

# IFLS East User's Guide and Field Report

---

*Bondan Sikoki, Firman Witoelar, John Strauss, Erik Meijer, Wayan Suriastini*

**INDONESIA FAMILY LIFE SURVEY – EAST**  
**User's Guide and Field Report**

**Bondan Sikoki\***  
**Firman Witoelar\***  
**John Strauss‡**  
**Erik Meijer‡**  
**Wayan Suriastini\***

**December 2013**

**\* SurveyMETER**

**‡ University of Southern California**

# Preface

This document describes the design and implementation and provides a preview of some key results of the Indonesia Family Life Survey East 2012.

The Indonesia Family Life Survey East 2012 is a large scale multi-topic household and community survey of living conditions that was conducted to cover the eastern provinces in Indonesia. It is based on the Indonesia Family Life Survey (IFLS), fielded by the RAND Corporation in collaboration with Survey METER. It collects data on individuals, their households, the communities in which they live as well as the health and education facilities in those communities. The survey was administered in 2012 to around 10,000 individuals in around 2,500 households living in 99 communities (enumeration areas) that are spread in seven provinces in eastern part of Indonesia: Nusa Tenggara Timur, Kalimantan Timur, Sulawesi Tenggara, Maluku, Maluku Utara, Papua Barat and Papua.

IFLS East was conducted by SurveyMETER on behalf of TNP2K, PRSF, and Australian Aid. Funding for project was provided by [funding/contract number]

The IFLS East public-use file documentation will be of interest to policymakers concerned about living conditions in nations like Indonesia, to researchers who are considering using or are already using the IFLS East data, and to those studying the design and conduct of large-scale panel household and community surveys. Updates regarding the IFLS East database subsequent to publication of this volume will appear at the IFLS East website, hosted by SurveyMETER at <http://surveymeter.org/>.

## Table of contents

<b>Preface</b> .....	ii
<b>Acknowledgment</b> .....	iv
<b>1. Introduction</b> .....	1
1.1 Contributions of the IFLS East.....	1
1.2 Organization of This Document.....	1
<b>2. IFLS East Household Survey</b> .....	2
2.1 Sample Design and Response Rates.....	2
2.1.1 Sample Design.....	2
2.1.2 Response Rates.....	3
2.2. Household and Individual Sample Weights.....	3
2.2.1 Household Weights.....	4
2.2.2 Individual Weights.....	6
2.2.3 Biomarker Weights.....	6
2.2.4 Population Size per Province.....	7
2.2.5 Results.....	8
2.3 Household Survey Instruments.....	9
2.4 Household Survey Respondent Burden.....	11
<b>3. IFLS East Community-Facility Survey</b> .....	12
3.1 Sample Design and Response Rates.....	12
3.1.1 Sampling design.....	12
3.1.2 Health Facility Sampling Frame.....	13
3.1.3 School Sampling Frame.....	13
3.1.4 Final Samples.....	13
3.1.5 Response Rates.....	14
3.2 Community-Facility Survey Instruments.....	14
3.3 Community and Facility Survey Respondent Burden.....	16
<b>4. IFLS East Data File Structure</b> .....	18
4.1. Basic File Organization.....	18
4.1.1. Household Survey.....	18
4.1.2. Community-Facility Survey.....	20
4.2. Identifiers and Level of Observation.....	23
4.2.1. Household Survey.....	23
4.2.2. Community-Facility Survey.....	24
<b>Appendix</b>	
A: Survey Operations.....	27
B: Field Staff for IFLS East Household Survey.....	31
C: Field Staff for IFLS East Community and Facility Survey.....	34
D: BPS Kecamatan Codes.....	35

## Acknowledgement

IFLS East 2012 was conducted by SurveyMETER on behalf of TNP2K, PRSF, and Australian Aid (need funding/contract number) Bondan Sikoki (SurveyMETER) was the research director, and Ni Wayan Suriastini (SurveyMETER) was the co-director.

IFLS East is heavily based on the Indonesia Family Life Survey (IFLS), fielded by RAND Corporation. Initial work for the survey design of the IFLS East was conducted by John Strauss (University of Southern California), Bondan Sikoki (SurveyMETER), Firman Witoelar (SurveyMETER), and Erik Meijer (University of Southern California) in 2009. This exploratory work was facilitated by Claudia Rokx and John Giles (World Bank) and the funding was provided by Australian Aid (Funding Agreement Deed 47464).

The preparation for the IFLS East fieldwork started in early 2012. The survey design and instruments of the IFLS East were based on the Indonesia Family Life Surveys conducted by RAND Corporation. In particular the IFLS East survey instruments are based on IFLS 4 that was conducted by RAND Corporation, SurveyMETER, and PSKK UGM in 2007. Strauss, Sikoki, Witoelar, and Elan Satriawan (TNP2K) were responsible for the questionnaire development. John Giles (The World Bank) and Pandu Harimurti (The World Bank) provided valuable contributions. Witoelar's work on the preparation and the fieldwork of IFLS East was supported by the Knowledge for Change Program at the World Bank.

The sampling design for the IFLS East was developed by Erik Meijer (USC) with inputs from Strauss. Meijer was also responsible for constructing the sample weights with inputs from Strauss, Witoelar, and the field team.

During the preparation and throughout the fieldwork, SurveyMETER coordinated closely with Fiona Howell (TNP2K), Patrick Sweeting (PRSF), and Peter Riddle-Care (PRSF). From SurveyMETER, six staff played important roles in the fieldwork. Dani Alfah coordinated the household listing. Edy Purwanto was the survey coordinator for the HH survey, and Nasirudin Rais was the survey coordinator for the CF Survey. Nur Suci Arnashanti, Amalia Rifana Widiastuti, and Danang Prasetya were responsible for writing the data entry programs and managing the field data. Danang Prasetya (SurveyMETER) was the programmer responsible for preparing the data for public use under the supervision of Witoelar.

The success of the fieldwork is largely a reflection of the diligence, persistence and commitment to quality of the interviewers, supervisors, field coordinators and the support staff at SurveyMETER's headquarters in Yogyakarta. Their names are listed in the Appendix E.

The survey is indebted to all of the respondents both in households and communities for graciously agreeing to participate. Without their being willing to share their valuable time this survey could not have been successful.

Finally, we would like to acknowledge valuable inputs and comments from Elan Satriawan, Jan Priebe, and Rizal Adi Prima of TNP2K on this report. All errors are our own.

## 1. Introduction

### 1.1 IFLS East Contributions

The Indonesia Family Life Survey East 2012 is a large scale multi-topic household and community survey of living conditions that was conducted to cover the Eastern provinces in Indonesia. The IFLS East was conducted by SurveyMETER on behalf of TNP2K, PRSF, and the Australian Aid and is modeled after the long running IFLS that was fielded in 1993, 1997, 2000, and 2007 by RAND Corporation.

When the original IFLS was first fielded in 1993, the baseline survey covered 13 provinces of Indonesia and excluded most of the eastern part of Indonesia.<sup>1</sup> This decision was primarily based on cost and security considerations. At the time, the population of the provinces represented by IFLS accounted for 83% of the population of Indonesia. Since then, publicly available data from the four rounds of IFLS have been used in research conducted by international scholars and appeared in peer-reviewed journals. The IFLS data have also been used to inform policy makers (the Government of Indonesia) and researchers at donor institutions interested in micro-level analysis of the Indonesian population.

The IFLS East was conducted out of recognition that for the eastern part of Indonesia, comparable data do not exist. For policy makers, this gap in data availability is significant especially since there is a growing need to promote more balanced development and extend development benefits to the less developed eastern province. The availability of high quality longitudinal household data for the eastern part of Indonesia would also be of high scientific value since it will provide a great deal of opportunity for researchers to gain understanding about household and individual outcomes and well-being in the eastern part of Indonesia. This is important since many experts have argued that households in the eastern provinces tend to be poorer and they are poorer in different ways from those in the western part of Indonesia (see for example, Booth 2004, Hill et al 2008).

The IFLS East 2012 covers 7 provinces in Eastern Indonesia: Nusa Tenggara Timur, Kalimantan Timur, Sulawesi Tenggara, Maluku, Maluku Utara, Papua Barat and Papua. Similar to the IFLS, the IFLS East also consists of two components: the household survey and the community survey. The Household Survey of the IFLS East builds on a well-developed set of questionnaires from past IFLS surveys. Information collected in the Household Survey include: household consumption and assets; income, work and retirement experiences; intergenerational transfers of time, goods and money; individual health outcomes, including biomarkers and survival; health care utilization; living arrangements. Innovations in the cognitive, health, and subjective well-being domains that were introduced to the most recent round of the IFLS (2007) are also included in IFLS East.

In the Community and Facility survey, information about the characteristics of the 99 villages (99 EAs) were collected. The community-level component consists of interviews with village leaders and elders concerning the history, economic infrastructure, and physical infrastructure of the community (e.g., epidemics and natural disasters, average wage rates, condition of roads, electric services, and the environment). The facility component consists of visits to probabilistically sampled health and school facilities in order to collect information on the quality, availability, and prices of health and education services.

### 1.2 Organization of this document

---

<sup>1</sup> The IFLS 1993 covered four provinces in Sumatra (Sumatra Utara, Sumatra Barat, Sumatra Selatan, and Lampung), all five of the Javanese provinces (DKI Jakarta, Jawa Barat, Jawa Tengah, DI Yogyakarta, and Jawa Timur), and four provinces covering the remaining major island groups (Bali, Nusa Tenggara Barat, Kalimantan, Selatan, and Sulawesi Selatan).

The next section, Section 2 describes the Household Survey component, starting with the sampling design, response rates, and providing summary of the survey contents as well as the burden to the respondents. This section also discusses how the household, individual, and biomarkers sampling weights were constructed. Section 3 describes the Community and Facility Survey component. Finally, section 4 describes the data organization.

Appendix A describes the Survey Operations of IFLS East including the timeline of the project. The names of IFLS East field workers are listed in Appendices B and C. Appendix D list the BPS Codes of the kecamatan are listed in Appendix B.

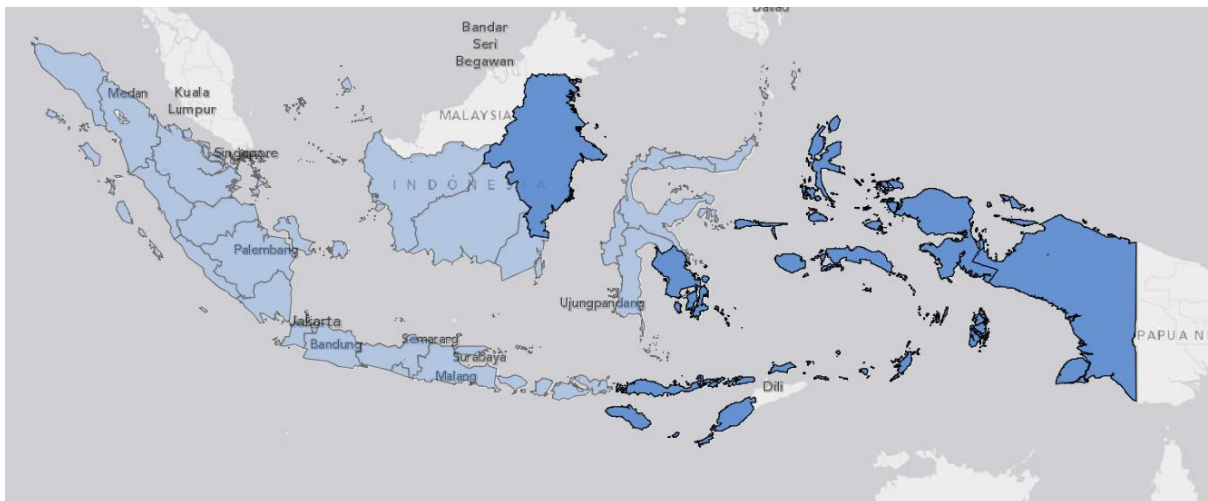
## 2. IFLS East Household Survey

### 2.1 Sampling design and Response Rates

#### 2.1.1 Sampling design

Sampling for the IFLS East was done in several stages. In the first stage, we drew one province each from Kalimantan and Sulawesi, from the provinces that are not covered by the original IFLS. Also, we excluded Sulawesi Tengah (Central Sulawesi) from consideration because of safety issues. This left three provinces each from Kalimantan and Sulawesi and each of these three was given equal probability. The province that was thus drawn from Kalimantan was Kalimantan Timur (East Kalimantan) and the province drawn from Sulawesi was Sulawesi Tenggara (Southeast Sulawesi). The provinces Nusa Tenggara Timur (East Nusa Tenggara), Maluku, Maluku Utara (North Maluku), Papua Barat (West Papua), and Papua were selected without sampling. The map below shows the provinces covered by the survey.

