

# Components of the Income Aggregate: “Indonesia Family Life Survey, Wave 3”

*Prepared for the Rural Income Generating Activities (RIGA) Project<sup>1</sup>*

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*This document provides the survey-specific details associated with the income aggregate construction. For more information about the RIGA project, please refer to <http://www.fao.org/es/esa/riga>. For additional detail regarding the overall RIGA income aggregate construction approach, please refer to Carletto, et al (2007), “Rural Income Generating Activities Study: Methodological note on the construction of income aggregates,” found on the RIGA website.*

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The Indonesia Family Life Survey, Wave 3 (IFLS3) is the third wave in a national panel survey undertaken to collect data at the individual and household level on fertility, health, education, migration and employment. While the IFLS1, IFLS2 (and IFLS2+<sup>2</sup>) were carried out in 1993 and 1997, respectively, this wave was carried out in 2000 with fieldwork taking place from June through November of that year.

Since the IFLS is a panel, the sampling frame was established in IFLS1, in which the two-stage stratified sampling procedure was based on provinces and urban/rural location. Of the 13 provinces were chosen for the survey, 321 enumeration areas (EA) were randomly selected, from which 20 households were then randomly sampled if the EA was urban, and 30 were sampled if the EA was rural. The sample for IFLS3 was formed by trying to recontact all IFLS1 households and all split-off households from IFLS2 and IFLS2+. 7,928 were target households from IFLS1 and 2,646 were split-off households from subsequent rounds, obtaining a target sample of 10,574 households, 10,435 of which were successfully interviewed (95.0%).<sup>3</sup>

There are 5,410 rural households and 5,025 urban households in the dataset. In the original datasets, SC05 is the variable distinguishing urban from rural households. In the calculation of

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<sup>1</sup> The RIGA Project is a collaboration between FAO, the World Bank and American University in Washington, D.C. Original data can be obtained from the World Bank’s Living Standards Measurement Study by visiting the LSMS website at: <http://www.worldbank.org/lsmis>. Data for Indonesia can be obtained directly from RAND at <http://www.rand.org/labor/FLS/IFLS/>.

<sup>2</sup> The IFLS2 + was conducted in the second half of 1998 on a sub-sample of the IFLS households to gauge the immediate impact of the Asian financial crisis.

<sup>3</sup> The User’s Guide states that the difference between the 10,574 contacted households and the 10,435 interviewed households is due households in which all members died or joined other IFLS households.

the income aggregate, SC05 is renamed to URBAN in order to use the same variable name across different surveys.

Since the sample is not self-weighting, household weights (HWT00XA) were calculated based upon the probability of selection. The average household size in Indonesia is 5.27 persons.<sup>4</sup> All money amounts are in the local currency, Rupiah (Rp). In 2000, the official exchange rate was 8421.77 Rp = 1.0 USD.<sup>5</sup> **The income aggregates are calculated at the household level and all aggregates are annualized.**

The household-level modules of the IFLS3 survey can be linked using the unique household identifier, HHID00. This variable is renamed HH for consistency across countries within the study. To merge the community questionnaire with the household questionnaire, the variables COMMID00 should be used.

Regarding income from different sources, revenues and costs were disaggregated when such information was available. The disaggregated sources for each income component are summarized in output variables column of Table 1. The net variables and the data files included in the final total income aggregate are in **bold**. **All variables included in the aggregate income variable are net of costs, unless otherwise noted.**

## Comments

- In all sections, the raw data undergoes a transformation (it is annualized, aggregated, taken from person – household level, etc) before a check for outliers takes place.
- The estimation of household income was prepared with attention to the different levels at which income is report (individual, household, business), the different members of the household responding to income questions (notably in the transfers section) and that similar income sources are reported across different books, as part of a careful effort to ensure all possible income sources are accounted for and to avoid the double-counting of income.
- In the Crop Production section, the reference period is the previous 12 months, which contains the previous crop season.
- For the Livestock, Other Income, Rentagric and Transfers sections, the reference period is the previous 12 months.
- Other Income includes income from the rental of household nonfarm assets and earnings from miscellaneous non-labor sources.
- For Transfer income, two estimates are calculated: gross and net. The household income aggregate, however, considers the gross value rather than net.
- Rentagric calculates gross income from the rental of agricultural land.
- In the Wage employment section, the reference period is the duration of employment as specified in the questionnaire for the primary and secondary full-time and part-time jobs held in the last 7 days and, if not in the last 7 days, all work in the last 12 months.
- The classification of wage employment activities into industries and skilled/unskilled categories follow the United Nations International Standard Industrial Classification (ISIC) and the International Standard Classification of Occupations (ISCO) 88 codes. Given the survey classification of each employed household member by industry, the employment

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<sup>4</sup> Estimate from IFLS 3 data.

<sup>5</sup> Exchange rate used comes from the World Bank World Development Indicators database.

sectors include: (1) Agriculture, Livestock, Hunting and Fishing, (2) Mining, (3) Manufacturing, (4) Electricity and Utilities, (5) Construction, (6) Commerce, (7) Transportation, Storage and Communications, (8) Finance, Insurance and Real Estate, (9) Services and (10) Other Industries.

- Earnings from wage employment are net and include all in-cash and in-kind benefits received from the employer.
- The Self Employment (SelfEmp) section accounts for net income from nonfarm enterprises owned by the household. The reference period was the last 12 months. Income from nonfarm enterprises is disaggregated by industry (following the ISIC Codes) in order to convey information regarding the diversity of household activities.
- For all sections, whenever information was available regarding the share of a business, enterprise, or any other income activity owned by the household, the income earned from that activity was weighted by the share owned by the household.
- Participation and income share variables are also included in the final income aggregate.
- A final outlier check is imposed at the end of the Aggregateincome.do file in which households with income shares from any given activity greater than or less than 3 (300%) are dropped from the final income aggregate. Using this criteria, 27 households are dropped from this survey.

