#### AN INTRODUCTION TO THE INDONESIA FAMILY LIFE SURVEY (IFLS) EAST 2012: SAMPLING, QUESTIONNAIRES, MAPS AND SOCIOECONOMIC BACKGROUND CHARACTERISTICS

ELAN SATRIAWAN, JAN PRIEBE, FIONA HOWELL AND RIZAL ADI PRIMA

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#### TNP2K

Grand Kebon Sirih Lt.4, Jl.Kebon Sirih Raya No.35, Jakarta Pusat, 10110 Tel: +62 (0) 21 3912812 Fax: +62 (0) 21 3912513 www.tnp2k.go.id

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# An Introduction to the Indonesia Family Life Survey (IFLS) East 2012: Sampling, Questionnaires, Maps, and Socioeconomic Background Characteristics

# Elan Satriawan, Jan Priebe\*, and Fiona Howell, Rizal Adi Prima<sup>1</sup> June 2014

#### **ABSTRACT**

The first round of the Indonesia Family Life Survey (IFLS) East was conducted in Eastern Indonesia in 2012. This paper is intended to provide researchers and policy makers alike an introduction to and brief overview of this new dataset. Topics covered include technical details of survey implementation (sampling procedure, calculation of weights, and field implementation) and a socioeconomic overview using Central Bureau of Statistics (Badan Pusat Statistik or BPS) data and IFLS East data of the provinces selected in the region.

Keywords: IFLS, survey, panel, Indonesia.

\* Contact: jan.priebe@tnp2k.go.id or jpriebe@uni-goettingen.de

<sup>&</sup>lt;sup>1</sup> Elan Satriawan is Head of the Monitoring and Evaluation Working Group at TNP2K. Jan Priebe is a senior economist at TNP2K's Cluster 1 team. Fiona Howell is the social assistance policy advisor at TNP2K. Rizal Prima is the Evaluation Coordinator (TNP2K).

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This paper is based on the December 2013 version of the IFLS East 2012. Due to data 'cleaning' carried out by SurveyMETER at the time this paper was written, some results may not be 100% reproducible with the data files that are uploaded for the general public at <a href="http://surveymeter.org/research/3/the-indonesia-family-life-survey-east-iffs-east">http://surveymeter.org/research/3/the-indonesia-family-life-survey-east-iffs-east</a>. However, these differences are expected to be quite minor.

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#### 1. Introduction

The Indonesian Family Life Survey (IFLS) East 2012 survey represents the first IFLS that specifically covers the eastern provinces of Indonesia. The survey was conducted on behalf of the National Team for Acceleration of Poverty Alleviation (Tim Nasional Percepatan Penanggulangan Kemiskinan or TNP2K), Poverty Reduction Support Facility (PRSF), and Australian Aid by SurveyMETER, one of Indonesia's most prominent survey companies; SurveyMETER worked in the past with the Rand Corporation on implementation of previous IFLS rounds in 2000 and 2007<sup>2</sup>. SurveyMETER's experience in conducting previous IFLS rounds helps ensure a high degree of continuity and quality assurance of IFLS East 2012, as similar questionnaires, enumerator training, field implementation procedures, etc., so the IFLS East 2012 dataset is expected to be of similar quality to the established IFLS dataset.

The previous IFLS rounds are known for high-quality panel data and providing a wealth of information on individuals, households, and communities in Indonesia. These data have been used extensively in academic research with the objective of facilitating evidence-based policy making. The IFLS East survey was intended to follow this tradition. Although it is the first round of the IFLS East and, therefore, no panel data are yet available, it is already providing researchers and policy makers with information on Eastern Indonesia not available from any other of Indonesia's major data sources (Riskesdas, Susenas, Sakernas, Podes, Demographic and Health Survey, etc.<sup>3</sup>). The IFLS East is therefore likely to make a contribution to policy making in the country.

The previous IFLS rounds were conducted in 10 provinces in 1993, 1997, 2000, and 2007. Of the 10 provinces covered in the IFLS, 5 were located in Java and 1 each in Bali, Kalimantan, Nusa Tenggara Barat, Sulawesi, and Sumatra. The IFLS East 2012 covers seven provinces in Eastern Indonesia, none of which (Kalimantan Timur, Nusa Tenggara Timur, Maluku, Maluku Utara, Papua, Papua Barat, and Sulawesi Tenggara) were part of the previous IFLS.

The remainder of this paper is organized as follows: Section 2 provides background information on the IFLS East 2012 (sampling process, calculation of weights, field implementation, and questionnaires) and a basic profile of the IFLS East provinces, as compared with other Indonesian provinces. Section 3 provides some descriptive socioeconomic statistics of key variables and characteristics of the IFLS East 2012 sample. All sections provide maps to better illustrate the IFLS East 2012 for the reader.

<sup>&</sup>lt;sup>2</sup> IFLS 1993 and IFLS 1997 were conducted by the Demographic Institute of the University of Indonesia, together with the Rand Corporation.

<sup>&</sup>lt;sup>3</sup> Riskesdas = Riset Kesehatan Dasar (National Basic Health Research); Susenas = Survei Sosial Ekonomi Nasional (National Socioeconomic Survey); Sakernas = Survei Angkatan Kerja Nasional (National Labour Force Survey); and Podes = Potensial Desa (Village Potential).

#### 2. Background information on the IFLS-East

#### Sampling Procedure and Selection of Respondents

The sampling process of the IFLS East survey had four stages<sup>4</sup>. The first stage involved selection of *seven provinces* as follows: one province not included in the previous IFLS rounds was randomly chosen in both Kalimantan and Sulawesi<sup>5</sup>: Kalimantan Timur (East Kalimantan) and Sulawesi Tenggara (Southeast Sulawesi). The remaining five provinces—Nusa Tenggara Timur (East Nusa Tenggara), Maluku, Maluku Utara (North Maluku), Papua, and Papua Barat (West Papua)—were selected without sampling. Figure 1 presents the geographic position of those provinces in Indonesia. Figure 2 shows the districts included in IFLS East 2012.