**Figure 1. IFLS East Provinces**



In the second stage, 14 villages were drawn from each province. We drew these villages from the SUSENAS 2010 data set.<sup>2</sup> Originally, we intended to sample census blocks from SUSENAS, which are smaller and more homogeneous in size, but we were unable to obtain the boundaries of the census blocks, and therefore we used the next higher level, which is the village or urban village level (desa/kelurahan), which we will simply call village. We listed all villages in the selected provinces in

<sup>2</sup> BPS conducted two SUSENAS rounds in 2010. The sampling frame for the IFLS East is from the July 2010 round.

SUSENAS 2010 and drew 14 from each province without replacement and with equal probability. Unfortunately, we had to drop some of the selected villages in Papua because of safety issues and one because of its remoteness and inaccessibility. In these cases, we drew replacement villages. In Papua, there was one village that was drawn into the sample, but in which the village leaders refused to participate in the community-facility survey. We included this village in the household survey, but we also added a replacement village (in both the household and community-facility surveys) to compensate and thus the total number of villages selected in Papua is 15.

In the third stage, an enumerator visited the selected village. The goal here was to identify an administrative unit level that would be roughly comparable to the census block level in size. We used a target of 100-150 households. Villages are typically subdivided in multiple levels of smaller administrative units. A typical subdivision of a village would include a number of *dusun* (hamlet), below which there are *Rukun Warga* (RW; communities), which itself are subdivided into *Rukun Tetangga* (RT; neighborhoods). The enumerator asked the head of the village for estimates of the average number of households per unit at each level. The highest level where the average number of households was less than 150 was selected. Once the level was selected, an inventory was made of the units at this level. These were called SLS (*Satuan Lingkungan Setempat*; Smallest Local Area Unit). The enumerator obtained estimates of the number of households in each SLS. The next step was to combine SLSs that were too small (less than 100 households) with one or more geographically adjacent SLSs to arrive at a unit that had at least 100 households. The result after this step was a number of *SLS groups* in each village. Often, an SLS group would consist of only one SLS, but in many other cases, an SLS group would consist of 2-4 SLSs. The final step at this stage was to select one SLS group from each village. This was one using a pre-generated table with for each potential number of SLS groups a random integer between 1 and this number. For example, with 2 SLS groups, the random integer was 1, so the first SLS group was selected, and with 5 SLS groups, the random integer was 3, so the third SLS group was selected.

In the fourth stage, the enumerator visited the selected SLS group in the village, and compiled a household listing by visiting all households. Subsequently, we drew a simple random sample without replacement of 30 households in rural villages, or 20 households in urban villages, from this listing. In case of refusals or failure to contact, we drew replacement households until the target was reached.

In contrast with the original IFLS, all household members of the selected households are included in the sample. If a household member was unable to respond, because of health, cognitive, or other reasons, a *proxy interview* was conducted with an informant, typically another household member. Children under the age of 11 were not interviewed themselves, but their parents were interviewed about them. All household members were also eligible for the biomarker data collection.

We kept sampling households until a specified number households was interviewed in each village, unless the number of households in the village was so small that there were no households left. We follow AAPOR (2011, pp. 11-12) and include all interviewed households in the numerator and all selected households, whether initially selected or selected as substitutes, in the denominator. Thus, abstracting from the mentioned (rare) case of small villages, the household response rate has a nonrandom numerator and a random denominator, which is the opposite of a typical textbook case.

### 2.1.2 Response rates

The total number of households thus selected was 3,159 and the total number of households that provided at least a partial interview was 2,547. Hence, the household response rate was 80.6%. These 2,547 households jointly had 10,887 household members, of which 10,759 (98.8%) provided at least a partial interview and 9,929 (91.2%) were measured in the biomarker module. Partial interviews are rare, so whether or not we include them has no noticeable impact. We included them.



Table 2.1 breaks down the response rates by province. Four reasons of household nonresponse were recorded: (1) respondent not at home or not found; (2) respondent was seriously ill; (3) respondent refused; and (4) other reasons. Of the 612 nonresponding households, 201 (32.8%) were noncontacts, 13 (2.3%) due to illness, 219 (35.8%) refusals, and 178 (29.1%) other. Household response rates were lower in urban areas, but there was some variation across provinces. Table 2.2 shows the distribution of nonresponse reasons by province and urbanicity.

**Table 2.1. Response rates by province**

Province	Household response rate	Conditional on household participating	
		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

**Table 2.2 Nonresponse reasons by province and urbanicity**

Province	Rural			Urban		
	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

## 2.2 Household and Individual Sample Weights

As usual with survey data, we have to supply a set of sampling weights that allows researchers to estimate population characteristics of interest. The sampling weight of a household or individual is inversely proportional to the probability of being included in the sample. Here, we discuss how we compute this. Because our sampling was stratified by province, all computations are done separately by province. To simplify notation, we do not explicitly indicate this dependence on province in the expressions below.

### 2.2.1 Household weights

The household weight of household  $h$  can be written as  $w_h = C/p_h$ , where  $C$  is a constant and  $p_h$  is the probability that the household was included in the sample. The latter is equal to  $p_h = p_1 p_2 p_3 p_4$ , where

- $p_1$  is the probability that the village was included in the SUSENAS 2010 sample. This is discussed below.
- $p_2$  is the probability that the village was included in the IFLS East sample given that it was included in the SUSENAS 2010 sample. According to our sampling design, this is 14 divided

by the number of villages in the province in the SUSENAS 2010 sample. Note, however, that in Papua, we ended up with 15 villages, so we use 15 in the numerator. Strictly speaking, all villages in Papua that were deemed insecure and were (or would be) therefore excluded should be removed from the denominator and the sample would need to be interpreted as representative of all safe areas in Papua. However, for most purposes, this is an awkward population and therefore we do include these in the denominator, and implicitly assume that villages in the safe areas are representative of villages in the unsafe areas as well. The unsafe areas are mostly in the western part of Papua province or in the central mountain range, or both. We do have some villages in the western part in the sample, as well as some villages in the mountains, so we assume that for most purposes, our sample can be viewed as representative of the whole province. However, for questions that are closely related to safety, this will not be the case.

- $p_3$  is the probability that the SLS group was 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.
- $p_4$  is the probability that the household was included in the IFLS East sample given that the SLS group was included. In our sampling design, each household in the SLS group is equally likely to be targeted for interviewing. We assume that all households in the SLS group are also equally likely to respond when targeted. Hence, each household within the SLS group has the same probability of being interviewed. Therefore,  $p_4$  is 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 latter was obtained from the household listing.

To compute the first factor,  $p_1$ , the probability that the village was included in the SUSENAS 2010 sample, we proceed as follows. We assume that the SUSENAS household weights were computed using similar (well-established) principles, that is, that the SUSENAS household weight variable "wert" is proportional to the inverse probability of being included in the sample. The SUSENAS household weight can thus be written as  $w_h^S = A/(p_{h|k}^S p_k^S)$ , where  $A$  is a constant,  $p_{h|k}^S$  is the probability that a household was in the SUSENAS sample given that the census block was in the sample, and  $p_k^S$  is the probability that the census block was in the SUSENAS sample. We found that the weights are constant within SUSENAS's census blocks ("kode sampel"), so  $p_{h|k}^S$  is simply the number of households in the census block in the sample divided by the number of households in the census block in the population,  $p_{h|k}^S = n_k^S/N_k$ . We assume that all census blocks have the same number of households, that is,  $N_k = M$ , say. This is approximately the case with  $M = 100$  (Badan Pusat Statistik, 2012). It follows that the probability  $p_k^S$  that census block  $k$  is in the SUSENAS sample is equal to  $p_k^S = AM/(n_k^S w_h^S)$ , with  $w_h^S$  constant within the census block. The number  $n_k^S$  in the sample is almost always 16. Further study shows that the weights  $w_h^S$  only vary between provinces and between urban and rural areas. Because the whole village has the same urbanicity, we interpret this to mean that all census blocks in the village have the same probability  $p_k^S$  of being in the sample, and numbers of households less than 16 are due to nonresponse for which the weights have not been adjusted. Therefore, we use  $n_k^S = 16$  in all our computations. Although in the whole SUSENAS, there are some villages with more than one census block, this does not occur in the provinces selected for the IFLS East. Consequently, the probability that village  $v$  is in the SUSENAS sample can be accurately approximated by  $p_1 \approx K_v AM/(16w_v^S)$ , where  $K_v$  is the number of census blocks in the village, which is equal to  $N_v/M$ , where  $N_v$  is the number of households in the village, and we have written  $w_v^S$  instead of  $w_h^S$  to stress that this weight is the same for all households within the village. An estimate of  $N_v$  is obtained from the sum (over all SLS's in the village) of the estimates of the number of households per SLS as provided by our informant. Note that  $M$  drops out of the formula. The factor  $A$  does not vary within province and only affects the overall scaling of the weights within province and can be subsumed in the constant  $C$ .

Summarizing, the household weights are computed as

$$w_h = C \left( \frac{16w_v^S}{N_v} \right) \left( \frac{L^S}{L} \right) (H_v) \left( \frac{N_g}{n_g} \right), \quad (1)$$

where  $L$  is the number of villages in the province in the IFLS East sample (14 or 15),  $L^S$  is the number of villages in the province in the SUSENAS 2010 sample,  $H_v$  is the number of SLS groups in the village,  $n_g$  is the number of households in the selected SLS group in the sample, and  $N_g$  is the number of households in the selected SLS group in the population (household listing). We choose the constant  $C$  such that the sum of the individual weights to be discussed below equals the population size in the province.

In cases where  $H_v$  or  $N_g$  are missing, we proceed as if all SLS groups in the village have the same number of households, so  $N_g$  is a constant within the village, and thus  $N_v = H_v N_g$ . With this assumption, all three drop out of the equation (1). There was a village with the number of households of only one SLS out of 17 missing. For this village, we computed population size  $N_v$  by imputing the mean number of households of the other 16 SLS's for this SLS. This is a weaker assumption than assuming that all SLS's have the same size.

### 2.2.2 Individual weights

The individual weights are constructed in the same way as the household weights. The principle again is that  $w_i = C/p_i$ , where  $w_i$  is the individual weight and  $p_i$  is the probability that the individual is in the sample. The latter is equal to  $p_i = p_h p_{i|h}$ , with  $p_h$  the probability that the household is in the sample as discussed above and  $p_{i|h}$  the probability that the individual is in the sample given that the household is in the sample. Conditional on household participation, the participation rate of individual household members is very high, 98.82%. There are some slight differences in conditional individual response rates by observable characteristics (e.g., for separated or divorced individuals, it is slightly over 95%), but these are minor. Therefore, we proceed by assuming that  $p_{i|h}$  is a constant equal to 0.9882 and thus compute individual weights as  $w_i = C/(0.9882 p_h) = w_h/0.9882$ . To determine the value of  $C$ , we compute the sum of these individual weights across all responding individuals in a province and choose  $C$  such that this sum of the weights equals the population size in the province in 2012.

