the 2004 list promulgated in the Decision No 124/2004/QĐ-TTg dated July 8th, 2004 by the Prime Minister) and newly established administrative units as of 31st December 2005 (newly established administrative units are printed in the survey manual).
- List of countries and territories (printed in the questionnaire).

IV. METHODOLOGY

4.1. Survey subjects and enumeration units:

Subjects of the survey include households, households' members and communes which have surveyed households. Enumeration units include selected households and communes

4.2. Scope of the survey:

Scope of the survey includes all selected enumeration areas and communes in 64 provinces and cities under central management (hereafter called province/city).

4.3. Timing and duration of field work

The survey is conducted in two rounds in May and September 2006. Field work will last 1 month.

4.4. Survey sample:

Sample of the VHLSS 2006 is selected in the way to represent the entire country (in which: urban/rural areas), 8 regions (in which: urban/rural areas), and provinces/cities. This sample is selected from the master sample which is designed specifically for VHLSSs in the period 2002-2010 which contains 3,063 communes/wards, 3 areas are selected in each commune/ward from areas of the Population and Housing Census 1999. Sample size of the VHLSS 2006 includes 45,945 households selected from 3,063 areas of the master sample frame, and is divided into 2 types: *Sample for income survey* includes 36,756 households to collect information as mentioned above, excluding household's expenditure, to assess living standard at national level, regional and provincial/city level; *Sample for income-expenditure survey* includes 9,189 to collect sufficient information for further assessment and analysis of living standard at national and regional level.

Sample for income survey and sample for income-expenditure survey divided for two rounds are as follows:

<u>Time for Data collection</u>	<u>Survey on income & expenditure</u>	<u>Survey on income</u>	Total
Total	9.189	36.756	45.945
<i>Of which:</i>			
May 2006	4.593	18.372	22.965
September 2006	4.596	18.384	22.980

The Socio-Environmental Statistics Department coordinates with provinces/cities to select sample as follows:

Step 1: Select EAs.

EAs of the VHLSS 2006 will be selected rotationally, specifically: re-select 50% enumeration areas of the VHLSS 2004 (in which half of the areas were surveyed in the 2002 and 2004 VHLSSs and another half of the areas were only surveyed in the 2004 VHLSS) and the other 50% areas will be newly selected from the master sample, which were not selected in the 2002 and 2004 VHLSSs.

The Socio- Environmental Statistics Department is responsible for selecting areas and sending the list of selected areas to Provincial Statistics Offices for reviewing and updating attached with the map and list of areas of the 1999 Population and Housing Census of the new areas. Provincial Statistics Offices review and propose to change some areas for more suitability with geographical, socio-economic characteristics of provinces with less than the change of 5% of total number of provinces' areas with an agreement of the GSO (the Socio-Environmental Statistics Department) before the survey.

Step 2: Select household.

Provincial Statistics Offices select households, specifically:

- For areas which are re-selected from the 2004 VHLSS, select all 15 households in which 12 households were already surveyed with income (income households) in 2004 to be surveyed with income for the 2006 VHLSS and 3 households were already surveyed with income-expenditure in 2004 to be surveyed with income-expenditure for the 2006 VHLSS. In case of households which were surveyed in 2002 or 2004 moved from the area, find alternate households to be assured of 12 households for income and 3 households for income-expenditure in each enumeration area.

- For new areas, select 20 households from the updated household's list. From these 20 households, select 15 households (12 official households, 3 spare households) for income survey, the 5 remaining households (3 official and 2 spare households) for income-expenditure survey.

Household selection follows the methods in the 20086 VHLSS manual.

Provincial Statistics Office will equally divide EAs by urban/rural areas and geographical region for the two rounds of the surveys conducted in May and September. Communes which have selected EAs for the household interview will simultaneously interview commune questionnaire.

The list of selected households will be kept in two places: PSOs and Socio-environmental Statistics Department for the implementation, monitoring, and supervision.

4.5. Data collection method

This survey will use two types of questionnaire: questionnaire for commune and questionnaire for household. The questionnaire for household includes: income-expenditure questionnaire (applied for the sample of the income-expenditure survey) which contains all information of the survey; and income questionnaire (applied for sample of the income survey) which contains all information of the survey excluding information on household's expenditure. Questionnaires are designed in details so that it will facilitate the recording of interviewers, help avoid the missing of items and increase the consistency among interviewers. Thus the survey data will be improved.