Figure 1: Provinces Selected for the IFLS East 2012

Source: Derived by the authors based on IFLS East 2012 data.

<sup>&</sup>lt;sup>4</sup> This chapter draws largely on SurveyMETER (2012) and Sikoki et al. (2014). The authors recommend that readers check the IFLS East website http://surveymeter.org/research/3/the-indonesia-family-life-survey-east-ifls-east for the latest and updated version of these documents.

<sup>&</sup>lt;sup>5</sup> The province of Sulawesi Tengah was not part of the previous rounds of IFLS and for security reasons was not included in the IFLS East sampling frame.



Figure 2: Districts Included in the IFLS East 2012

Source: Derived by the authors based on IFLS East 2012 data.

Note: The four-digit district codes from the Central Bureau of Statistics (Badan Pusat Statistik or BPS) were added to the map to permit identification of specific districts. See table A.3 in the appendix for a list of all districts per province included in the IFLS East 2012 survey.

In the second stage, 14 villages, defined as either rural or urban (respectively, *desa* or *kelurahan*), were randomly selected from those villages included in the July 2010 round of Susenas in each of the seven provinces. The sampling frame for the selection of villages was based on those villages included from the Susenas July 2010 round. As a first step, all the villages in the SUSENAS July 2010 survey belonging to the aforementioned provinces have been listed and then 14 were drawn from each province without replacement and with equal probability of being selected. Thus, the sampling frame<sup>6</sup> for the villages was based on the list of villages available in SUSENAS July 2010 rather than on all the villages in the provinces.

In the third stage, enumerators visited the selected villages in order to identify a geographic unit level roughly comparable in population size to the census block level. This process led to the creation of units called the 'smallest local area unit' (*satuan lingkungan setempat* or SLS) by SurveyMETER, which were sometimes further grouped (in the case of very small size, that is, fewer than 100 households) with other geographically adjacent SLSs. This resulted in having either one or a number of SLS groups in each village. After having created and grouped the units, one SLS group was randomly chosen from each village.

In the fourth stage, the enumerators visited the selected SLS groups in each of the villages and compiled a household listing by visiting each of the households in the chosen SLS groups. Then, for each village and, hence, each SLS group, a simple random sample of 20 (urban) or 30 households (rural) was drawn from the listing<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> In Papua, where some villages had to be dropped due to security concerns, remoteness, or inaccessibility, it was necessary to select replacement villages. In addition, leaders in one village drawn into the sample refused to participate in the Community and Facility Survey. Thus, to compensate for this, a replacement village (in both the Household and Community and Facility Surveys) was added, resulting in a total of 15, not 14, villages selected in Papua.

<sup>&</sup>lt;sup>7</sup> In case of refusals or failure to contact households, replacement households were randomly selected until the target had been reached.

#### Survey Components

IFLS East 2012 consisted of two components, a Household Survey and a Community and Facility Survey. The Household Survey included, depending on the specific questionnaire module, questions for each individual of the household or for the household head, mother, etc., whereas the Community and Facility Survey consisted of interviews with village officers, community leaders, and educational and health officers in the corresponding villages. Overall, in the Household Survey, 3,159 households (spread across 99 villages) were selected; the total number of households providing at least a partial interview totalled 2,547; the household response rate was 80.6%. The 2,547 respondent households jointly had 10,887 household members, of which 10,759 (98.8%) gave at least a partial interview and 9,929 (91.2%) were measured in the biomarker module. For the number of households and individuals surveyed by province and district, see Figures 3 to 6<sup>10</sup>.

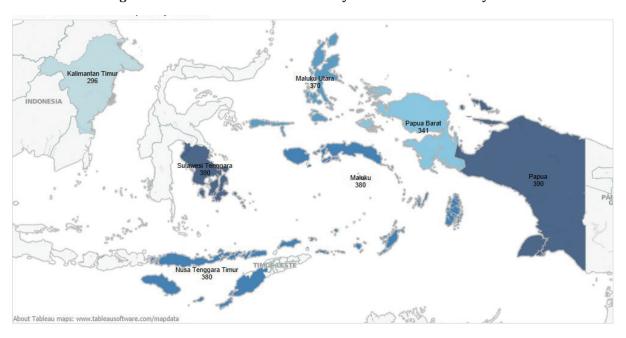


Figure 3: Number of Households Surveyed in IFLS East 2012 by Province

Source: Derived by the authors based on IFLS East 2012 data.

<sup>8</sup> See Tables A.1 and A.2 in the appendix for response rates by province and reasons for nonresponse.

<sup>&</sup>lt;sup>9</sup> The biomarker module collected information on anthropometric and health outcomes.

<sup>&</sup>lt;sup>10</sup> Partial interviews were very rare. The reported numbers include cases with partial interviews.

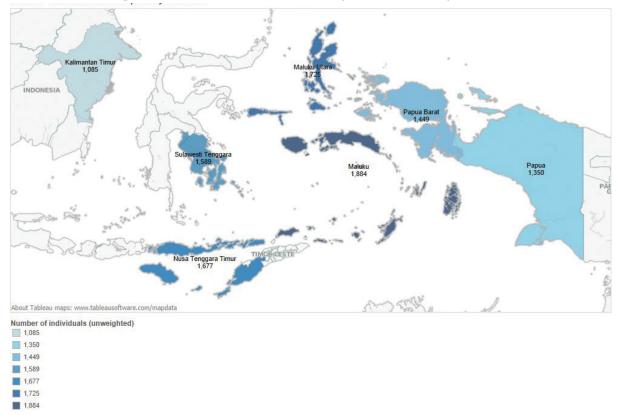


Figure 4: Number of Individuals Surveyed in IFLS East by Province

Source: Derived by the authors based on IFLS East 2012 data.