### 2.2.3 Biomarker weights

The individual weights are intended for usage of any analysis at the individual level. However, the fraction of individuals for which we have biomarker data conditional on their household participating is a bit lower, 91.20%. There is also more variation across individual characteristics. For example, it is 81% for separated individuals versus 92% for married individuals, and 80% for individuals age 70 and over versus 95% for individuals age 5-14. Therefore, we have constructed separate weights for usage in analyses with the biomarker data. To this end, we have estimated a logit model for participation in the biomarker module, with covariates province interacted with urbanicity, sex interacted with age group (0-4, 5-14, 15-29, 30-49, 50-69, and 70+), and marital status (never married, married, separated, divorced, widowed). We also experimented with other specifications, such as including lower geographic levels or including education dummies, but these were less satisfactory for practical or statistical reasons. Table 2.3 presents the estimation results of the preferred model. We use the predicted probability of this model as the value  $p_{i|h}^B$  in constructing the biomarker weights, which are computed as  $w_i^B = w_h/p_{i|h}^B$ .

**Table 2.3.** Estimation results from a logit model for biomarker response conditional on household participation

Covariate	Coefficient	s.e.	t-value	p-value
Province				
Nusa Tenggara Timur	0.000	(reference)		
Kalimantan Timur	-0.882	0.292	-3.0	0.0020
Sulawesi Tenggara	-0.233	0.183	-1.3	0.2010
Maluku	-0.656	0.169	-3.9	0.0000
Maluku Utara	-1.265	0.162	-7.8	0.0000
Papua Barat	-1.207	0.167	-7.2	0.0000
Papua	-1.388	0.167	-8.3	0.0000
Urban	0.285	0.303	0.9	0.3470
Urban by province				
Nusa Tenggara Timur	0.000	(reference)		
Kalimantan Timur	-0.240	0.415	-0.6	0.5640
Sulawesi Tenggara	-0.422	0.423	-1.0	0.3180
Maluku	0.285	0.391	0.7	0.4660
Maluku Utara	-0.308	0.342	-0.9	0.3690
Papua Barat	0.306	0.381	0.8	0.4220
Papua	0.351	0.368	1.0	0.3410
Female	-0.154	0.203	-0.8	0.4500
Age				
0-4	0.000	(reference)		
5-14	0.004	0.180	0.0	0.9830
15-29	-1.420	0.168	-8.4	0.0000
30-49	-1.115	0.207	-5.4	0.0000
50-69	-0.856	0.247	-3.5	0.0010
70+	-1.806	0.319	-5.7	0.0000
Female by age				
0-4	0.000	(reference)		
5-14	0.634	0.266	2.4	0.0170
15-29	0.722	0.242	3.0	0.0030
30-49	0.311	0.247	1.3	0.2080
50-69	-0.220	0.297	-0.7	0.4590
70+	-0.369	0.392	-0.9	0.3470
Marital status				
Never married	0.000	(reference)		
Married	0.889	0.126	7.1	0.0000
Separated	-0.075	0.437	-0.2	0.8640
Divorced	0.268	0.307	0.9	0.3820
Widowed	0.592	0.217	2.7	0.0060
Constant	3.462	0.195	17.8	0.0000

#### 2.2.4 Population size per province

As mentioned above, we scale the weights per province such that the sum of the individual weights equals the predicted population size in the province in 2012. Unfortunately, we have not been able to find external estimates of the population sizes in 2012. Therefore, we have constructed these from data from the Indonesian statistical bureau in Badan Pusat Statistik (2010). Page 8 of this publication has the population size,  $N_{p,2010}$ , say, per province in the 2010 census and page 11 gives the annual growth rate,  $\delta_p$ , say, in percent in the province in the 2000-2010 period. Our prediction of the population in the province in 2012, based on these numbers, is  $\hat{N}_{p,2012} = N_{p,2010}(1 + \delta_p/100)^2$ . Table 2.4 presents the numbers.

**Table 2.4** Predicted population per province in 2012.

	annual growth rate	predicted
--	--------------------	-----------

Province	population 2010	2000-2010 (%)	population 2012
Nusa Tenggara Timur	4,679,316	2.06	4,874,090
Kalimantan Timur	3,550,586	3.80	3,825,558
Sulawesi Tenggara	2,230,569	2.07	2,323,870
Maluku	1,531,402	2.78	1,617,731
Maluku Utara	1,035,478	2.44	1,086,626
Papua Barat	760,855	3.72	818,516
Papua	2,851,999	5.46	3,171,940

Note that the IFLS East provinces grew faster than the country as a whole in the 2000-2010 period: the annual growth rate of Indonesia as a whole was 1.49%. All the selected provinces had higher population growth than the national average, and often considerably higher.

### 2.2.5 Results

Tables 2.5 show the distributions of the weight variables in each province and overall. The weight variation within each province is moderate. From (1) we can deduce that this variation is partly due to design choices (e.g., number of households sampled different for urban and rural communities), partly due to heterogeneity in population size by administrative unit that cannot be exactly controlled (although our grouping of SLS's reduces this variation), and in the case of the biomarker weights also partly due to selective nonresponse (e.g., refusal to have one's measurements taken). Thus, weighting is necessary to correct for differential probabilities of inclusion in the sample, but the weight variation within province is smaller than with many other surveys. There is also weight variation between provinces, and this increases overall weight variation. However, this is due to stratification by province, and to the extent that there is substantial between-province variation in variables of interest, this stratification and the resulting design-induced differences in mean weights between provinces should decrease rather than increase the variance of estimators. Overall, we believe the weights are satisfactory.

**Table 2.5** Descriptive statistics of the distribution of the household weight (hwt12)

Province	N	mean	std.dev	min	max
Nusa Tenggara Timur	380	2,853	736	1,862	4,328
Kalimantan Timur	296	3,518	1,225	1,770	6,264
Sulawesi Tenggara	390	1,428	402	716	2,286
Maluku	380	871	327	381	1,582
Maluku Utara	370	646	427	375	2,264
Papua Barat	341	546	186	330	912
Papua	390	2,280	759	1,161	4,046
Total	2,547	1,699	1,226	330	6,264

**Table 2.6** Descriptive statistics of the distribution of the person weight (pwt12)

Province	N	mean	std.dev	min	max
Nusa Tenggara Timur	1,677	2,906	747	1,884	4,380
Kalimantan Timur	1,085	3,526	1,172	1,791	6,339
Sulawesi Tenggara	1,589	1,462	403	725	2,313
Maluku	1,884	859	341	386	1,601
Maluku Utara	1,725	630	412	379	2,291
Papua Barat	1,449	565	194	334	923
Papua	1,350	2,350	763	1,175	4,094
Total	10,759	1,647	1,216	334	6,339

**Table 2.7** Descriptive statistics of the distribution of the person weight for the biomarker module (pwt12us)

Province	N	mean	std.dev	min	max
Nusa Tenggara Timur	1,619	3,000	772	1,898	4,890
Kalimantan Timur	1,010	3,812	1,268	1,852	8,142
Sulawesi Tenggara	1,506	1,527	437	734	2,837
Maluku	1,754	916	365	395	1,890
Maluku Utara	1,518	719	498	401	3,329
Papua Barat	1,307	628	221	342	1,303
Papua	1,215	2,633	855	1,251	5,161
Total	9,929	1,785	1,299	342	8,142

## 2.3 IFLS East Household Survey Instruments

### *Book K: Control Book and Household Roster*

For every household in the sample, there is a control book with all questions completed by a knowledgeable household member over 18 years. The control book records the location of the household and contains the household roster which lists the household member and their basic socio-economic characteristics such as age, sex, relationship to other household members, education, and employment status. Data from the control books are also used during field work to track progress while in the field and to calculate response rates and interviewer productivity during analysis.

### *Book 1: Household Consumption*

This book is usually answered by the adult female in the household – typically the spouse of the household head, or the person who is considered to be the most knowledgeable about household consumption. The consumption module collects information on the value of foods purchased in the last week and consumed in the last week from self-production, purchases of household and personal care items during the last month, and purchases of durable goods in the last year. Quantities and purchase prices for a number of frequently purchased staples are also collected, from which unit prices may be derived.

In addition, Book 1 also contains the consumption assistance module. The purpose of this section is to identify sources and quantities of assistance to households in the forms of cash and in-kind (food staples) transfers. The module focuses on three sources of assistance: friends and family, subsidized purchases from government sources, and transfers from the government or NGOs. In addition the book also incorporate questions about public social safety net programs that the household participates in.

### *Book 2: Household Characteristics and Economy*

This section of the questionnaire is typically answered by the person considered to be the most knowledgeable about household economy. This module collects information about housing characteristics, household non-labor income, non-farm businesses, farm businesses, and assets. In IFLS East, questions about fishery were added as part of the farm business module.

Since in subsequent sections of the questionnaire individual income and employment information is collected, the household economy questions focuses on the characteristics of household-owned agricultural (including fishery) and non-agricultural businesses. Thus, combined with individual-level data on labor and non-labor income collected in Book3, the information collected in this book will provide a complete picture of current household income that has been built up from market wage income, family businesses (both farm and non-farm), and unearned income.

Book 2 also collects retrospective information on local natural disasters and other economic shocks experience by the households and some questions about household borrowing and loans.

### ***Book 3A and Book 3B: Adult Book***

Book 3A asks all household members 15 years and older about their educational, marital, work, retirement, pension, and long-run (6 months or more) migration histories. In addition, the book includes questions on asset ownership and non-labor income, household decision-making, cumulative fertility (for women 50 and older), subjective views of their well-being and living standards, and retrospective information on local natural disasters and other economic shocks. Questions on attitudes about risk and time-preferences, the degree of trust of their neighbors, individual religiosity and attitudes of religious tolerance are also asked in this book.

Book 3B emphasizes current rather than retrospective information and is heavily devoted to health. Separate modules address smoking habits, insurance coverage, detailed health conditions, food intake frequencies, use of inpatient and outpatient care, and participation in community development activities. The book includes questions about doctor diagnoses of the respondent's chronic health conditions, pains, and the 10 question version of the CES-D, a cognition section, which included repeated word recall. Two other sections (BA and TF) ask in detail about the existence and characteristics of non- co-resident family members (parents, siblings, and children) and about whether and the amount of money, goods, or services that were transferred between these family members during the year before the interview.

### ***Book Proxy: Adult Information by Proxy***

The proxy book was designed to facilitate collecting data by proxy about individual adults who could not be interviewed directly because the respondents were unable because of illnesses, were away, or in small cases, refused. The proxy book contains shortened versions of most of the sections included in books 3A, 3B, and 4. Proxy book was used only as a last resort; so long as our enumerators were still in the EA they were instructed to attempt to do direct interview with the respondents.

### ***Book 4: Ever-Married Woman Information***

This book was administered to all ever-married women age 15–49. Book 4 collects retrospective life histories on marriage, children ever born, pregnancy outcomes and health-related behavior during pregnancy and childbirth, infant feeding practice, and contraceptive use. The marriage and pregnancy summary modules replicated those included in books 3A and B so that women who answered book 4 skipped these modules in books 3A and B. Similarly, women who answered questions about non- resident family in book 4 skipped that module in book 3B. A separate module asked married women about their use of contraceptive methods.

### ***Book 5: Child Information***

This book collected information about children younger than 15. For children younger than 11, the child’s mother, guardian, or caretaker answered the questions. Children between the ages of 11 and 14 were allowed to respond for themselves if they felt comfortable doing so. The six modules focused on the child’s educational history, morbidities, self-treatment, inpatient and outpatient visits and non-resident parents. Each paralleled a module in the adult questionnaire (books 3A and B), with some age-appropriate modifications.

