Summary – Survey Weights

The TVSEP survey weights are derived in three steps:

First, based on the three-stage sampling design of TVSEP (see Section "Sample Design"[1]), design weights *"Wd"* were calculated.

Second, nonresponse adjustment for the sample was carried out in order to increase the weights of remaining households based on those households that did not respond in individual survey waves. The nonresponse adjustment is conducted at the level of the country stratum. Therefore, the nonresponse adjustment weight is calculated as the inverse response rate at the stratum-level. Hereby, two nonresponse adjustment weights are calculated, namely *"wAll"* and *"wInc"*. *"wAll"* captures household nonresponse during the survey wave, whereas *"wInc"* is an alternative nonresponse adjustment weight based on the number of households for which a valid, e.g., non-missing, income aggregate could be calculated.

Examples of the calculated nonresponse weights are provided in Tables 1&2.

Table 1. Survey weights (2007) - Thailand

Stratum (S1Strat)	No. of households			Adjustment for nonresponse	
	Targeted	Responded	With Valid Income	wAll	wInc
31 Buriram	820	819	714	1.00122	1.14846
34 Ubon Ratchathani	980	970	694	1.01031	1.41210
48 Nakhon Phanom	400	397	247	1.00756	1.61943
	2,200	2,186	1,655		

Source: Own calculations.

Table 2. Survey weights (2007) - Vietnam

Stratum (S1Strat)	No. of households			Adjustment for nonresponse	
	Targeted	Responded	With Valid Income	wAll	wInc
405 Ha Tinh	**720**	**720**	**613**	**1.00000**	**1.17455**
4051	360	360	309	1.00000	1.16505
4052	200	200	163	1.00000	1.22699
4053	160	160	141	1.00000	1.13475
411 Hue	**720**	**718**	**531**	**1.00279**	**1.35593**
4111	240	240	195	1.00000	1.23077
4112	240	239	157	1.00418	1.52866
4113	240	239	179	1.00418	1.34078
605 Dak Lak	**760**	**757**	**521**	**1.00396**	**1.45873**
6052	260	260	183	1.00000	1.42077
6053	500	497	338	1.00604	1.47929
	2,200	2,195	2,148		

Source: Own calculations.

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[1] Website document "Description of waves and sample design"

Third, the final weight *"WAll"* for the sample, alongside the final weight for those households with valid income data *"WInc",* is calculated by multiplying the design weight *"Wd"* with the nonresponse adjustment weights *"wAll"* and *"wInc"* respectively.

All weights calculated by TVSEP are provided on the website[2] and can be merged to datasets using the unique household identifier *"QID"*. A brief description of the survey weight variables and syntax needed to apply the survey weights in Stata is provided in the following paragraphs.

The *"svyset"* syntax is utilised in order to designate variables containing information on survey design and apply weights to analyses. Thereby, the following syntax[3] is applied in order to account for survey design and weighting:

svyset subdistr [pweight=WIncCap], strata(S1Strat) fpc(S1N) vce(linearized) singleunit(certainty) ///

|| vill, fpc(S2N) || QID, fpc(S3MOS)

Whereby, the primary sampling units *[psu]* are the sub-districts. The sampling weight [*pweight*] is given as weight per capita *"WIncCap"*. Thereby, *"WInc"* is multiplied with the nucleus household size *"_x12122"*.

The stage one stratum identification is provided in the variable *"S1Strat"*, which consists of the three sampled provinces in Thailand and grouped districts[4] within the three sampled provinces of Vietnam. Finite population correction is applied with the stage one population size *"S1N"*, which adheres to the number of sub-districts located within a stratum. The default Taylor linearisation is set for variance estimation in order to produce estimates for the stratified cluster-sampled data of TVSEP. Further, the method through which the sampling units were generated, i.e., random sampling, is specified using the *"singleunit(certainty)"* syntax. The stage two primary sampling units *[psu]* are the villages. Finite population correction is applied with the stage two population size *"S2N"*, which adheres to the number of villages located within a sub-district. The stage three primary sampling units *[psu]* are the individual households, whereby a finite population correction is applied with the measure of size of the village *"S3MOS"*.

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[2] Listed as *"Weights_TH_VN"* and available as either a Stata .dta file or Excel .xls file.

[3] This is an example for applying weights to the dataset that account for nonresponse in terms of valid income data. Alternatively, the final weight *"WAll"* may be used to weight the dataset instead of *"WIncCap"*. The remaining syntax remains the same.

[4] Grouped based on heterogeneity of provinces in terms of population density and agro-ecological conditions as explained in website documentation "Description of waves and sample design"