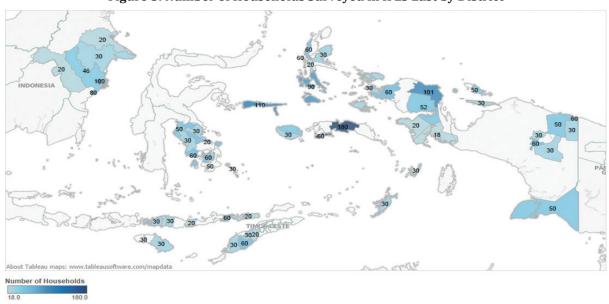


Figure 5: Number of Households Surveyed in IFLS East by District

Source: Derived by the authors based on IFLS East 2012 data.

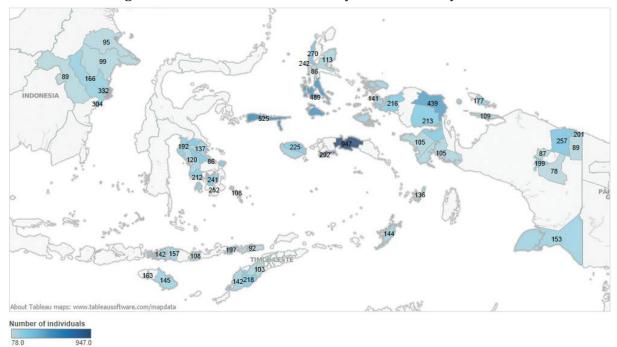


Figure 6: Number of Individuals Surveyed in IFLS East by District

Source: Derived by the authors based on IFLS East 2012 data.

In line with previous IFLS rounds, all members of the selected households were surveyed. If a household member was not able to respond due to health, cognitive, or other reasons, a proxy interview was conducted with an informant, typically another household member. Furthermore, children under 15 years old were not interviewed themselves; instead, their parents were interviewed about them. All household members were eligible for the biomarker data collection.

The collected data comprise various indicators of the households' economic situation and social welfare (approximated using household expenditure), their income, and assets. The survey also provides information on labour participation of household members, their education levels, migration patterns, health conditions, use of health-care services, possession and use of health insurance, marital status and history, pregnancy, use of contraception, characteristics of decision making processes, and participation in the community.

#### Household, Individual, and Biomarker Weights

To permit a sample that is representative of Eastern Indonesia, three different kinds of weights were constructed: household, individual, and biomarker. Sampling in the IFLS East 2012 was stratified by province, with all computations done separately by province. When calculating the weight of the first group (i.e., households), the basic principle adopted was that the weight of a household is inversely proportional to the probability of the household being chosen and thus can be defined as

$$w_h = C/p_h$$

 $w_h = C/p_h$  where  $w_h$  indicates the weight of the household, C indicates a constant and  $p_h$  indicates the probability of the household being chosen. The probability is equal to

$$p_h = p_1 p_2 p_3 p_4$$

 $p_h = p_1 p_2 p_3 p_4$  where  $p_1$  is the probability that the village was included in the Susenas 2010 sample;  $p_2$  is the probability that the village has been included in the IFLS East sample, given that it was included in the Susenas 2010 sample;  $p_3$  is the probability that the SLS group has been included in the IFLS East sample, given that the village was included (this is the reciprocal of the number of SLS groups in the village); and  $p_4$  is the probability that the household was included in the IFLS East sample, given that the SLS group was included (this equals the number of households in the SLS group in the sample divided by the number of households in the SLS group in the population).

The individual weights were calculated in a similar manner to the one described above; the underlying principle, once more, was that the individual's weight is inversely proportional to the probability of the individual being included in the sample. Likewise, the formula for this principle is

$$w_i = C/p_i$$

where  $w_i$  is the individual weight, C a constant, and  $p_i$  is the probability that the individual is in the sample. The formula for the probability has a very similar form to the household weights formula described above; the only difference is that the reference group comprises individuals, rather than households.

In addition, biomarker weights were constructed to use when analysing biomarker data. Two main motives lie behind the use of this distinct category of weights, rather than the individual one described above. First, the fraction of individuals for which there are biomarker data conditional on their household participating is a bit lower than for the overall sample. Second, the variation across individual characteristics in this subset of the data is somewhat larger than for the overall sample. To calculate the weights, a logit model estimating the probability of participating in the biomarker module (based on various characteristics such as age, gender, marital status, or province) was used. Namely, the predicted probability of the logit model (defined as the value  $p_{i|h}^B$ ) was inserted into the following formula, which estimates the weights:  $w_i^B = w_h/p_{i|h}^B w_i^B w_h p_{i|h}^B$ 

$$w_i^B = w_h/p_{i|h}^B$$

where  $w_i^B$ : is the biomarker weight,  $w_h$  the household weight, and  $p_{i|h}^B$  the predicted probability).

The calculations used to obtain the probability of a household being selected in the survey, that is, were based on the weights calculations used in the Susenas 2010 survey and on the sample sizes used in the IFLS East survey.

#### Community and Facility Surveys

In addition to the Household Survey, the IFLS East survey also includes a Community and Facility Survey. In this survey, for each of the 99 villages (corresponding to 99 SLS groups), those health and educational institutions and facilities most frequently mentioned by surveyed households were visited and their staff interviewed. From the remaining facilities available in the area, additional persons were randomly selected for interviews<sup>12</sup>. The visited health institutions included health centers (*puskesmas*), auxiliary mobile health centers (*puskesmas pembantu* or *pustu*), as well as private health practices (i.e., clinics, doctors, midwives (*bidan*), village midwives, and health posts (*posyandu*), and the visited educational institutions consisted of primary schools (*sekolah dasar* or SD), middle schools (*sekolah menengah pertama* or SMP), and high schools (*sekolah menengah atas* or SMA). Furthermore, the Community and Facility Surveys were complemented by interviews with community leaders and health officers. The village heads and staff were interviewed for information on the socioeconomic condition of the households in the community and availability and accessibility of educational and health facilities in their communities.