**Book US (Health Measurement)**

This book record measures of physical health for each household member, including: height and weight (all members), sitting height (members 40 years and older), waist circumference (members 40 years and older), blood pressure and pulse (members 15 and older), lung capacity (members 9 and older) and hemoglobin (members 1 year and older). In addition, respondents 15 and older are timed while they rise from a sitting to a standing position five times (nurses bring standardized plastic stools for the respondents to sit on) and are also asked to squeeze in each hand a special dynamometer that measures grip strength. There is also an assessment of each respondent’s health status on a nine-point scale.

**Books EK: Cognitive Assessments**

Respondents aged 7-24 were administered cognitive tests to assess their general cognitive level, as well as skills in mathematics. Two levels of tests were given, an easier version to all respondents (including those who never attended or were not currently enrolled in school) aged 7-14 and a more difficult version to all older respondents.

**2.4 IFLS East Household Survey Respondent Burden**

The IFLS East household survey instruments are complicated and take a lot of time to complete. Table 2.8 shows the median time it took to complete each book. At 54 minutes, Book 1 interview was the longest.<sup>3</sup> This book include the expenditure module which collects detailed information about household expenditure and facility knowledge module in which the respondent was asked to list the names and addresses of the health facilities that are within reach of the community. Among the individual books, both Book 3A and Book 3B took around 50 minutes each. In most of the cases the books were completed in one visit. One important exception is Book US – the health measurement book- where around 37 percent of the books were completed only after several visits. The US Book is a household-level book and the interviewers took the health measurements on the eligible respondents who were available at the time and revisited the household to take measurement of others.

**Table 2.8 IFLS East Household Survey Completion Times, by Questionnaire Book**

<b>Book</b>	<b>Median completion time (minute)</b>	<b>% Books Completed in One Visit</b>	<b># Books Completed</b>
-------------	--	---------------------------------------	--------------------------

<sup>3</sup> In general, interviews in IFLS East took longer than in IFLS4. For example, in IFLS4, the median time to answer Book 3A was 42, 10 minutes shorter than in IFLS East. One reason is that in IFLS 4, some of the information about the respondents that are not varying with time and had already been asked to the panel respondents in earlier round of IFLS were not collected again.



K	Control Book	27	99.7	2,547
1	Household expenditures, health facility knowledge	54	99.5	2,547
2	Household economy	45	99.3	2,547
3A	Adult information	52	96.6	6,029
3B	Adult information	48	97.0	6,029
4	Ever-married woman information	36	97.6	2,015
5	Child information	24	99.6	4,219
3P	Proxy Book for Adults	46	98.4	639
US	Health assessment-US	45	63.5	2,547
EK	Cognitive assessment 7-14 year old	13	100.00	2,222
EK	Cognitive assessment 15-24 year old	11	100.00	1,504

Some respondents answered more than one book because they provided information not only about themselves but also about their household and potentially about their children, spouse, or parents. Table 2.9 shows median completion times for respondents of different types. Ever-married women age 15–49 generally spent more time being interviewed than others since not only they will have to answer questions about marital history and are more likely to have to answer questions about birth history, they typically also have to answer Book 1 if they are the ones who are most knowledgeable about the household’s expenditures. Women with young children also typically have to answer Book 5 for each of their child if they are under the age of 11. For this type of respondents the median time was around 230 minutes. In contrast, never-married women age 15-49 spent only 99 minutes. The median time for women 50 and older, regardless of marital status, was 165 minutes, while for married men it was 178 minutes. For children aged 11-14, the only children who might have answered questions, the median response time was only 21 minutes.

**Table 2.9 IFLS East Household Survey Completion Times, by Respondent Type and Questionnaire Part**

	Median completion time (minute)
Respondent type	
Married women, age 15-49	230
Never married women, age 15-49	99
Women, age 50+	165
Married men	178
Unmarried men	86
Children, age 11-14	21

### 3. IFLS East Community and Facility Survey

#### 3.1 Sampling design and Response Rates

##### 3.1.1 Sampling design

The community-facility sampling design in IFLS East is a function of the household sampling design: for each community sampled in the household survey, the village leader, the head of the village women’s group, the *adat* leader, and a couple of community informants were interviewed. In addition a sample of health care providers and schools was obtained from the facilities that were

indicated in the household survey, with some alternative sources of sampling in case the household survey did not result in enough facilities.

There are six strata of facilities that are surveyed:

- Government health centers and subcenters (*puskesmas, puskesmas pembantu*)
- Private clinics and practitioners including doctors, midwives, nurses, and paramedics
- Community health posts (*posyandu*)
- Community health posts for the elderly (*posyandu lansia*)
- Traditional health practitioners
- Elementary schools (SD)
- Junior high schools (SMP)
- Senior high schools (SMU) / Senior vocational high schools (SMK)

IFLS East used the same protocol for selecting facilities as in IFLS. We wanted the specific schools and health providers for detailed interviews to reflect facilities available to the communities from which household respondents were drawn. Rather than selecting facilities based solely on information from the village leader or on proximity to the community center, we sampled schools and health care providers from information provided by household respondents.

### 3.1.2 Health Facility Sampling Frame

For each EA, we compiled a list of facilities in each health facility stratum from household responses about the names and locations of facilities the respondent knew about. Specifically, we drew on responses from book 1, module PP of the household survey, which asked (typically) the female household head if she knew of health facilities of various types, such as government health centers. The names and locations provided were added to the sampling frame.

Household respondents did not need to have actually used a health facility for it to be relevant to the facility sample. Though someone in the household may well have used a facility that was mentioned, any facility known to the respondent was relevant. Requiring actual use of a facility was rejected because it was judged that that approach would yield a more limited picture of community health care options (since use of health care is sporadic) and possibly be biased because the sample would then be choice-based.

### 3.1.3 School Sampling Frame

Names of candidate schools were obtained from household responses to book K, module AR, in which (typically) the household head verified the name and location of all schools currently attended by household members under age 25. Therefore, unlike the health facility sampling frame, each school in the candidate list had at least one member of an IFLS East household attending.

### 3.1.4 Final Samples

Not all identified health facilities and schools were eligible for interview. A facility was excluded if it had already been interviewed in another EA, if it was more than 45 minutes away by motorcycle. The facilities that were located in another area were eligible for interview so long it was in our reachable area (about 45 minutes away by motorcycle). We set a quota of facilities to be interviewed in each stratum in each EA.

<i>Stratum</i>	<i>Quota per EA</i>
Government health centers and subcenters	1

Private clinics and practitioners	2
Community health posts	1
Community health posts for the elderly	1
Traditional practitioners	1
Community informants	1
Adat book	1
Elementary schools	2
Junior high schools	1
Senior high schools	1

Two forms were used in developing the facility sample for each stratum. Sample Listing Form I (SDI) provided space to tally household responses and ascertain which facilities met the criteria for interview and were not duplicates of each other. Those facilities constituted the sampling frame and were listed on the second form, Sample Listing Form II (SDII), in order of frequency of mention. The final sample consisted of the facility most frequently mentioned plus enough others, randomly selected, to fill the quota for the stratum.<sup>4</sup>

### 3.1.5 Response Rates

Table 3.1 shows the number of community-facility respondents and facilities covered in IFLS East.

**Table 3.1 IFLS East Community and Facility Survey Response Rates**

	Number of Books	Average per EA
Community characteristics (Book 1)	98	1.0
Community records (Book 2)	98	1.0
Women's group head (Book PKK)	98	1.0
Adat expert	105	1.1
Community informant	99	1.0
Government health center/subcenter (Book Puskesmas A + B)	98	1.0
Private Practice	185	1.9
Private Doctor	25	0.3
Clinic	12	0.1
Midwife	49	0.5
Paramedic/nurse	68	0.7
Village midwife	25	0.3
Traditional Practice	98	
Community health post (Posyandu)	98	
Community health post for the elderly (Posyandu Lansia)	39	
School	371	
Elementary school	183	1.9
Junior high school	97	1.0
Senior high school	91	0.9
Price: market	105	
Price: stall/store	98	1.0

<sup>4</sup> In some EAs the pooled household responses did not generate enough facilities to fill the quota. Then, information from the village/township leader or women's group head was used to supplement the sample frame.

### 3.2 Community and Facility Survey Instruments

#### *Book 1: Community History and Characteristics*

This book collects a wide range of information about the community. It is addressed to the head of the community in a group interview. Ideally the group includes the village or township leader, one or two of his staff members, and one or two members of the Village Elders Advisory Board, but the composition varies across villages, reflecting who is available and whom the village leader wants to participate. Respondents are asked about available means of transportation, communications, sanitation infrastructure, agriculture and industry, history of the community, credit opportunities, community development activities, the availability of schools and health facilities, community welfare and economic changes.

#### *Book 2: Community Statistics*

This book provides a place to record statistical data about the community. Generally the data were extracted from the community's Statistical Monograph or from a copy of its *PODES* questionnaire. Separate modules ask the interviewer to make direct observations about community conditions.

#### *Book PKK: Village Women's Organization*

This book is administered to the head of the village women's group, the PKK. Respondents are asked about the availability of health services and schools in the community; including outreach activities, changes in the community over time, and different dimensions of community welfare.

#### *Book Informant: Community Informant*

This book collects information from two informants on poverty alleviation programs in the community, perceptions on community infrastructure, local governance and decentralization and community social interactions. Special attention is paid to assessment of the quality of services available to the community and to the quality of local government.

#### *Book SAR: Service Availability Roster*

The Service Availability Roster (SAR) was intended to gather in one place information on all the schools and health facilities available to residents of IFLS East communities. It included

- Facilities identified by respondents in IFLS East household modules PP and AR
- Any other facilities mentioned by the head of the village/township or the women's group head in Modules I and J in IFLS East Community-Facility Survey books 1 or PKK.

For each facility mentioned, we collect data on the date it opened, if it was still open at the time of the survey and if not, the date of closing. By collecting this information we have a retrospective history on service availability to the community. The head of the village/township or the women's group head was asked to estimate the distance, travel time, and travel cost to the facility.

#### *Book Informant: Community Informant*

This book collected information from two informants on poverty alleviation programs in the community, perceptions on community infrastructure, local governance and decentralization and community social interactions. Special attention was paid to assessment of the quality of services available to the community and to the quality of local government.

### *Health Facility Questionnaires*

Separate books are designed for each health facility stratum: Book Puskesmas for government health centers and sub-centers; Book Private Practice for private doctors, clinics, midwives, nurses and paramedics; Book Posyandu for community health posts; Book Posyandu Lansia for community health posts for the elderly; and Book Traditional Practice.

The contents of books Puskesmas and Private Practice are designed to indicate the facility's functional capacity: adequacy of the laboratory, pharmacy, equipment, staff, the physical environment; and the adequacy of specific services for outpatient care, care for pregnant women, well-baby care, and family planning. A module in both books is concerned with the availability and prices of services for "poor" patients, covered by new health social safety net programs. Also, health vignettes were asked. These set out 4 kinds of health cases, about which the health practitioners were asked a series of questions. The health cases included prenatal care, child care for a child with diarrhea, adult care for someone with upper respiratory problems, and adult health care for someone wanting their blood sugar checked. The answers can be scored against so-called "correct" answers to get at the quality of health practitioners.

The contents of book Posyandu Lansia reflect the different roles this health service plays in providing health services to the elderly. The posyandu are village-level health posts, run by the villages, with their own resources, but sometimes with the technical assistance of representatives from the public health clinics. We ask about the characteristics of the volunteer staff (including general education and health training) and their frequency of contact with outreach workers from the government health center (puskesmas). In addition to questions about services offered at the posts, there are general questions about health problems in the village.

### *School Questionnaire*

The questionnaires for schools, combines the three levels of schools, elementary, junior high school, and senior high school. In most of the modules, the principal or designee answered questions about the staff, school characteristics, and student population. Questions were asked about scholarship programs; social safety net assistance for schools, like the DBO (Operational Funds Assistance) and Operational and Maintenance Funds; and decision-making at the schools, specifically the level at which decisions are made for specific tasks (school, district school ministry or central government education ministry). Another module, investigating teacher characteristics, was focused on home room teachers and asked about their background, classes and certification, whether they had it or had applied for it. Direct observations by interviewers were collected regarding the quality of the classroom infrastructure. The final modules recorded student expenditures, math and language scores on the UAN tests (the replacement for EBANAS) for a random sample of 25 students for each test, and counts of teachers and students for the school year 2011/2012.