Direct interview is applied in this survey. Interviewers visit households, meet with heads of households and related households' members to interview and

fill information in questionnaires for households. Head of the enumeration team interviews commune's leaders and related local staff and to fill information in the questionnaire for communes. In order to ensure quality of the selected information, indirect interview or the copy of information from available sources will not be acceptable in this survey

V. DIRECTION AND IMPLEMENTATION

5.1. Direction

5.1.1. Central level

Director of Socio- Environmental Statistics Department is responsible for comprehensively organizing and leading the survey in front of the GSO's leaders. Establish a team of specialists from the two departments to help the organization, direction and implementation of the survey including: design project, forms, compile skill guiding handbook, provide skill training for cities/provinces, examine and supervise the skill training for investigators, team leaders and the data collection process in the area, collect, double check, synthesis, analyze and public the result of the survey

During the implementation process, Director of the Socio- Environmental Statistics Department cooperates with General Directors of related Departments, Heads of relevant Divisions to deploy specialists to different local areas to examine, supervise, and solve professional problems in order to ensure that the survey will be carried out in accordance with the regulations.

5.1.2. Provincial level

Côc Directors of the Provincial Statistics Offices are responsible in front of the General Office of Statistic's leaders for comprehensively organizing, monitoring the survey within their local charge, include: establish the enumeration teams, provide skill training, implement the data collecting process in the area, examine, supervise, post-enumerate, hand-over, enter information, double check, compile the result of the survey in accordance with regulated direction and quality of survey's data.

During the data collection process at an area, especially in beginning days, Provincial Statistics Offices have to deploy sufficient specialist team to ward/ districts to examine, supervise in order to timely correct errors made by interviewers, and solve concerns about survey procedures and techniques

5.1.3. District level

Heads of district statistic offices are responsible for monitoring the implementation of the survey at wards/ communes selected in the area under their charge.

5.1.4. Ward/ Commune level

Leaders of wards/ communes in the enumeration areas are required to facilitate the survey team to fulfil their duty. Leaders at wards/ communes have to have meeting with selected households to thoroughly explain the purpose of the survey and encourage them to actively take part in providing information as required in the survey. For remote communes, local areas with difficulties, the duty will be

delegated to head of the people groups, village chief... who have to directly visit the selected households to encourage them to actively take part in the survey.

Commune leaders with enumeration areas should agree with team leader about collection plan for information in the questionnaire for commune. Information related to many people, commune leaders should invite people in charge to participate a meeting to explain purposes, requirements, contents and provide information to team leader.

5.2. Selection of interviewers and team leaders

Because the survey has complicated contents, relates to many fields of life, society, including many sensitive areas, the interviewers and team leaders have to have a certain level of professional expertise, experience in exploitation of data, know how to involve the public, enthusiastic and physically fit.

At each district with an enumeration spot, it is necessary to establish an enumeration team of 2-3 interviewers and 1 team leader. The team leader is the leader or experienced specialist from district Statistics Office or Provincial Statistics Office.

The duty of the interviewer is to directly visit designated households to collect necessary information and fill up the survey form.

The team leader is responsible for organizing the entire survey process at designated areas, examine, and collect all the survey forms conducted by interviewers, collect information and fill up the commune survey form.

5.3. Expertise training

Organization of expertise training at two levels:

5.3.1. Central level

The General Statistics Office opens two survey expertise training courses, one for Northern provinces and one for Southern provinces, each course lasts at least 6 days, of which 1 day is for practice at field. Participants of the course include 1 leader and 1 staff of Division of Social and Population of PSO. Lecturers are leaders and staffs of Department of Social and Environmental Statistics. At the end of each training course, there will be an exam to evaluate the knowledge of the participants and teaching method of the teachers in order to get lessons learned for later training courses.

5.3.2. Provincial level

Each provincial Statistic Office opens an expertise training course for staff joining the survey at local area, including supervisor, leaders of district statistics divisions that have enumeration areas, team leaders and interviewers. The duration of the training is of at least 5 days, including 1 day for practice at the area. Teachers include leaders that have attended training course at Central level.

The contents of the training include extensively explain the survey methodology, implementation plan at local level, direction in household sample size selection, communication skills, techniques for interviewing and recording information into survey forms for commune and household.

During the training period, it is necessary introduce clearly definitions, calculation methods, interview methods to collect information, techniques in

recording information into the forms, method to check the logical relation among questions and parts in the survey form, method to examine the quality of the data collected. Practical conditions and situations at the locality should be incorporated to explain and guide interviewers about usual practical concerns. After training, there should be an exam to evaluate the knowledge of participants and only deploy those that have satisfied the requirements of the training; as well as evaluate teaching method of teachers in order to get lessons learned for later training course.