#### **Data Collection Process and Questionnaires**

The data collection process took place from 17 May to 21 July 2012, organized as follows: the household teams consisted of 1 local supervisor, 5 to 11 interviewers, and 2 editors; at least 3 of the interviewers were specifically trained in measuring health outcomes. The community and facility (komunitas fasilitas or KOMFAS) teams comprised about 4 enumerators and 1 person responsible for data editing. Two survey teams operated in each province; each survey team consisted of a household team and a KOMFAS team, except for Papua and Papua Barat, where 4 and 3 teams, respectively, were used. The 2 survey teams per province were supervised by a province-specific field coordinator (7 in all), while all field coordinators were supervised by a field director, who was in turn supervised by SurveyMETER research directors.

<sup>&</sup>lt;sup>12</sup> A list of all health and educational facilities mentioned by households can be found in the List of Existing Facilities (*Daftar Keberadaan Fasilitas* or DKF) book.

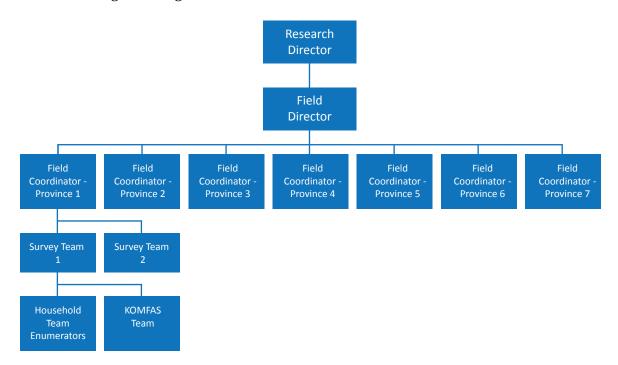


Figure 7: Organizational Structure for the IFLS East 2012 Field Work

The ILFS East 2012 uses a standardized list of questions (which is seen as an improvement compared with previously used questionnaires in previous IFLS rounds). The questionnaire consists of several books containing different sections (Table 1 provides details). The household component of the survey consists of Books K, I, and II, which served as the basis for interviewing household heads or, in case of their absence, their spouses; therefore, these books include household-level questionnaires. In contrast, Books IIIA, IIIB, IV, V, Ek1, and Ek2 served as the basis for interviewing individual household members; therefore, these books included individual-level questionnaires.

Table 1: Description of Books in the Household Survey by Questionnaire Type

Questionnaire/ Module Type	Book	Description
Household Questionnaire	K	A control book that lists all the household members and specifies the household's characteristics, demographics, socioeconomic situation, location, and (if applicable) relocation plans.
	I	Includes information on household expenses, familiarity with educational and health facilities in the area, and knowledge and use of various governmental programs (in particular those alleviating poverty). Also contains questions on any criminal offenses that have occurred in the household's village and/or have affected household members.
	II	Includes information on the household's economic situation, its assets and loans, natural disasters it has experienced, and whether the main source of income is agriculture.
Individual Questionnaire	IIIA	Includes information on household members' (except children under 15 years old) educational background, marital status, birth date, migration patterns, employment status, attitudes towards trust and risk aversion, and decision making patterns in the household.
	IIIB	Includes information on the physical and mental condition of the various household members (except for children under 15 years old), including the ability of the individuals to recollect various events or information, diagnoses of chronic diseases, meal frequency, use of health care and inpatient or outpatient medications. Includes information on transfer payments from and to household members.
	IV	Only includes information on female household members aged 15 to 49 years old who are either currently married or were in the past. Asks about the women's marriage, number of children, pregnancy and use of contraception.
	V	Only includes information on household members younger than 15 years old. Asks about children's education, employment, medical history, use of inpatient and outpatient medications, and meal frequency.
	EK1	Measures development of logical thinking and reasoning skills in children between 7 and 14 years old.
	EK2	Measures development of logical thinking and reasoning skills ofindividuals between 15 and 24 years old.

The Community and Facility Survey includes two main books, the Book of Characteristics of the Village Population (*Karakteristik masyarakat desa* or Kamades) and the Book of Facilities, both comprising several modules. The Book of Kamades consists of Books I, II, and Family Welfare Development (*Pemberdayaan dan Kesejahteraan Keluarga* or PKK), and the Book of Facilities consists of the Books of Posyandu, Health Facilities, Education Facilities, and the Price of Textbooks. Table 2 describes in detail the information gathered in each of the books.

Table 2: Description of Books in Community and Facility Surveys by Main Book

Main Book	Book	Description	Respondents
Book of Kamades	Book I	Village head and village staff	
Book of Kamades	Book II	Includes village statistics.	Village head and village staff
Book of Kamades	Book PKK	Includes information about the existence of educational and health facilities as well as the governmental programs implemented in the villages or enumeration areas.	PKK members and PKK cadres
Book of Facilities	Book of Posyandu	Includes information on activities carried out by either the Posyandu Lansia (for the elderly) or the Posyandu Balita (for toddlers), such as the history of these organizations in the villages/ areas, the services provided by them, the availability of medical equipment.	Facility manager and staff
Book of Facilities	Book of Health Facilities	Comprises several books, including questionnaires on puskesmas, private medical practices, and traditional practices. Includes information on activities and services provided by the health facilities (puskesmas, pustu, posyandu, bidan, etc.), their staff, and equipment available to them, as well as the prices of medications and services.	Clinic staff, doctors, midwives (e.g., village midwives and traditional midwives), traditional practitioners, and nurses
Book of Facilities	Book of Educational Facilities	Includes information on school principals, teaching staff, school committees, teaching/learning activities, school facilities, scholarship funds, and student assessment, using data obtained through the National Examination system (Ujian Nasional).	School principals and teaching staff
Book of Facilities	Book of Market Prices	Provides information on market prices of various items in markets and shops or stores in enumeration areas.	Market merchants, owners, and shop assistants in the centre of the enumeration area or near the village hall, as well as PKK members and other women with children who know the price of goods in the area

Note: Posyandu Lansia (for the elderly) and Posyandu Balita (for toddlers).