### **3.3 Community and Facility Respondent Burden:**

Table 3.2 shows the median time to complete each book in the Community and Facility Survey. The questionnaire that took the longest time to complete was the Puskesmas book which, in IFLS East, was divided into two parts, part A and part B, which were administered to different informant/resource person at the Puskesmas. Because of that while the median time to interview both books are more than 4 hours (295 minutes), in practice the actual time that were spent by the team of interviewers in the Puskesmas and the time spent by each of the respondent in the Puskesmas may be much less than that. Book 1 also took a long time to complete (median time 167 minutes) and so did the School questionnaires (159 minutes). The table shows that most books were completed in one visit more than 90% if the time except the Puskesmas Book and Book1.

**Table 3.2 IFLS East Community and Facility Survey Completion Times, by Questionnaire Book**

Book	Median completion time (minute)	% Books Completed in One Visit
Community characteristics (Book 1)	167	87.8
Community records (Book 2)	76	95.9
Women's group head (Book PKK)	57	94.9
Adat expert	72	100
Community informant	86	99.0
Government health center/subcenter (Book Puskesmas A + B)	295	77.6
Private practice	99	93.5
Traditional practice	50	98.0
Community health post (Posyandu)	61	95.9
Community health post for the elderly (Posyandu Lansia)	44	100
School	159	92.5
Elementary school	148	93.4
Junior high school	163	89.7
Senior high school	171	93.4
Price: market	67	100
Price: stall/store	42	100
Price: informant	47	98.9

## 4. IFLS East Data File Structure and Naming Conventions

This section describes the organization, naming conventions, and other distinctive features of IFLS East data files to facilitate their use in analysis. Additional information about the data files is provided in the survey questionnaires and codebooks. . The codebook for each questionnaire book describes the files containing the data for that book and the levels of observation represented.

### 4.1 Basic File Organization

#### 4.1.1 Household Survey

The organization of IFLS East follows closely that for the original IFLS. Household data files correspond to questionnaire books and modules. File naming conventions are straightforward. The

first two or three characters identify the associated questionnaire book, followed by characters identifying the specific module and a number denoting sequence if data from the module are spread across multiple data files. For example, all files from book K will have the prefix BK, and data from module AR that are spread across multiple files can be found in files BK\_AR0, BK\_AR1, and so forth.

**Table 4.1 Household Survey Instruments: Respondent and Description of the Modules**

<b>Book K: Control Book and Household Roster (file prefix: BK)</b>		
Household head, spouse, or knowledgeable other person	SC	Sampling and enumeration record
	AR	Household roster
	KRK	Housing characteristics (interviewer's observations)
	IK	Information about where the respondents moved
	FP	Interview book check and tracking form
	CP	<i>See Note at end of table.</i>
<b>Book 1: Expenditures and Knowledge of Health Facilities (file prefix: B1)</b>		
Wife of household head, household head, or other knowledgeable person	KS	Household expenditures
	KSR	Assistance received by household
	CR	Crime
	PP	Knowledge of outpatient care providers
	CP	<i>See Note at end of table.</i>
<b>Book 2: Household Economy (file prefix: B2)</b>		
Household head, wife of household head, or other household member	KR	Housing characteristics
	UT	Farm business
	NT	Nonfarm business
	HR	Household assets
	HI	Household nonlabor income
	GE	Household economic shocks
	ND	Natural Disasters
	BH	Loans
	CP	<i>See Note at end of table.</i>
<b>Book 3A: Adult Information (part 1) (file prefix: B3A)</b>		
Each household member age 15 and older	DL	Education history
	SW	Subjective well-being
	HR	Individual assets and nonlabor income
	HI	Nonlabor income
	KW	Marital history
	PK	Household decision-making (married respondents)
	BR	Pregnancy summary (women age 50 and older)
	MG	Migration history
	TK	Employment history
	RE	Retirement
	SI	Risk and time preferences
	TR	Trust
	CP	<i>See Note at end of table.</i>
<b>Book 3B: Adult Information (part 2) (file prefix: B3B)</b>		
Each household member age 15 and older	KM	Tobacco smoking
	KK	Health conditions
	CD	Chronic conditions
	KP	Depression scale

CO	Cognitive test
MA	Acute morbidity
AK	Health Insurance
PS	Self-treatment
RJ	Outpatient visits
FM	Food intake frequency tables
RN	Inpatient visits
PM	Community participation
BA	Non-coresident family roster and transfers
TF	Transfer to/from outside household member
EP	Expectations
BH	Borrowing history
CP	<i>See Note at end of table.</i>

**Book 4: Ever-Married Woman Information (file prefix: B4)**

Each ever-married woman age 15–49	KW	Marital history
	BR	Pregnancy summary
	BA	Non-coresident children and transfers
	BF	Breastfeeding update
	CH	Pregnancy and infant feeding history
	BX	Non-co resident adopted child roster
	CX	Contraceptive knowledge and use
	KL	Contraceptive use on a monthly basis
	CP	<i>See Note at end of table.</i>

**Book 5: Child Information (file prefix: B5)**

Each child, age 0–14 (usually answered by the mother if the child was less than 11 year)	DLA	Child education history
	MAA	Child acute morbidity
	PSA	Child self-treatment
	RJA	Child outpatient visits
	FMA	Food intake frequencies
	RNA	Child inpatient visits
	BAA	Parental information
	CP	<i>See Note at end of table.</i>

**Book Proxy (file prefix: BP)**

Someone who answered for the intended respondent to book 3A, 3B, or 4 in his/her absence.	Shortened versions of other modules:	
	Book 3A – KW, MG, DL, TK	
	Book 3B – PM, KM, KK, MA, RJ, RN, BH	
	Book 4 – BR, CH, CX, BA	

**Book US: Health Assessment (file prefix: BUS)**

Each household member	US	Measures of physical health
-----------------------	----	-----------------------------

**Book EK: Cognitive Assessment (file prefix: BEK)**

Each household member age 7–24	EK	Skills in abstract reasoning and in numeracy
--------------------------------	----	--

**Note:** Every book includes a cover page on which information is included regarding time and date of interview, interviewer code and the result of the interview. The CP module at the end of nearly every book asked the interviewer to record the conditions of the interview (who else was present, whether others provided assistance in answering questions), the respondent’s level of attention, and any other relevant information about the interview environment. The interviewer could also add information to explain or clarify the respondent’s answers

**4.1.2 Community-Facility Survey**



Community-facility data typically have one file at the community or the facility level that contains basic characteristics and spans multiple questionnaire modules within a book. Additional files at other levels of observation are included when appropriate, as explained below.

Data files are named by the questionnaire book and follow the similar convention as names of household files.

**Table 4.2 Community and Facility Survey Instruments: Respondent and Description of the Modules**

<b>Book 1: Community History and Characteristics (file prefix: B1)</b>		
Village head and community representatives (group interview)	LK	Basic Information
	LSPM	Community participation sampling sheet
	IR	Respondents' identities
	A	Distances between community institutions and available transportation
	B	Electricity
	C	Water sources and sanitation
	D	Agriculture and industry
	E	Community history and climate
	F	Natural Disasters
	G	Credit institutions
	I	History of availability of schools
	J	History of health services availability
	PMKD	Citizen participation
	SW	Subjective well-being
	PAP	Poverty alleviation programs
PPS	Perception of public services and infrastructure	
GD	Governance and decentralization	
TR	Trust	
CP	<i>See Note at end of table</i>	
<b>Book 2: Community Statistics (file prefix: B2)</b>		
Community statistical records	LK	Basic information
	OL	Interviewer's direct observation (e.g., cleanliness, prosperity, social cohesion)
	KA	Nature and the use of land
	PL	Pollution
	ST	Land certification
	PR	Housing and population
	LU	Employment
	KD	Village budget
	CP	<i>See Note at end of table</i>
<b>Book PKK: Village Women's Organization (file prefix: PKK)</b>		
Head of women's group	LK	Basic information
	KR	Respondent's characteristics
	I	Availability of schools
	J	History of health services availability
	PM	Community development activities
	KSR	Welfare Assistance
CP	<i>See Note at end of table</i>	
<b>Book SAR: Service Availability Roster (file prefix: SAR)</b>		
Filled by interviewer based on information from IFLS3 SAR,		List of health and school facilities by type serving local community

IFLS4 household modules AR, PP  
and IFLS4 community-facility  
book 1 and book PKK.

---

**Book Informant: Public Perception on Government Programs and Public Services (file prefix: INF)**

Sampled community/NGO activist.	LK	Basic information
	K	Respondent's identity
	PAP	Poverty alleviation program
	PPS	Perception on public infrastructure and services
	GD	Governance and decentralization
	CP	<i>See Note at end of table</i>

**Book Adat: Traditional law and community customs (file prefix: ADT)**

Usually village midwife, or else other person with main responsibility for JPS/BK	LK	Sampling sheet
	KD	General
	AP	Marriage
	AC	Divorce
	BK	Birth
	BW	Death and inheritance
	CK	Decision making in the household
	BL	Living arrangement of elderly
	DG	Land use
	FG	Mutual cooperation
	GO	Community organizations
	FB	Changes in tradition
	CP	<i>See Note at end of table</i>

**Book Puskesmas A: Government Health Center (part 1) (file prefix: PSA)**

Government Health Center director or designee	LK	Basic information
	A	Information from Head of facility
	SDP	Other resources available (funding)
	AKM	Health insurance for the poor
	DM	Decision making
	H	Health case vignettes
	CP	<i>See Note at end of table</i>

**Book Puskesmas B: Government Health Center (part 2) (file prefix: PSB)**

Government Health Center director or designee	LK	Basic information
	B	Development of facility
	C	Services available
	D	Staff available
	E	Equipment and supplies available
	F	Direct observation (e.g., cleanliness)
	G	Family planning services

**Book Private Practice: Doctors, Health clinics and other private health service providers (file prefix: PR)**

Private doctors, head of clinics, nurse, midwives.	LK	Basic information
	PB	Joint practices
	A	General information
	B	Practice schedule and service available
	PH	Pharmacy
	C	Equipment available
	D	Stock of medicine
	BD	Village midwives
	E	Direct observation
	F	Family planning services

---

	H	Health case vignettes
	CP	<i>See Note at end of table</i>
<b>Book Traditional Practitioner (file prefix: TRA)</b>		
Volunteer staff member of community health service post	LK	Control sheet
	A	General
	B	Practice activities
	C	Traditional midwife
	KR	Respondent information
	CP	<i>See Note at end of table</i>
<b>Book Prices: Market (file prefix: HRP)</b>		
Sampled community markets	LK	Control sheet
	H	Prices
	CP	<i>See Note at end of table</i>
<b>Book Prices:Shops/Stalls (file prefix:HRWT)</b>		
Sample of shops/stalls	LK	Control sheet
	H	Prices
	CP	<i>See Note at end of table</i>
<b>Book Prices: Informant (file prefix:HRGINF)</b>		
Volunteer staff member of community health service post	LK	Control sheet
	H	Prices
	CP	<i>See Note at end of table</i>
<b>Book Posyandu: Community Child Health Post (file prefix: POSY)</b>		
Volunteer staff member of community health service post	LK	Basic information
	KR	Respondent's characteristics
	A	Facility utilization and community health
	B	Services available
	C	Staff available
	D	Health instruments (equipment, supplies, medications)
	SDP	Other sources available (funding)
	PRP	Revitalization program
	CP	<i>See Note at end of table</i>
<b>Book Posyandu Lansia: Community Elderly Health Post (file prefix: POSLANSIA)</b>		
Volunteer staff member of community health service post	LK	Basic information
	KR	Respondent's characteristics
	A	General
	B	Services available
	C	Staff available
	D	Health instruments (equipment, supplies, medications)
	SDP	Posyandu resources available
	CP	<i>See Note at end of table</i>
<b>Book School: Elementary, Junior High and Senior High Schools (file prefix: SEK)</b>		
Principal or designee	LK	Basic information
	KR	Respondent characteristics
	A	Principal
	B	School characteristics
	SC	School committee
	C	Teacher characteristics (administered to teachers of Bahasa Indonesia and mathematics)
	D	Direct observation on classrooms
	E	Average expenditures per student during academic years of 1999/2000 and 2000/2001

F	Statistics and EBTANAS scores
G	Number of Teachers and Students
H	Observation sheet during the interview
CP	See Note at end of table

**Note:** Every book includes a cover page on which information is included regarding time and date of interview, interviewer code and the result of the interview. The CP module at the end of nearly every book asked the interviewer to record the conditions of the interview (who else was present, whether others provided assistance in answering questions), the respondent's level of attention, and any other relevant information about the interview environment. The interviewer could also add information to explain or clarify the respondent's answers

## 4.2 Identifiers and Level of Observation

### 4.2.1 Household Survey

Variable HHID12 uniquely identifies a household. When the level of observation within a file is the household, HHID12 will uniquely identifies an observation.

