

Observations and questions to the Vietnamese team regarding the interpretation of the household survey, November 2013:

- 1) We note that disaster losses were more important in 2010 and again in 2011 than in 2008/2009. So comparing with the situation in 2013 with the 2008 situation is relevant for what purpose? Because the 2008 situation was a year without any major disaster?

Why are so many households missing in year 2008/2009 in terms of economic losses? Due to real missing values or estimated zero losses? We might need data on income from other years than 2013 to look at the trend.

Statistics

	f311a. Estimation of economic loss in 2008 (thousand Dong)	f311b. In 2009 (thousand Dong)	f311c. In 2010 (thousand Dong)	f311d. In 2011 (thousand Dong)	f311e. In 2012 (thousand Dong)	f311f. In 2013 (thousand Dong)
N Valid	365	364	424	375	382	261
N Missing	105	106	46	95	88	209
Mean	1887,26	1492,72	5355,05	2254,40	1791,68	450,50
Std. Deviation	4594,058	4108,727	13897,983	10909,890	4004,758	1656,580
Minimum	0	0	0	0	0	0
Maximum	65000	50000	250000	200000	50000	15000

- 2) Many questions relate to the impact of natural disasters on the household livelihood: e101, e105, e201, e203, e205 etc. Some of the more detailed questions are not answered when asking about the impact on husbandry, aquaculture, and fishing (apart from cold weather impact on livestock)

Comparing the main tables yield slightly different results as to which natural disaster caused the highest impact:

E101 (Compared to 2008, have you noticed any variation in extreme climate events?) : Long lasting drought, drought (very difficult to distinguish between the two categories), heavy rain and flooding

E105 (How seriously do you consider the following stress factors ?) : Flooding, storms and drought (saltwater intrusion a serious problem in Nge An, not in the two other provinces)

E201 (Did extreme climate events have any impact on agricultural production?): Extreme cold weather, flooding and storms (among the specific impact categories, less productivity seems most important)

- 3) Most households receive disaster relief as support in kind as opposed to support in cash. We should ask household to estimate the value of both types of disaster relief. Once again, Nghe An displays a different pattern than the two other provinces, as many households here receive disaster relief as cash support. Other support schemes seem not to play any major role. Question f305 relates to the flooding in 2008, and question f308 to the general trend in disaster relief. Only small differences can be observed between the two answers.

Have all households received a fixed amount of indemnity transfers (in cash or kind),or are poor/vulnerable households entitled to higher compensation than other households ?

a101. Province * f305a. Support in cash

		f305a. Support in cash		Total
		Co/ Yes	Khong/ No	
a101. Province	Nghe An	111	33	144
	Ha Tinh	8	166	174
	Quang Binh	10	110	120
Total		129	309	438

a101. Province * f305b. In kind Crosstabulation

Count

		f305b. In kind		Total
		Co/ Yes	Khong/ No	
a101. Province	Nghe An	140	4	144
	Ha Tinh	172	2	174
	Quang Binh	118	2	120
Total		430	8	438

a101. Province * f308a. Support in cash Crosstabulation

Count

		f308a. Support in cash		Total
		Co/ Yes	Khong/ No	
a101. Province	Nghe An	102	33	135
	Ha Tinh	28	156	184
	Quang Binh	16	106	122
Total		146	295	441

a101. Province * f308b. In kind

Count

a101. Province * f309. The most important source of support

		f309. The most important source of support							Total	
			Siblings	Relatives	Friends	Neighbors	Local social unions	Local government		Other
a101. Province	Nghe An	14	11	3	1	1	27	89	2	148
	Ha Tinh	6	13	6	1	2	5	131	23	187
	Quang Binh	13	24	3	0	1	4	88	2	135
	Total	33	48	12	2	4	36	308	27	470

- 4) The interpretation of G101 (IK) is hampered by the fact that the interviewer has assigned '5' to their answer for many households, though we only operate with four categories.
- 5) Flood prevention is an important factor in the indigenous knowledge, as perceived by the population, though households consider the impact of flooding to be considerable. How do we explain this lack of association between the two factors?

g101d1. Flood prevention * e105a1. How seriously flood impacts household's life

Count

		e105a1. How seriously flood impacts household's life				Total
		High impact	Moderate impact	Low impact	No impact	
g101d1. Flood prevention	High	81	17	5	0	103
	Moderate	45	6	2	0	53
	Low	44	10	3	0	57
	Not at all	66	8	3	2	79
Total		236	41	13	2	292

- 6) The satisfaction rate of received disaster relief is very high. So households remain completely immune from negative economic costs caused by the natural disasters? Is question f306 only related to the disaster relief in 2008?

a101. Province * f306. Was the family happy with the support/relief?