#### Provinces in the IFLS East: Socioeconomic Background

To get a better idea of the extent to which the IFLS East provinces differ from other provinces in Indonesia and those eastern provinces included in previous IFLS rounds, the authors compiled a table on socioeconomic information from Indonesia's Statistical Yearbook for 2012 (BPS 2012). Table 3 pro-

vides basic descriptive statistics on some key development indicators in the 33 Indonesian provinces in 2012<sup>13</sup>.

As Table 3 shows, the provinces included in IFLS East 2012 (i.e., Kalimantan Timur, Nusa Tenggara Timur, Maluku, Maluku Utara, Papua, Papua Barat, and Sulawesi Tenggara) are among the least populated in the country; their populations total 14,402,366 individuals, accounting for slightly more than 6% of the entire Indonesian population. The average household size in those provinces, which varies from 4.1 to 4.8, is higher than the country's average of 3.9. The eastern provinces (except for Nusa Tenggara Timur) are characterized by a sex ratio higher than 100, indicating that the number of males in the population exceeds that of females<sup>14</sup>. This aligns with the national average and most of the remaining provinces.

Labour market participation rates in IFLS East 2012 provinces are, in most cases (except for Maluku and Maluku Utara), higher than the national average (Table 3). At the same time, the minimum wages reported for IFLS East provinces are lower than the Indonesian mean in 4 of 7 cases: The four provinces of Maluku, Maluku Utara; Nusa Tenggara Timur, and Sulawesi Tenggara are all characterized by lower than average minimum wages, whereas Kalimantan Timur, Papua, and Papua Barat are characterized by higher minimum wages than the national average (the figures for Papua and Papua Barat substantially higher than for Kalimantan Timur<sup>15</sup>).

Maluku is characterized by a rather high poverty rate, while poverty in Sulawesi Tenggara is only slightly higher compared with the national average. The only two eastern provinces with lower-than-average poverty rates are Kalimantan Timur and Maluku Utara; the latter has one of the lowest poverty rates in Indonesia.

The human development index largely corresponds to the poverty rates. Those provinces (except for Maluku Utara) characterized by higher-than-average poverty rates have lower-than-average human development index levels (Table 3). Overall, the human development indices are not substantially lower (or, in the case of Kalimantan Timur, higher) than those of the remaining provinces and the national average.

Gross regional domestic product per capita levels rank relatively low in most eastern provinces compared with other Indonesian provinces. Four provinces—Nusa Tenggara Timur, Maluku, Maluku Utara, and Sulawesi Tenggara—have per capita gross regional domestic products that are less than half the national average (Table 3). The value reported for Papua also falls below the Indonesian average, albeit not as much. Only the numbers reported in Kalimantan Timur and Papua Barat are higher than the average of the remaining provinces; the former is considerable, as it is more than three times higher than the country's average.

<sup>&</sup>lt;sup>13</sup> At the time of the survey, there were 33 provinces in Indonesia. In 2013, the 34th province of North Kalimantan was established.

<sup>&</sup>lt;sup>14</sup> Sex ratio is defined as the number of males over the number of females, times 100.

<sup>&</sup>lt;sup>15</sup> Due to large differences in living costs in Eastern Indonesia, official poverty rates do not correspond completely with impressions based on minimum wage statistics. Put differently, higher minimum wages do not indicate lower poverty rates as the provinces Papua Barat and Papua, which had relatively high minimum wages (much higher than the remaining eastern provinces) but are characterized by very high poverty rates that are much more substantial than both the country average and the poverty rates of the remaining eastern provinces.