Especially at both central and local levels, there should be enough time to discuss and draw lessons in directing and implementing of VHLSS 2002 and 2004.

5.4. Disseminating activities

The General Statistics Office will print letters to households taking part in the survey to encourage, explain the purposes and benefits of the survey to help the households understand the duty and honour, willing to cooperate and provide accurate information for interviewers.

For delta regions and those with favourable conditions, it is necessary to hold a meeting for households being surveyed at ward/ commune.

5.5. Data collection procedures

Provincial Statistics offices collect data at their areas in two periods: May and September, 2006.

At each ward/commune with an enumeration area, team leader notifies and agrees with ward/commune leaders regarding the plan for interviewing households and collecting information for the commune survey form. After agreement, team leader and village leaders announce the plan for heads of the households and related members so that they will get as much information as possible in order to actively arrange their personal business and meet with interviewers. This plan must be informed 3 – 5 days before interviewers visit households.

Team leader sets up the workload delegation plan for each interviewer and notifies the Provincial Statistics Office in order to arrange examination and supervision plan at the area.

Basing on plan made by team leader, interviewers must directly meet household's heads and household members to interview and collect information. It is definitely not allowed to use any existing documents to replace direct interview.

Interviewer has to follow the household interview procedures as stated in handbook of expertise direction VHLSS 2006.

Timing regulation: From the time of data collection until the form is submitted, each interviewer can have 2.5 days to interview 1 household regarding income and expenditure survey form, 2.5 days to interview 1 household regarding income and weight of consumer price index survey form, and 1 day to interview 1 household regarding weight of consumer price index survey form.

5.6. Supervision, examination and inspection

The General Statistics Office and Provincial Statistics Offices are in charge of supervising, examining and inspecting regularly or suddenly during the period of training, collecting and analyzing survey data.

The supervision, examination, inspection team from the General Office includes staff from the Social and Environmental Statistics Department, inspectors from the General Statistics Office and other related units

The supervision, examination, and inspection team at local level are staff from Population Division and other related Divisions.

The purpose of supervision, examination, and inspection is to discover and solve timely at field all concerns incurred during the survey period.

The contents of examination, inspection include organizing and implementing the survey procedures, quantity (sufficient number of households as planned, enough forms, parts and survey indices) and quality (in correct lines, columns, code, unit, calculation, logical relation between columns, lines, indices, relation between tables, rationality when compare some indices with local reality or other related statistical documents), methods to ask questions and record data of each interviewer, act in accordance with administration procedures such as progress report as regulated, fill up the quality control form, data entering and cleaning up process.

Team leader is responsible for examining all the team's completed survey forms in contents, calculation methods, logicity, calculation examination, compare a few indices with the local reality or other related statistical documents, attend the interview of interviewers to examine the communication skills, data collection and recording process. As for data collecting process, at both central and local levels, there must be an extensive management plan for examination and inspection, and it is necessary to focus on the first week of implementing the process in order to timely correct interviewers' mistakes and avoid systematic mistakes.

5.7. Post-enumeration

Provincial Statistics Offices have to select randomly 10% of the interviewed households for post-enumeration to check-up the quality of the survey. In order to ensure the high quality of the inspection, Provincial Statistics Offices have to choose experienced, enthusiastic, expertise staff to directly visit the households to examine. It is possible to appoint an interviewer that has been collecting information at the area as an inspector, but not for the households interviewed by them, in order to ensure the objectivity. The inspector besides collecting information from the households, can visit key leaders of ward/ commune (president or vice President, Head of the village, resident group) to collect some information related to the inspecting procedures. While doing this, the inspector absolutely cannot reveal information of the survey, even to the local government. After inspecting, Provincial Statistics Offices have to report results in regulated form to the General Statistics Office. (See instruction about inspecting procedures in expertise guidance Handbook VHLSS 2006)

5.8. Submission of result

District Statistics Divisions collect every survey forms from the interviewers under their charge.

Provincial Statistics Provincial Statistics Offices collect every survey forms of the districts with enumeration spots.

Socio- Environmental Statistics Department collects survey forms, result of the quick compilation and the raw data set from all cities, provinces.

5.9. Processing, compiling and disseminating result

Statistical Informatics centre in Hanoi develops, trains users and provides Provincial Statistics Offices the 2-time (twice) data entering program, inspecting program, quick compilation program and official compilation program.