The programs that calculate each household's income aggregate component are summarized in Table 1. Table 2 summarizes the results from the created income aggregate.

**Table 1**

<b>Program Name (.do)</b>	<b>Input Data Files</b>	<b>Output Data Files</b>	<b>Output Variables</b>	
Sample	BK_SC	Sample		
Cropincome	B1_UT1	<b>Cropincome</b>	cropincimp cropexpimp cropincomeimp	
Employment	B3P_TK2 B3A_TK1 B3A_TK2 SAMPLE	employ1 employ2  <b>Employment</b>	wgeimp  wgeimp1_1 wgeimp2_1 wgeimp3_1 wgeimp4_1 wgeimp5_1 wgeimp6_1 wgeimp7_1 wgeimp8_1 wgeimp9_1 wgeimp10_1 wgeimp1_3 wgeimp2_3 wgeimp3_3 wgeimp4_3 wgeimp5_3	wgeimp1_2 wgeimp2_2 wgeimp3_2 wgeimp4_2 wgeimp5_2 wgeimp6_2 wgeimp7_2 wgeimp8_2 wgeimp9_2 wgeimp10_2 wgeimp6_3 wgeimp7_3 wgeimp8_3 wgeimp9_3 wgeimp10_3
Livestock	B2_HR1 B2_UT2 SAMPLE	livstrent1 livstrent2 livstrent3  <b>Livestock</b>	livstrent1imp livstrent2imp livstexpimp livstsoldimp livstrent3imp livstincimp	
Other	B3A_HR1 B2_H1 B2_HR1 SAMPLE	othinc1.dta othinc2.dta othinc3.dta <b>Other</b> .dta	othinc1imp othinc2imp othinc3imp nonfarmrntimp	
Rentagric	B2_UT2 SAMPLE	<b>Rentagric</b>	farmrntimp	
Selfemp	B2_NT1 B2_NT2 SAMPLE	<b>Selfemp</b>	hhrevimp hhexpimp selfimp1 selfimp2	

			selfimp4 selfimp5 selfimp6 selfimp7 selfimp8 selfimp9 selfimp10
Transfers1	B1_KSR3 B5_DLA3 B2_HI B3A_HI B3B_TF  SAMPLE	Pubtrans1 Pubtrans2 Othtrans  Transferprivout Transferprivinc	pubtransimp socialassistimp pensionimp othtransimp transfersentimp transferincimp
Transfers2	B3B_BA1 B3P_BA1 B3B_BA4 B3P_BA4 B3B_BA6 B3P_BA6 B4_BA6 B4_BX6 SAMPLE	Privtrans1     Privtrans2 Privtrans3	Privtrans1incimp     Privtrans2incimp Privtrans3incimp
Transfers3	Pubtrans1 Pubtrans2 Othtrans Transferprivout Transferprivinc Privtrans1 Privtrans2 Privtrans3	<b>Transfers</b>	privtrans pubtrans transferstotimp transfersgrossimp
AggregateIncome	Sample Cropincome Employment Livestock Other Rentagric Selfemp Transfers	<b>Income</b>	agr_wge nonagr_wge crop livestock selfemp transfer other totincome1

**Table 2**

<i>Indonesia 2000</i>	5,410 Rural HH Observations	Rural, Weighted, Rupiah						Rural, Wiegthed, USD	
<i>Variable</i>		<i># Participants</i>	<i>Participation Rate</i>	<i>Returns to Participation- Participant HHs</i>	<i>Returns to Participation- All HHs</i>	<i>Share of Total Income- All HHs (Mean of Shares)</i>	<i>Share of Total Income- All HHs (Share of Means)</i>	<i>Returns to Participation- Participant HHs</i>	<i>Returns to Participation- All HHs</i>
<b>agr_wge</b>	Wage Employment- Agriculture	982	19.33%	1,614,875	312,216	9.68%	9.33%	192	37
<b>nonagr_wge</b>	Wage Employment- Nonfarm	1,672	31.79%	3,567,180	1,133,949	20.30%	33.88%	424	135
<b>crop1</b>	Crop Production	2,938	53.66%	958,171	514,188	23.76%	15.36%	114	61
<b>livestock</b>	Livestock Production	555	10.20%	670,819	68,411	2.09%	2.04%	80	8
<b>selfemp</b>	Non-ag Self Employment	1,748	32.71%	2,367,577	774,373	17.63%	23.14%	281	92
<b>transfer</b>	Total Transfers	4,580	85.40%	513,376	438,428	22.93%	13.10%	61	52
<b>other</b>	Other Income Sources	790	14.13%	744,407	105,177	3.61%	3.14%	88	12
<b>totincome1</b>	Total Household Income	5,228	97.02%	3,450,320	3,346,742	100.00%	100.00%	410	397

<b>Percent Rural (Weighted)</b>	<b>54.42%</b>
<b>Rupiah/USD (July 1, 2000)</b>	<b>8,421.77</b>

Notes:

1. Source data: Indonesia Family Life Survey, Wave 3.
2. Exchange rate used comes from the World Bank *World Development Indicators* database.
3. All values reported are annual and net of costs (with the exception of income from transfers and land rent, which are gross receipts).