**Table 3: Basic Statistics by Province** 

	Variable											
Province	Surveyed in IFLS or IFLS East	Population Size (2010)	Average House- hold Size (2010)	Sex Ratio <sup>a</sup> (2010)	Labour Force Participa- tion Rate <sup>b</sup> (2012)	Minimum Monthly Wage (thou- sands) <sup>c</sup> (2012)	Poverty Rate <sup>d</sup> (2012)	Human Devel- opment Index (2010)	Gross Regional Domestic Product per Cap- ita (thou- sands) <sup>e</sup> (2011)			
Nangroe Aceh Darussalam	-	4,494,410	4.2	100.2	65.85	1,400	18.58	71.7	18,606.1			
Sumatera Utara	_	12,982,204	4.3	99.8	74.55	1,200	10.41	74.19	23,974.9			
Sumatera Barat	_	4,846,909	4.2	98.4	69.92	1,150	8.00	73.78	20,168.8			
Riau	_	5,538,367	4.2	106.3	66.91	1,238	8.05	76.07	72,030.5			
Jambi	_	3,092,265	4.0	104.6	69.40	1,142.5	8.28	72.74	19,959.6			
Sumatera Selatan	_	7,450,394	4.1	103.7	73.55	1,195.22	13.48	72.95	23,980.0			
Bengkulu	_	1,715,518	4.0	104.6	74.85	930	17.51	72.92	12,140.8			
Lampung	IFLS	7,608,405	3.9	106.1	71.98	975	15.65	71.42	16,696.0			
Bangka Belitung	_	1,223,296	3.9	108	68.11	1,110	5.37	72.86	23,978.7			
Kepulauan Riau	_	1,679,163	3.8	105.5	69.33	1,015	6.83	75.07	45,469.4			
DKI Jakarta	IFLS	9,607,787	3.8	102.8	70.83	1,529.15	3.70	77.6	100,985.3			
Jawa Barat	IFLS	43,053,732	3.7	103.6	64.26	_	9.89	72.29	19,645.7			
Jawa Tengah	IFLS	32,382,657	3.7	98.8	71.58	_	14.98	72.49	15,376.2			
DI Yogyakarta	IFLS	3,457,491	3.3	97.7	70.47	892.66	15.88	75.77	14,848.6			
Jawa Timur	IFLS	37,476,757	3.6	97.5	69.55	_	13.08	71.62	23,459.8			
Banten	_	10,632,166	4.1	104.7	69.36	1,042	5.71	70.48	17,594.8			
Bali	IFLS	3,890,757	3.8	101.7	77.42	967.5	3.95	72.28	18,502.5			
Nusa Tenggara Barat	IFLS	4,500,212	3.6	94.3	69.27	1,000	18.02	65.2	10,719.9			
Nusa Tenggara Timur	IFLS East	4,683,827	4.6	98.7	74.77	925	20.41	67.26	6,532.9			
Kalimantan Barat	_	4,395,983	4.3	104.6	74.50	900	7.96	69.15	15,081.1			
Kalimantan Tengah	_	2,212,089	3.9	109	73.79	1,327	6.19	74.64	21,818.3			
Kalimantan Selatan	IFLS	3,626,616	3.7	102.6	71.24	1,225	5.01	69.92	18,466.2			
Kalimantan Timur	IFLS East	3,553,143	4.1	111.3	69.89	1,177	6.38	75.56	105,849.2			
Sulawesi Utara	_	2,270,596	3.9	104.4	66.82	1,250	7.64	76.09	18,075.4			
Sulawesi Tengah	_	2,635,009	4.2	105.2	74.63	885	14.94	71.14	16,514.0			
Sulawesi Selatan	IFLS	8,034,776	4.3	95.5	64.56	1,200	9.82	71.62	16,929.0			
Sulawesi Tenggara	IFLS East	2,232,586	4.4	101	73.10	1,032.3	13.06	70	14,067.7			
Gorontalo	-	1,040,164	4.3	100.7	64.36	837.5	17.22	70.28	8,612.1			
Sulawesi Barat	_	1,158,651	4.5	100.8	72.64	1,127	13.01	69.64	10,843.7			
Maluku	IFLS East	1,533,506	4.8	102.3	66.98	975	20.76	71.42	6,088.3			
Maluku Utara	IFLS East	1,038,087	4.8	104.9	67.82	960.5	8.06	69.03	5,697.4			
Papua Barat	IFLS East	760,422	4.5	113.4	72.27	1,450	27.04	69.15	45,842.7			
Papua	IFLS East	2,833,381	4.3	112.4	79.27	1,585	30.66	64.94	25,530.9			
All Indonesia <sup>f</sup>		237,641,325	3.9	101.4	69.66	1,121.46	11.66	72.27	30,812.9			

Source: BPS (2012) and the BPS website (www.bps.go.id)

a Defined as number of males over the number of females, times 100.

b Defined as the number of individuals older than 15 years considered to be in the labour force, divided by the national number of individuals older than 15 years. The labour force itself is defined as those who are working (i.e., those who are working for at least one hour in the past week and those who already have a job but are temporarily not working in the past week) and those who are unemployed (i.e., those who are currently looking for work; those who are preparing for job initiation; those who are currently unable to find job; and those who have already accepted a job but have not started working yet).

c Expressed in current currency.

d Defined (by the government) as the rate of people who have per capita expenditures below the minimum per capita expenditure needed in the region to attain the basic living needs.

e The compulsory minimum wage rate paid differs by region.

f Population weighted average

#### 3. Descriptive Statistics from the IFLS East 2012

To allow for better understanding of IFLS East 2012, Table 4 presents a range of statistics summarizing the sample collected in IFLS East 2012<sup>16</sup>. Statistics are presented for both the sample and each of the seven eastern provinces under consideration. Several inferences on the overall sample and provincial subsamples can be made when analysing the table.

First, the number of sampled individuals and households does not greatly differ among the provinces. Overall, the number of individuals surveyed ranges from 1,085 in Kalimantan Timur to 1,884 in Maluku, while the number of households surveyed ranges from 296 in Kalimantan Timur to 390 in both Sulawesi Tenggara and Papua.

Second, some differences exist in the average household size in each of the seven provinces. The lowest mean household size is recorded in Papua (3.62), whereas the highest is in Maluku (4.85); the mean household size for the entire IFLS East is 4.11.

Third, the levels of the sex ratios indicate more males than females in most of the seven provinces (except for Maluku and Papua). Overall, the sex ratios vary from 96.01 percent in Papua to 110.63 percent in Kalimantan Timur; the overall sample average is 103.45 percent.

Fourth, the total dependency ratio varies somewhat more among the different IFLS East provinces than the household size and sex rations do. The lowest dependency ratio is reported for Kalimantan Timur (63.65 percent) and the highest for Papua Barat (88.29 percent). The dependency ratio for the entire sample is 79 percent, indicating that, in both the entire population and each of the provinces, there are many more individuals in productive ages than elderly and children combined. When looking at the two components in the total dependency ratio, that is, child dependency ratio and elderly dependency ratio, the former is much higher than the latter for each of the seven provinces. Overall, the entire sample's child dependency ratio equals 67.22 percent, whereas the elderly dependency ratio is 11.78 percent.

Fifth, the urban population rates, disaggregated both at the individual and household levels, indicate that in almost all provinces (except for Kalimantan Timur), the vast majority of the population/ households live in rural areas. Except for Kalimantan Timur, the urbanization rate on the individual level varies between 22.29 percent (Sulawesi Tenggara) and 41.99 percent (in Maluku Utara); on the household level, the rate ranges from 22.75 percent to 46.03 percent (in the corresponding provinces). In addition, household head age and education levels (expressed through years of schooling completed) do not show substantial variation among the different provinces. The average age of the household head in the entire sample is 43.28 years, while the provincial means range from 40.92 to 46.79. The sample's mean number of years of schooling of the household head equals 7.93. Kalimantan Timur is the province with the highest education level with a mean of 9.76 years and Nusa Tenggara Timur the lowest with a mean of 6.52 years.