HHID12 is a seven digit character variable whose digits carry the following meaning:

x   x   x	x   x	x   X
EA	specific household	"00"

The last two digits of HHID12, "00", indicates that the households are IFLS East baseline households. Should there be a next round of the survey, these two digits will be used to identify the split-off households. This way while the households will be uniquely identified, users can still link households that belong to the same original (2012) stem.

The person identifier in IFLS East is the variable PID12. This variable is simply the line number of the person in the AR roster. If the level of observation is the individual, both HHID12 and PID12 are required to uniquely identify a person.

Wherever possible the data have been organized so that the level of observation within a file is either the household or the individual.

When the level of observation is something other than the household or individual, it is usually because the data were collected as part of a grid, in which a set of questions was repeated for a series of items or events. For example, in the health care provider data from Book 1, module PP, each observation corresponds to a particular type of provider, and there are multiple observations per household. In this data file, the combination of HHID12 and PPTYPE uniquely identifies an observation. The variable that defines the items or events is usually named XXXTYPE, where XXX identifies the associated module (more is said about TYPE variables below).

In some cases, data collected as part of a grid are organized rectangularly. For example, file B1\_PP1 contains data about 12 provider types for each of xxx households. Thus, there are  $12 \times xxx = yyy$  observations in the data file. In other cases, the number of records per household or individual varies. For example, the level of observation in file B3B\_RJ is a visit by an individual to an outpatient provider. Not all individuals made the same number of visits, so some individuals appear only once, others appear twice, and some appear more than twice. Those who made no visits do not appear at

all. This file is not rectangular because the number of observations per person is not constant. To uniquely identify an observation in this file, the analyst should use HHID12, PID12, and RJTYPE.

### PIDLINK

We also created a PIDLINK for each individual which will be useful to link individuals across waves of IFLS East, should there be another round of the survey. The idea is while PID may be different across the survey rounds depending on the household composition in the particular round, PIDLINK will be uniquely assigned to individual and will stay constant across survey waves.

PIDLINK is a 9-digit identifier consisting of the following:

x   x   x	x   x	0   0	x   X
-----	-----	-----	-----
EA	specific household	"00"	PID12

#### 4.2.2 Community-Facility Survey

Wherever possible, community-facility survey data are organized so that the level of observation within a data file is either the community or the facility. In a community-level data file, an observation can be uniquely identified with COMMID12. In a facility-level file, an observation can be uniquely identified with the variable FASCODE12.

COMMID12 are digits for the 98 communities that correspond to the 98 EAs. The first two digits of variable COMMID12 identify the province, and the remaining two digits indicate a sequence number within the province:

x   x	x   x
-----	-----
Province	Sequence

The following codes identify the 7 IFLS provinces:

53 = East Nusa Tenggara	34 = North Maluku
64 = East Kalimantan	35 = West Papua
7 = South Sumatra	51 = Papua
18 = Maluku	

The first four digits of variable FASCODE12 are the COMMID12 of the place where the facility was first found, the fifth digit indicates the facility type, and the last three digits indicate the facility type's sequence number within the community.

x   x   x   x	x	x   x   x
-----	-----	-----
COMMID12	Facility type	Sequence

The codes for facility type are the following:

- 0 = traditional health practitioner
- 1 = health center or subcenter (*puskesmas* or *puskesmas pembantu*)
- 2 = private practitioner (*dokter praktek*, *klinik swasta*, *klinik umum*, *bidan*, *bides*, *perawati*, *mantri*)
- 4 = community health post (*posyandu*)
- 5 = community health post for the elderly (*posyandu lansia*)

- 6 = elementary school
- 7 = junior high school
- 8 = senior high school
- 9= hospitals

Some facilities may be used by members of more than one IFLS East community. Note that the community ID embedded in FCODE is not necessarily the community in which the facility is now located, or the community for which the facility was interviewed, or the only IFLS East community to which the facility provides services. To identify which facilities provide services to an IFLS East community, analysts should use the Service Availability Roster (SAR).

## References

- AAPOR (2011). Standard definitions: Final depositions of case codes and outcome rates for surveys (7th ed.). American Association for Public Opinion Research. As of August 1, 2013: <http://aapor.org/Content/NavigationMenu/AboutAAPOR/StandardsampEthics/StandardDefinitions/StandardDefinitions2011.pdf>
- Badan Pusat Statistik (2010). *Hasil sensus penduduk 2010: Data agregat per provinsi* [The results of the 2010 population census: Data aggregated by province]. As of August 1, 2013: [http://www.bps.go.id/65tahun/SP2010\\_agregat\\_data\\_perProvinsi.pdf](http://www.bps.go.id/65tahun/SP2010_agregat_data_perProvinsi.pdf)
- Badan Pusat Statistik (2012). *SUSENAS 2010 (Core) [computer file]*. Canberra: Australian Data Archive, The Australian National University, 2012. As of August 1, 2013: <http://www.ada.edu.au/ada/01242hier>
- Booth, A. (2004) "Africa in Asia? The Development Challenges Facing Eastern Indonesia and East Timor", *Oxford Development Studies*, (32):1.
- Frankenberg, E., and L.A. Karoly (1995) *The 1993 Indonesian Family Life Survey: Overview and Field Report*. Report No. DRU-1195/1. Santa Monica, CA: RAND Corporation.
- Frankenberg, E. and D. Thomas. (2000) "The Indonesia Family Life Survey (IFLS): Study Design and Results from Waves 1 and 2." March 2000. RAND, Santa Monica, CA. DRU-2238/1-NIA/NICHD.
- Hill, H., B.P. Resosudarmo, and Y. Vidyattama (2008) "Indonesia's Changing Economic Geography", *Bulletin of Indonesian Economic Studies*, (44): 3.
- Strauss, J., K. Beegle, B. Sikoki, A. Dwiyanto, Y. Herawati and F. Witoelar. "The Third Wave of the Indonesia Family Life Survey (IFLS): Overview and Field Report", March 2004. WR-144/1-NIA/NICHD.
- Strauss, J., Witoelar F, Sikoki B and Wattie A M. (2009) "The Fourth Wave of the Indonesian Family Life Survey (IFLS4): Overview and Field Report". RAND WR-675/1-NIA/NICHD.
- xxxxxxx TNP2K, "An Introduction into the IFLS-East 2012: Sampling, questionnaires, maps and socio-economic background characteristics"

## Appendix A: Survey Operations

### A1. Development of Questionnaire

The household and community-facility questionnaires fielded in IFLS4 provided the base for the IFLS East questionnaires. The goal was to keep the instruments as similar as possible across with the original IFLS in substantive content and questionnaire wording so as to maximize comparability. Changes were made to collect new data on topics of particular interest: coverage and workings of new public social safety net programs, fishery, to name a few examples. Because IFLS East 2012 is a baseline survey, there are no need for complicated skip patterns employed in IFLS4 to differentiate between panel and new respondents. The bulk of work on this was done intensively between February and March 2012 through several meetings and email communications.

### A2. Piloting and Pretesting

Piloting of new or heavily changed modules was first done in Kulon Progo, Yogyakarta in early March 2012. The full pretest of household as well as community and facility surveys were done in locations in Eastern Indonesia, namely in the city of Bitung in North Sulawesi and in the district of Fak Fak, Papua Barat, between March 9 and 22, 2012. The household questionnaire and biomarker questionnaires were tested in their entirety during a full-scale pretest and so were the community-facility questionnaires. Pretests allowed us to evaluate questionnaire changes in a field setting.

The final contents of the IFLS East questionnaires are summarized in Sections 2 and 3 of this document for the household survey and community-facility survey, respectively. Details about the respondents and the modules are described in Section 4.

### A3. Training for the Household Survey

The sequence of training started with the Training of Trainers (TOT) which was conducted between April 2 and April 15, 2012. Most of the participants had been senior field staff in one of the IFLS and who were targeted to be senior field staff (field coordinators, supervisors, editors) for IFLS East. The Survey Director and survey managers also participated directly. The two weeks were spent in thoroughly training the staff in the use of the new questionnaires by using and further developing teaching materials that would be later used in training of the enumerators. This training was very participatory and live respondents were brought into the meeting rooms during the period for practice.

Training for the enumerators for the household survey was conducted between April 16 and May 20, 2012 and took place in Salatiga, Central Java. Some 170 trainees took part of whom 161 were subsequently chosen as interviewers, data entry workers and supervisors for these teams, with some others being held in reserve as alternates, in case something happened to a team member, and others who were rejected. Recognizing the extremely difficult terrain in Papua and Papua Barat, enumerators which are physically fit were chosen to go there.

Each training session was divided into two parts. First there was classroom training, which involved lectures, nightly homeworks, demonstrations and in-classroom practice with live respondents. "Dress-rehearsal" field practice followed the classroom training, during which time the teams actually went into the field, near Salatiga, set up base camps, where they stayed and worked. Household interviewers received three weeks of classroom training. CAFE editors were chosen from this group in the third week and given separate, specialized training.



There were 7 Field Coordinators, each responsible for one province. Field Coordinators were senior field staff who had years of field experience and who were involved in the project since the Training of Trainers.

#### **A4. Household Survey Fieldwork**

For the Household Survey, there were a total of 17 teams in the 7 provinces. Seven field coordinators were assigned to head the teams in each of the province enumerated. They were senior staff who had been involved in IFLS. Also the household team and café supervisors undertook some responsibility. Two teams were assigned to each province, except for Papua Barat (3 teams) and Papua Barat (4 teams). This step was taken due the difficult terrain and the remoteness of the EAs. The teams that were sent to Papua and Papua Barat were smaller than those that were sent to the other provinces (See Appendix B and C for field staff composition and names). The composition of the household is as follows:

##### **HHS Team**

1 Supervisor  
4-8 Interviewers  
1-2 Editors

The fieldwork periods went from May 7 to July 21. During main fieldwork, each pair of teams was assigned a route that would take them to 7 enumeration areas except in Papua Barat where the smaller teams went to 5-6 EA. Many of the interviewers would be involved in community-facility survey that was fielded a month later.

#### **A5. Training for the Community-Facility Survey**

Training of Trainers for the community-facility survey ran from August 27 to September 4, 2012, also in Salatiga. The training followed the same rigorous pattern as the household TOT. Most of the participants were involved in the household survey a month earlier and were already familiar with the location.

The training for the CF enumerators were immediately after, from September 5 to September 24. Sixteen days were allocated for in-class training and 4 days for field practice, where the teams went to interview the communities and facilities in the district of Semarang and Boyolali, Central Java.