Count

		f306. Was the family happy with the support/relief?		Total
		Co/ Yes	Khong/ No	
a101. Province	Nghe An	134	10	144
	Ha Tinh	172	4	176
	Quang Binh	107	14	121
Total		413	28	441

7) Regression results using losses as dependent variable yields only significant results for year 2012. Probably, we will need figures on income for the other years. If we use income as only dependent variables, revenue (agriculture) and revenue (non-agriculture) are both significant, but they do not explain a lot of the variation in losses. In addition housing (b201b1) and gender (b11b) are showing significance, though the two independent variables only contribute marginally to explain the total variation in losses.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1884,544	262,749		7,172	,000
1	Revenue, agriculture	,009	,004	,105	2,116	,035
	Revenue, non-agriculture	-,011	,005	-,117	-2,353	,019

a. Dependent Variable: f311e. In 2012 (thousand Dong)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,160 ^a	,026	,021	3897,959

a. Predictors: (Constant), Revenue, non-agriculture, Revenue, agriculture

b. Dependent Variable: f311e. In 2012 (thousand Dong)

8) Faced with extreme weather events, households react by investing more money and more labour in agricultural production. Not by abandoning production. Households seem to believe these two categories (capital and labour investment) are quite similar.

e202a. Invest more money

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Co/ Yes	250	53,2	59,4	59,4
Valid Khong/ No	171	36,4	40,6	100,0
Total	421	89,6	100,0	
Missing System	49	10,4		
Total	470	100,0		

e202b. Invest more labour

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Co/ Yes	250	53,2	59,4	59,4
Valid Khong/ No	171	36,4	40,6	100,0
Total	421	89,6	100,0	
Missing System	49	10,4		
Total	470	100,0		

- 9) One other way of looking at the impact of disaster on the household livelihood is to use the logarithmic value of total monthly income as dependent variable and asses the importance of vulnerability indicators (independent variables) compared to income. Only flooding and access to market seem significant:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8,428	,332		25,408	,000
e105a2. Level of impacts induced by flood	-,068	,029	-,134	-2,377	,018
e105b2. Level of impacts induced by drought	,003	,020	,008	,150	,881
e105c2. Level of impacts induced by saltwater intrusion	-,017	,014	-,065	-1,226	,221
e105d2. Level of impacts induced by storm	,005	,021	,012	,240	,810
e105e2. Level of impacts induced by government policies	-,021	,016	-,064	-1,331	,184
e105f2. Level of impacts induced by access to the market	,030	,015	,099	1,979	,048
e105g2. Level of impacts induced by access to credit	,014	,015	,047	,895	,371
e105h2. Level of impacts induced by access to labour	,017	,016	,060	1,103	,271
e105i2. Level of impacts induced by access to land	,024	,019	,064	1,289	,198
e105j2. Level of impacts induced by illness	-,021	,014	-,079	-1,488	,138

a. Dependent Variable: lnincmonth

- 10) We need to know more about how the households estimate their losses. Households might be able to estimate losses caused by dramatic climatic changes, like storms, whereas drought impacts could gradually be on the increase (?), but much less easy to estimate in terms of losses. It could be an explanation to the non-significance of drought impact in the last test. We might integrate changes in natural conditions (flooding, drought etc) in the equations to test household behavioral patterns.
- 11) About 30 households have not received any assistance to cover for their disaster losses. An idea could be to interview these households or a sample of them (list of households in an Excel file).
- 12) If you look at the household assets composition, household are richer in 2013 than in 2008. Despite the negative impact of natural disasters on household earnings. Other studies reach similar conclusions that disaster effects are contemporary, not significant, if any, in the long term. A few examples:

b204b1. Motorbike/ 2-wheel vehicle - 2008

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Co/ Yes	216	46,0	46,6	46,6
Valid Khong/ No	248	52,8	53,4	100,0
Total	464	98,7	100,0	
Missing System	6	1,3		
Total	470	100,0		

b204b2. Motorbike/ 2-wheel vehicle - Currently

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Co/ Yes	354	75,3	75,5	75,5
Valid Khong/ No	115	24,5	24,5	100,0
Total	469	99,8	100,0	
Missing System	1	,2		
Total	470	100,0		

b203h1. Washing machine - 2008

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Co/ Yes	13	2,8	2,8
	Khong/ No	451	96,0	100,0
	Total	464	98,7	100,0
Missing	System	6	1,3	
Total		470	100,0	

b203h2. Washing machine - Currently

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Co/ Yes	33	7,0	7,0
	Khong/ No	436	92,8	100,0
	Total	469	99,8	100,0
Missing	System	1	,2	
Total		470	100,0	