<sup>&</sup>lt;sup>16</sup> See figures A.1 to A.5 in the appendix for maps illustrating these statistics at the provincial and district levels (for all provinces and districts included in IFLS East 2012).

Sixth, the expenditure levels reported for each of the provinces (expressed as the real per capita monthly expenditure levels) show substantial differences. For instance, the mean expenditure level reported for Nusa Tenggara Timur (Rp. 805,900, the lowest value of all provincial averages) is only slightly more than half the mean expenditure level reported for Papua (Rp. 1,539,500, the highest value of all provincial averages).

**Table 4: Descriptive Statistics by Province** 

				Province				
Characteristic	Nusa Tenggara Timur	Kali- mantan Timur	Sulawesi Tenggara	Maluku	Maluku Utara	Papua Barat	Papua	Total
Households (number)	380	296	390	380	370	341	390	2,547
Individuals (number)	1,677	1,085	1,589	1,884	1,725	1,449	1,350	10,759
Average household size	4.48	3.75	4.14	4.85	4.55	4.40	3.62	4.11
Sex ratio <sup>a</sup>	104.19	110.63	104.44	97.35	102.24	108.03	96.01	103.45
Child dependency ratio <sup>b</sup>	0.71	0.56	0.67	0.72	0.65	0.80	0.72	0.67
Elderly dependency ratio <sup>c</sup>	0.16	0.82	0.14	0.13	0.91	0.80	0.10	0.12
Dependency ratio <sup>d</sup>	0.87	0.64	0.81	0.85	0.75	0.88	0.8	0.79
Urbanization rate at the household level <sup>e</sup>	24.92	87.87	22.75	29.27	46.03	23.59	41.09	44.55
Average age of household head	46.79	43.01	44.91	46.47	40.92	43.02	42.20	43.28
Average education level of household head <sup>f</sup>	6.52	9.76	6.93	8.08	9.40	7.93	7.69	7.93
Average education level of household head's spouse <sup>f</sup>	4.93	6.55	5.09	6.11	6.45	5.26	4.92	5.53
Average real per capita expenditure (thousands) <sup>g</sup>	805.9	1,156.7	1,247.2	829.4	1,346.0	1,084.2	1,539.5	1,140.7

Source: IFLS East 2012

Notes: All statistics are weighted using the respective household or individual survey weights.

a Defined as the number of males divided by the number of females times 100.

b Defined as the number of children (individuals below 15 years of age) divided by the number of individuals in the working age (aged 15 to 64 years old)

c Defined as the number of elderly (i.e., individuals older than 64 years of age) divided by the number of individuals in the working age (aged 15 to 64 years old)

d Defined as the number of both children and elderly divided by the number of individuals in the working age (aged 15 to 64 years old)

e Defined as the percentage of urban households among all households

f Approximated using the years of schooling of the household head

g Defined as the overall monthly household expenditure divided by the household size and adjusted using a price deflator based on the province specific poverty lines.

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### **Appendix**

**Table A.1: Response Rates by Province** 

	Haysahald Dagnanga	Conditional on Household Participating					
Province	Household Response Rate	Individual Response Rate	Biomarker Response Rate				
Nusa Tenggara Timur	85.0	99.2	95.9				
Kalimantan Timur	73.8	97.5	90.8				
Sulawesi Tenggara	82.1	99.6	94.4				
Maluku	83.3	99.5	92.7				
Maluku Utara	79.7	98.5	86.7				
Papua Barat	84.4	98.8	89.2				
Papua	76.0	97.8	88.0				
Total	80.5	98.8	91.2				

Source: IFLS East 2012.

Table A.2: Reasons for Not Responding Survey by Province and Location

		Rural		Urban					
Province	No Contact	Refuse/ Sick	Other	No Contact	Refuse/ Sick	Other			
Nusa Tenggara Timur	3.1	1.7	9.4	3.1	9.4	4.2			
Kalimantan Timur	0.0	3.0	6.1	5.4	15.5	8.7			
Sulawesi Tenggara	6.6	3.2	3.2	12.5	15.6	9.4			
Maluku	9.6	4.5	0.8	9.7	10.7	1.9			
Maluku Utara	6.0	4.8	6.7	4.0	10.1	12.1			
Papua Barat	4.8	7.0	5.4	1.1	2.2	6.7			
Papua	7.2	7.8	4.0	13.2	17.4	3.6			

Source: IFLS East 2012

**Table A.3: Districts by Province** 

	Nusa enggara Timur		limantan Timur		ulawesi enggara	N	<b>Aaluku</b>	Mal	uku Utara	Paj	oua Barat		Papua
5301	Sumba Barat	6402	Kutai Barat	7402	Muna	8101	Maluku Tenggara Barat	8201	Halmahera Barat	9101	Fakfak	9401	Merauke
5302	Sumba Timur	6403	Kutai Kar- tanegara	7403	Konawe	8102	Maluku Tenggara	8203	Kepulauan Sula	9102	Kaimana	9402	Kab. Jayapura
5303	Kupang	6404	Kutai Timur	7404	Kolaka	8103	Maluku Tengah	8204	Halmahera Selatan	9104	Teluk Bintuni	9403	Jayawijaya
5304	Timur Tengah Selatan	6405	Berau	7406	Bombana	8104	Buru	8206	Halmahera Timur	9105	Manokwari	9408	Kepulauan Yapen
5305	Timur Tengah Utara	6471	Balikpapan	7407	Wakatobi	8109	Buru Selatan	8271	Ternate	9107	Kab. Sorong	9409	Biak Numfor
5306	Belu	6472	Samarinda	7408	Kolaka Utara	8171	Ambon	8272	Tidore Kepulauan	9108	Raja Ampat	9416	Yahukimo
5307	Alor			7410	Konawe Utara					9171	Sorong	9420	Keerom
5308	Lembata			7471	Kendari							9431	Mambera- mo Tengah
5311	Ende			7472	Bau-Bau							9471	Jayapura
5313	Manggarai												
5319	Manggarai Timur												

Source: Sikoki, B., F. Witoelar, J. Strauss, E. Meijer, and N.W. Suriastini. 2014. and SurveyMeter 2012. Note: The four-digit code of each district refers to the BPS district code.