#### **A6. Community-Facility Survey Fieldwork**

There were a total of 16 teams consisting of 48 persons. As in the household survey, two teams were assigned to each province, except for Papua and Papua Barat which had 3 teams each. The composition of the household and community-facility teams is as follows:

##### **CFS Team**

1 Supervisor/Editor  
2 Interviewers

Three Field Coordinators were responsible, all of whom were also Field Coordinators of the Household Survey. The names of all the field staff in each team are listed in Appendices B and C.

## A7. Data Entry, Verification, and Data Cleaning

### *In the Field: CAFE Editing, Interviewer Rechecks*

Since they were introduced in IFLS2 in 1997, CAFE operations were an important ingredient to the success of the IFLS and have been used by many other survey projects in the country. IFLS East employed the similar procedures.

With CAFE, data cleaning began in the field. Interviewers filled out the paper questionnaires while in the respondents' households, then edited their work at base camp. For both the household and community-facility surveys, interviewers were responsible for turning in legible questionnaires that had been filled out as completely and accurately as possible. Interviewers handed in their completed paper questionnaires to a CAFE team at base camp. The CAFE team entered and edited the data on laptop computers, using data-entry software (CSPro) designed to detect a variety of fielding errors. Range checks identified illogical values, such as a sex value of 2 when sex was supposed to equal 1 or 3.

The CAFE editor was responsible for resolving error messages with the interviewer. Some errors could be resolved fairly easily. For example, the interviewer might mis-remember the sex of a respondent interviewed earlier in the day and verify that the inconsistency was due to a careless error. Other errors required the interviewer to return to the household and check with the respondent.

When the CAFE team's work was finished for an EA, the data were uploaded to SurveyMETER website and subsequently downloaded. A team in Yogyakarta performed basic data quality checks, monitored re-contact rates, and provided feedback to the teams in the field.

### *In Yogyakarta: "Look Ups"*

For detecting and resolving more complicated errors, we implemented a "Look Ups" (LU) cleaning process. LU involved the use of sophisticated, customized computer programs to run checks, with follow-up of suspected errors by specialists with extensive field experience, who consulted the paper questionnaires.

The LU phase was important to quality assurance because:

- The paper questionnaires sometimes contained valuable written information that was not captured in the electronic data. For example, an inconsistency might be generated because an editor had made an inappropriate correction. Reference to the interviewer's original annotation resolved the issue so the data could be corrected.
- LU specialists were drawn from our best interviewers, editors, and field supervisors. We wanted to capitalize on the expertise they had gained in fielding the survey to help resolve more difficult issues before releasing the data for analysis.

### **Privacy Information**

In compliance with regulations governing the appropriate treatment of human subjects, information that could be used to identify respondents in the IFLS East survey has been suppressed. This includes respondents' names and residence locations and the names and physical locations of the facilities that respondents used. In addition we remove all reference to the location of the villages and only release the location codes down to the kecamatan level.

## Timeline of IFLS East Activities

<b>2012</b>	
February	Questionnaire development
	Development of data entry program
March	Pilots and pretesting
	Finalization of questionnaire
April 2-15	Training of trainers for the HH survey
April 16-May 13	Training of HH survey enumerators
May 17-July 21	Fieldwork of the HH survey
July-September	Data cleaning for the HH survey
July -August	<i>Ramadhan and Idul Fitri break</i>
August 27-September 4	Training of trainers for the CF survey
September 5- 24	Training of CF survey enumerators
September 30-November 25	Fieldwork of the CF survey
November-December	Data cleaning for the CF survey
December	Submission of preliminary data and report to TNP2K
<b>2013</b>	
January-August	Preparation for public use
	Construction of sample weights
	Updating location codes based on the latest BPS codes
September-November	Final preparation for public use
December	Soft-launching of IFLS East homepage
<b>2014</b>	
January	Official release of public use data

## Appendix B: Field Staff for IFLS East Household Survey

### Field Coordinators

1	Roni Hermoko	M	Team A and B (Nusa Tenggara Timur)
2	Tri Rahayu	F	Team C and D (Maluku Utara)
3	Henry Setyo Nugroho	M	Team E and F (Maluku)
4	Endra Dwi Mulyanto	M	Team G, H, I, and J (Papua)
5	M. Fajar Suminto	M	Team K, L, and M (Papua Barat)
6	Setyo Puji Astuti	F	Team N and O (Sulawesi Tenggara)
7	Fita Herawati	F	Team P and Q (Kalimantan Timur)

### Team Nusa Tenggara Timur A

1	Muhammad Mukhlis	M	Supervisor
2	Arif Pranoto	M	Editor 1
3	Mariani	F	Editor 2
4	Sukiyanto	M	Interviewer
5	Khairun Nidham	M	Interviewer
6	Fahroni Windarto	M	Interviewer
7	Dwi Sumawati	F	Interviewer
8	Anis Nur Aini	F	Interviewer
9	Masfiatul Asriyah	F	Interviewer
10	Dwi Yani Yustiningsih	F	Interviewer
11	Shobaril Yuliadi	M	Interviewer

### Team Nusa Tenggara Timur B

1	Amirul Arifin	M	Supervisor
2	Vita Ratna Utami	F	Editor 1
3	Agus S. Haryanto	M	Editor 2
4	Arief Setiawan	M	Interviewer
5	Muchtarom	M	Interviewer
6	Kartaya	M	Interviewer
7	Lilik Umu Habibah	F	Interviewer
8	Dhiassari Paminta Resti	F	Interviewer
9	Yanti Rohaniyawati	F	Interviewer
10	Hermin	F	Interviewer
11	Hiyatul Auliya	F	Interviewer

### Team Maluku Utara C

1	Jejen Fauzan	M	Supervisor
2	Desti Wahyu Kurniawati	F	Editor 1
3	Slamet Haryono	M	Editor 2
4	Indra Retnaningtyas	F	Interviewer
5	M. Ikhsan	M	Interviewer
6	Muhammad Awaludin	M	Interviewer
7	Muzakir	M	Interviewer
8	Maryati Rahayu	F	Interviewer
9	Sri Ulie Rahmwati	F	Interviewer
10	Rini Widiastuti	F	Interviewer
11	Purnomo	M	Interviewer

### Team Maluku Utara D

1	Pentadiati	F	Supervisor
2	Pratiwi Dwi Suhartanti	F	Editor 1
3	Ade Apri Hendrawanto	M	Editor 2
4	Rizaul Ihzan	M	Interviewer
5	Slamet Sukoraharjo	M	Interviewer
6	Dian Rahmawati	F	Interviewer
7	Suryadi	M	Interviewer
8	Dwi Indriya	F	Interviewer
9	Mivta Indriani	F	Interviewer
10	Danarsih	F	Interviewer
11	Akmal Fahmi	M	Interviewer

### Team Maluku E

1	Naryanta	M	Supervisor
2	M. Bastomi Busro	M	Editor 1
3	Setyorini	F	Editor 2
4	Panuju	M	Interviewer
5	Fajar Anggi Santoso	M	Interviewer
6	Teguh Krisma Aji	M	Interviewer
7	Heni Mubarika	F	Interviewer
8	Ummu Hasanah Munirotun	F	Interviewer
9	Melya Anggraini	F	Interviewer
10	Vita Victoria Gumilar	F	Interviewer
11	Devi Riyandari	F	Interviewer

### Team Maluku F

1	Asmadi	M	Supervisor
2	Deni Puspita	F	Editor 1
3	Fita Dwi Untari	F	Editor 2
4	Sigit Sawung Pamuji	M	Interviewer
5	Alan R. Jacobus	M	Interviewer
6	Muhammad Baiquni	M	Interviewer
7	Taufiq Agung Nugroho	M	Interviewer
8	Stevia Descarenza	F	Interviewer
9	Winarsih	F	Interviewer
10	Mega Sugesti	F	Interviewer
11	Lisnia Yulia	F	Interviewer

**Team Papua G**

1	Arif Gunawan	M	Supervisor
2	Edi Jalemi	M	Editor 1
3	Oki Petrus Laoh	M	Editor 2
4	Muhamad Fahrezal Sillia	M	Interviewer
5	Herry Tjipto Susilo	M	Interviewer
6	Rohmad Yasin Yunanto	M	Interviewer
7	Eva Puri Nur Ismawati	F	Interviewer
8	Arvian Beti Rahmadani	F	Interviewer
9	Fiske Kristina Chandrawati	F	Interviewer

**Team Papua I**

1	Hendrik	M	Supervisor
2	Nur Indah Setyawati	F	Editor 1
3	Ngatman	M	Editor 2
4	Danang Widadmoko	M	Interviewer
5	Arnanda Doli Gurning	M	Interviewer
6	Muhamad Aiman	M	Interviewer
7	Berliana Hetty Lumban Gaol	F	Interviewer
8	Agata Vera Setianingsih	F	Interviewer
9	Andri Yani Prabawati	F	Interviewer

**Team Papua H**

1	Yuniaman	M	Supervisor
2	Ismail Hidayat	M	Editor 1
3	Zainul Falah Kurniawan	M	Interviewer
4	Khairul Amin	M	Interviewer
5	Arinto Nugroho	M	Interviewer
6	Suhariadi	M	Interviewer

**Team Papua J**

1	Andi Ahmad	M	Supervisor
2	Parzuniadi	M	Interviewer
3	Herizal	M	Interviewer
4	Adib	M	Interviewer
5	Arief Setiaji	M	Interviewer

**Team Papua Barat K**

1	Muhammad L. Rakhman	M	Supervisor
2	Susi Lestari	F	Editor 1
3	Alman Suriadi	M	Editor 2
4	Didik Andika	M	Interviewer
5	Denny Wowor	M	Interviewer
6	M. Arief Febrianto	M	Interviewer
7	Hayu Ratnaningtyas	F	Interviewer
8	Sinta Karuba	F	Interviewer
9	Ika Wahyuningtias	F	Interviewer

**Team Papua Barat L**

1	Rangga Fauzan Andika	M	Supervisor
2	Hendy P.P.	M	Editor 1
3	Faqih Anatomi	M	Editor 2
4	Haryanto	M	Interviewer
5	Dwi Dedi Prasetyo	M	Interviewer
6	Eka Septiana	F	Interviewer
7	Nurbaeti	F	Interviewer
8	Nunung Puji Rahayu	F	Interviewer
9	Nyimas Oktariza	F	Interviewer

**Team Papua Barat M**

1	Mocahmmad Syukri	M	Supervisor
2	Ahmad Tofik	M	Editor 1
3	Achmad Zarkasi	M	Interviewer
4	Dian Fitriyanto	M	Interviewer
5	Noviyah Wongso Suratna	F	Interviewer
6	Ira Sasmita	F	Interviewer

**Team Sulawesi Tenggara N**

1	Sugiyanto	M	Supervisor
2	Upik Widyaningsih	F	Editor 1
3	Siti Mardisah	F	Editor 2
4	Deni Riyanto	M	Interviewer
5	Tommy Setiawan	M	Interviewer
6	Muhammad Karno	M	Interviewer
7	Dianita A.	F	Interviewer
8	Dian Martha Shinta	F	Interviewer
9	Wahid Mifakhudin	M	Interviewer
10	Ria Arbiyati Ningtyas	F	Interviewer
11	Erlis Herliawati	F	Interviewer

**Team Sulawesi Tenggara O**

1	Yudono Setiawan	M	Supervisor
2	Lintang Widya Retna	F	Editor 1
3	Dini Romantika	F	Editor 2
4	Wahyudi	M	Interviewer
5	Banon Kuncoro Manik	M	Interviewer
6	Edwin Walukow	M	Interviewer
7	Julian Ardina Reswari	F	Interviewer
8	Retno Palupi	F	Interviewer
9	Pramesti Arum Wardani	F	Interviewer
10	Krisna Yulianti	F	Interviewer
11	Nurul Isnaini	F	Interviewer