Provincial Statistics Offices which are qualified will be in charge of entering data twice, clean up data and compile data of households according to the regulated plan and guidance from the Statistical Informatics Centre in order to ensure the consistent data processing and compiling.

All survey forms only after being certified by provincial level inspector to be qualified can be used as enter data, being cleaned up and analysed.

Provincial Statistics Offices delegate staff with expertise in entering data and responsible to take part in the data enter training and implementing, in the mean time have methods to examine and supervise to minimize possible mistakes incurred while entering data. When the data enter and data examination program inform the possibilities of mistakes in data, the data enter staff and staff in charge of surveying living standard from the Population Division and Trade Service price Division have to cooperate to examine, clarify carefully with interviewer teams and correct the mistakes if necessary. The data enter staff must not correct the possible mistakes on his own without the approval from specialist staff. The data enter and cleaning up have to be finished within 1 month after each period of data collecting at the locality.

After finish data entering and cleaning up, Provincial Statistics Offices at have to preliminarily compile the survey data. Leaders from Provincial Statistics Offices examine and send the preliminarily compiled data and data testing report to the Socio- Environmental Statistics Department for assessment. The compilation and assessment of the preliminary results should be finished in 1 month, of them 20 days are for preliminary results and 10 days are for assessment of the preliminary results.

After the preliminary results have been assessed, Provincial Statistics Offices proceed to officially compilation, as well as send the entered raw data to Hanoi Statistical Informatics Center.

The Statistical Computing Centre of Hanoi chairs the cooperation with Socio- Environmental Statistics Department to compile the nationwide data.

The General Statistics Office publishes the preliminary results of the VHLSS 2006 in June 2007 and official results in December 2007.

5.10. Document transfer

Interviewers and the teams transfer the survey documents (survey forms and commune interview forms) to the district Division of Statistics within 5 days after the interview period.

District Statistics Division transfer the survey documents to Provincial Statistics Offices latest 12 days after the last day of the interview at each locality

Provincial Statistics Offices send the preliminary results to Socio- Environmental Statistics Department on July 20, 2006 and November 20, 2008. Provincial Statistics

Offices send the first batch of original data which has been entered to Statistical Informatics Centre of Hanoi on October 30, 2006 and second batch on December 31, 2006.

Provincial Statistics Offices are responsible for storage of the survey forms until the General Office orders to cancel.

VI. BUDGET

The General Statistics Office announces the budget allocated to each locality based on scale, complexity and practical situations about implementation of VHLSS. Provincial Statistics Offices have to use the budget rationally and in accordance with regulation in order to ensure the progress and high quality of the survey.

Budget for the survey will be used for different procedures of the survey, including selecting sample, plan preparation, compiling survey instruction documents, data recording, expertise training, disseminating, directing, survey checking, supervising, post-enumerating, wage for interviewers, presents for households being surveyed, over time salary for staff doing the check-up, inspection, survey forms cleaning up, data entering, examining the result of data entering, preliminary compilation, official compilation the survey result, examining the result, checking-over, writing report analysing, building the survey database.

VII. IMPLEMENTATION PLAN

- From August to September 2005: Research for plan preparation, survey form, preliminary compilation tables, official compilation tables and expertise instruction documents, indicators.
- From October 2005 to February 2006: prepare sample.
- At the end of October and in November 2005: pilot survey in some provinces.
- December 2005: Submit plan for approval and print central training documents.
- End of December 2005: Print survey documents and send to localities.
- End of April 2006: Expertise training courses for provinces/cities.
- Early May 2006: provinces open training courses for interviewers and prepare for the survey
- In May, June and September, October 2006: Collect data in enumerated areas.
- From May to December 2006: The centre checks and takes over the survey results.
- From June to November 2006: Data entry and cleaning at Provincial Statistics Offices.
- July-August 2006: Preliminary compilation for data collected in May 5.
- November – December 2006 Preliminary compilation for data collected in September and compile result of the two periods.
- 2007: Compilation of official results at GSO.
- June 2007: Publish preliminary results.
- December 2007: Publish official results.

The General Statistics Offices requires Leaders of Provincial Statistics Offices to pay attention to directing, ensuring the regulated content, methods, and timing so that the VHLSS 2006 achieve desirable result.

To:

GSO's leaders;

DIRECTOR GENERAL

Provincial people's committees;
Provincial Statistics Offices;
Departments, Institute, Administration of GSO;
Secretariat Division;
Storage of archives, Department of S&E,
Department of M&S.

(Signed)

Lê Mạnh Hùng