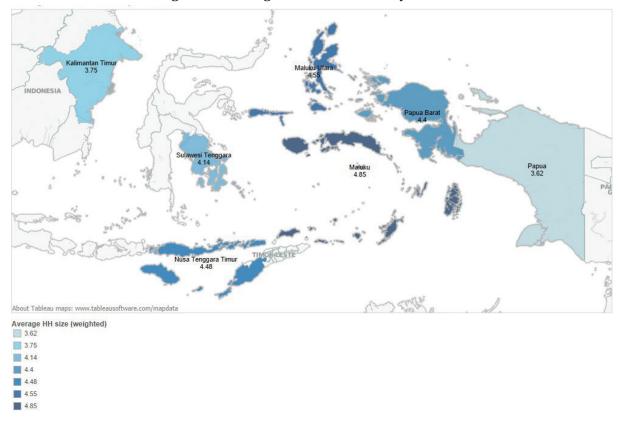


Figure A.1: Average Size of Household by Province

Source:Derived from author calculations based on IFLS East 2012.

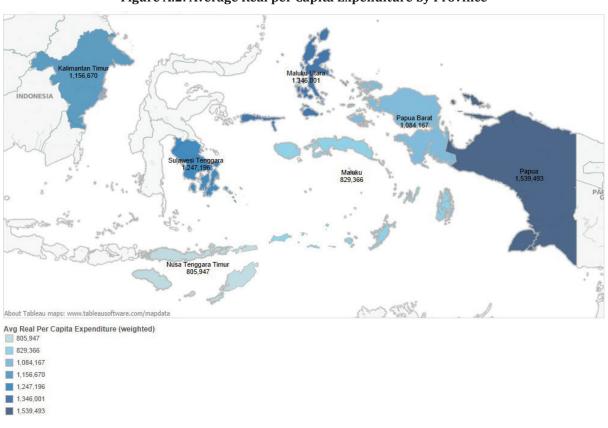


Figure A.2: Average Real per Capita Expenditure by Province

Source: Derived from author calculations based on IFLS East 2012.

Nova Tenggara Timur

About Tableau maps: www.tableausoftware.com/mapdata

Average Years of Schooling for HH Head (weighted)

6.51

6.53

7.69

7.79

8.08

Figure A.3: Average Years of Schooling of Household Head in IFLS East 2012 by Province

Source: Derived from author calculations based on IFLS East 2012.

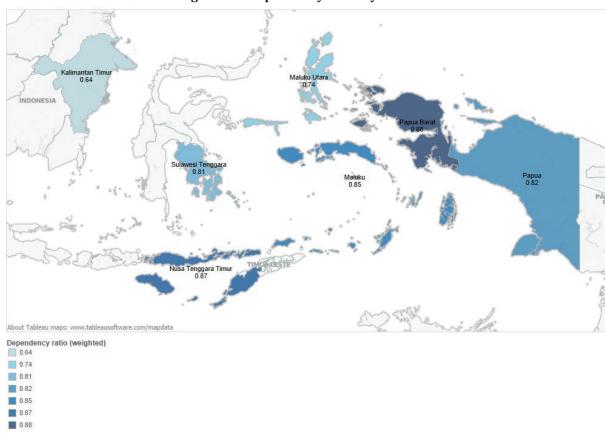


Figure A.4: Dependency Ratio by Province

Source: Derived from author calculations based on IFLS East 2012.

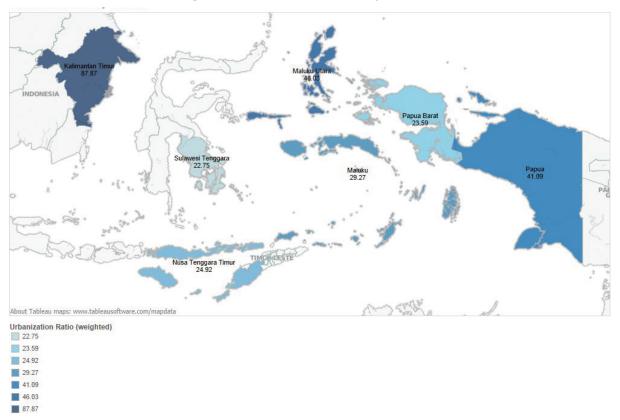


Figure A.5: Urbanization Ratio by Province

Source: Derived from author calculations based on IFLS East 2012.



The first round of the Indonesia Family Life Survey (IFLS) East was conducted in Eastern Indonesia in 2012. This paper is intended to provide researchers and policy makers alike an introduction to and brief overview of this new dataset. Topics covered include technical details of survey implementation (sampling procedure, calculation of weights, and field implementation) and a socioeconomic overview using Central Bureau of Statistics (Badan Pusat Statistik or BPS) data and IFLS East data of the provinces selected in the region.

# TIM NASIONAL PERCEPATAN PENANGGULANGAN KEMISKINAN (TNP2K)

Jl. Kebon Sirih No. 35, Jakarta Pusat 10110

Tel: +62 (0) 21 391 2812 Fax: +62 (0) 21 391 2511 E-mail: info@tnp2k.go.id Web: www.tnp2k.go.id