**Team Kalimantan Timur P**

1	Slamet Subadrodin	M	Supervisor
2	Warjiyo	M	Editor 1
3	Sadirman	M	Editor 2
4	Iwan Kurniawan	M	Interviewer
5	Faroh Dina	F	Interviewer
6	Hartiwi	F	Interviewer
7	Fitri Yuniati	F	Interviewer
8	Taufik AR	M	Interviewer
9	Suharyanti	F	Interviewer

**Team Kalimantan Timur Q**

1	Ulil Absor	M	Supervisor
2	Titis Putri Ambarwati	F	Editor 1
3	Agastia Ristanti Pamungkas	F	Editor 2
4	Kartika Yoga	M	Interviewer
5	Mangatur Sm. Butar-butur	M	Interviewer
6	Cilia Eli W.	F	Interviewer
7	Ginanjari Dwi Partiw	F	Interviewer
8	Larassati Ayu Ansuda	F	Interviewer
9	Lilis Nedy Ernawati	F	Interviewer
10	Itrina	F	Interviewer
11	Tri Handayani	F	Interviewer

## Appendix C: Field Staff for IFLS East Community and Facility Survey

### Field Coordinators

	Name	M/F	Team
1	Oky Juhdjanto	M	Maluku C and D; Maluku Utara E and F
2	M. Fajar Suminto	F	Nusa Tenggara Timur A and B; Sulawesi Tenggara M and N; Kalimantan Timur O and P
3	Arif Gunawan	M	Papua G,H, and I; Papua Barat J, K, and L

### Team NTT A

1	Muhammad Mukhlis	M	Sup.+ Editor
2	Shobaril Yuliadi	M	Interviewer
3	Masfiatul Asriyah		Interviewer

### Team NTT B

1	Amirul Arifin	M	Sup.+ Editor
2	Sukiyanto	M	Interviewer
3	Fitri yuniati		Interviewer

### Team Maluku Utara C

1	M.Ikhsan	M	Sup.+ Editor
2	Arif Gunawan	M	Sup.+ Editor
3	Arif Pranoto	M	Interviewer
4	Dwi Indriya K	F	Interviewer

### Team Maluku Utara D

1	Slamet Haryono	M	Sup.+ Editor
2	Muhammad Awaludin	M	Interviewer
3	Maryati Rahayu		Interviewer

### Team Maluku E

1	Andi Ahmad	M	Sup.+ Editor
2	Setyorini	F	Interviewer
3	Wahid Miftakhudin	M	Interviewer

### Team Maluku F

1	Asmadi	M	Sup.+ Editor
2	Panuju	M	Interviewer
3	Lisnia Yulia	F	Interviewer

### Team Papua G

1	Ngatman	M	Sup.+ Editor
2	Andi Setiawan	M	Interviewer
3	Eva Puri Nur Ismawati	F	Interviewer

### Team Papua H

1	Edi Jalerni	M	Sup.+ Editor
2	Sadirman	M	Interviewer
3	Berliana Hetty Lumban Gaol	F	Interviewer

### Team Papua I

1	Yuniaman	M	Sup.+ Editor
2	Arinto Nugroho	M	Interviewer
3	Adib	M	Interviewer

### Team Papua Barat J

1	Alman Suriadi	M	Sup.+ Editor
2	Parzunaidi	M	Interviewer
3	Siti Marsidah	F	Interviewer

### Team Papua Barat K

1	Hendy P.P	M	Sup.+ Editor
2	Mangatur Sm Butar-Butar	M	Interviewer
3	Pratiwi Dwi Suhartanti	F	Interviewer

### Team Papua Barat L

1	Mochammad Syukri	M	Sup.+ Editor
2	Dian Fitriyanto	M	Interviewer
3	Upik Widyaningsih	F	Interviewer

### Team Sulawesi Tenggara M

1	Sugiyanto	M	Sup.+ Editor
2	Muzakir	M	Interviewer
3	Susi Lestari, S.Sos.	F	Interviewer

### Team Sulawesi Tenggara N

1	Ahmad Tofik	M	Sup.+ Editor
2	Ismail Hidayat	M	Interviewer
3	Retno Palupi	F	Interviewer

### Team Kalimantan Timur O

1	Faqih Anatomi	M	Sup.+ Editor
2	Warjiyo	M	Interviewer
3	Faroh Dina	F	Interviewer

### Team Kalimantan Timur P

1	Ulil Absor	M	Sup.+ Editor
2	Agastia Ristanti Pamungkas	F	Interviewer
3	Ginanjari Dwi Partiw	F	Interviewer

## Appendix D: BPS Kecamatan Codes in IFLS East Data Set

Prov. code	Province name	Kab. code	Kabupaten name	Kec. code	Kecamatan Name
53	NUSA TENGGARA TIMUR	1	SUMBA BARAT	50	LOLI
53	NUSA TENGGARA TIMUR	2	SUMBA TIMUR	11	NGGAHA ORIANGU
53	NUSA TENGGARA TIMUR	3	KUPANG	191	AMFOANG BARAT LAUT
53	NUSA TENGGARA TIMUR	4	TIMOR TENGAH SELATAN	41	BATU PUTIH
53	NUSA TENGGARA TIMUR	4	TIMOR TENGAH SELATAN	61	KUALIN
53	NUSA TENGGARA TIMUR	5	TIMOR TENGAH UTARA	41	INSANA UTARA
53	NUSA TENGGARA TIMUR	6	BELU	61	ATAMBUA BARAT
53	NUSA TENGGARA TIMUR	7	ALOR	50	TELUK MUTIARA
53	NUSA TENGGARA TIMUR	8	LEMBATA	30	ILE APE
53	NUSA TENGGARA TIMUR	8	LEMBATA	60	OMESURI
53	NUSA TENGGARA TIMUR	11	ENDE	31	ENDE TIMUR
53	NUSA TENGGARA TIMUR	13	MANGGARAI	110	LANGKE REMBONG
53	NUSA TENGGARA TIMUR	15	MANGGARAI BARAT	10	KOMODO
53	NUSA TENGGARA TIMUR	19	MANGGARAI TIMUR	10	BORONG
64	KALIMANTAN TIMUR	2	KUTAI BARAT	80	MELAK
64	KALIMANTAN TIMUR	3	KUTAI KARTANEGARA	90	TENGGARONG
64	KALIMANTAN TIMUR	3	KUTAI KARTANEGARA	120	ANGGANA
64	KALIMANTAN TIMUR	4	KUTAI TIMUR	52	SANDARAN
64	KALIMANTAN TIMUR	5	BERAU	70	GUNUNG TABUR
64	KALIMANTAN TIMUR	71	BALIKPAPAN	10	BALIKPAPAN SELATAN
64	KALIMANTAN TIMUR	71	BALIKPAPAN	30	BALIKPAPAN UTARA
64	KALIMANTAN TIMUR	71	BALIKPAPAN	40	BALIKPAPAN TENGAH
64	KALIMANTAN TIMUR	72	SAMARINDA	22	SAMBUTAN
64	KALIMANTAN TIMUR	72	SAMARINDA	30	SAMARINDA SEBERANG
64	KALIMANTAN TIMUR	72	SAMARINDA	31	LOAJANAN ILIR
64	KALIMANTAN TIMUR	72	SAMARINDA	40	SUNGAI KUNJANG
64	KALIMANTAN TIMUR	72	SAMARINDA	50	SAMARINDA ULU
74	SULAWESI TENGGARA	2	MUNA	22	MAROBO
74	SULAWESI TENGGARA	2	MUNA	91	PASIR PUTIH
74	SULAWESI TENGGARA	3	KONAWE	71	WAWONII SELATAN
74	SULAWESI TENGGARA	3	KONAWE	131	UEPAI
74	SULAWESI TENGGARA	4	KOLAKA	41	LAMBANDIA
74	SULAWESI TENGGARA	6	BOMBANA	51	POLEANG UTARA
74	SULAWESI TENGGARA	6	BOMBANA	61	POLEANG BARAT
74	SULAWESI TENGGARA	7	WAKATOBI	21	TOMIA TIMUR
74	SULAWESI TENGGARA	8	KOLAKA UTARA	20	LASUSUA
74	SULAWESI TENGGARA	8	KOLAKA UTARA	60	BATU PUTIH
74	SULAWESI TENGGARA	10	KONAWE UTARA	30	LASOLO
74	SULAWESI TENGGARA	71	KENDARI	13	KADIA
74	SULAWESI TENGGARA	72	BAU-BAU	11	MURHUM
74	SULAWESI TENGGARA	72	BAU-BAU	30	SORAWOLIO
81	MALUKU	1	MALUKU TENGGARA BARAT	53	NIRUNMAS
81	MALUKU	2	MALUKU TENGGARA	22	KEI BESAR SELATAN



Prov. code	Province name	Kab. code	Kabupaten name	Kec. code	Kecamatan Name
81	MALUKU	3	MALUKU TENGAH	10	BANDA
81	MALUKU	3	MALUKU TENGAH	50	AMAHAI
81	MALUKU	3	MALUKU TENGAH	60	TEON NILA SERUA
81	MALUKU	3	MALUKU TENGAH	100	SALAHUTU
81	MALUKU	3	MALUKU TENGAH	110	LEIHITU
81	MALUKU	4	BURU	20	NAMLEA
81	MALUKU	4	BURU	23	BATA BUAL
81	MALUKU	9	BURU SELATAN	20	LEKSULA
81	MALUKU	71	AMBON	20	SIRIMAU
81	MALUKU	71	AMBON	30	TELUK AMBON
81	MALUKU	71	AMBON	40	BAGUALA
82	MALUKU UTARA	1	HALMAHERA BARAT	91	JAILOLO SELATAN
82	MALUKU UTARA	1	HALMAHERA BARAT	131	IBU SELATAN
82	MALUKU UTARA	3	KEPULAUAN SULA	20	SANANA
82	MALUKU UTARA	3	KEPULAUAN SULA	21	SULA BESI TENGAH
82	MALUKU UTARA	3	KEPULAUAN SULA	32	MANGOLI UTARA TIMUR
82	MALUKU UTARA	3	KEPULAUAN SULA	64	TALIABU SELATAN
82	MALUKU UTARA	4	HALMAHERA SELATAN	33	BACAN SELATAN
82	MALUKU UTARA	4	HALMAHERA SELATAN	62	KAYOA SELATAN
82	MALUKU UTARA	4	HALMAHERA SELATAN	91	GANE TIMUR TENGAH
82	MALUKU UTARA	6	HALMAHERA TIMUR	40	MABA
82	MALUKU UTARA	71	TERNATE	21	TERNATE TENGAH
82	MALUKU UTARA	71	TERNATE	30	TERNATE UTARA
82	MALUKU UTARA	72	TIDORE KEPULAUAN	30	TIDORE
91	PAPUA BARAT	1	FAKFAK	82	KRAMONGMONGGA
91	PAPUA BARAT	2	KAIMANA	20	TELUK ARGUNI
91	PAPUA BARAT	4	TELUK BINTUNI	22	ARоба
91	PAPUA BARAT	4	TELUK BINTUNI	52	TUHIRA
91	PAPUA BARAT	5	MANOKWARI	130	MINYAMBOUW
91	PAPUA BARAT	5	MANOKWARI	141	MANOKWARI BARAT
91	PAPUA BARAT	5	MANOKWARI	142	MANOKWARI TIMUR
91	PAPUA BARAT	5	MANOKWARI	146	TANAH RUBUH
91	PAPUA BARAT	7	SORONG	121	MAYAMUK
91	PAPUA BARAT	7	SORONG	171	MARIAT
91	PAPUA BARAT	8	RAJA AMPAT	22	MISOOL TIMUR
91	PAPUA BARAT	71	SORONG	10	SORONG BARAT
91	PAPUA BARAT	71	SORONG	22	SORONG
94	PAPUA	1	MERAUKE	40	MERAUKE
94	PAPUA	1	MERAUKE	42	TANAH MIRING
94	PAPUA	2	JAYAWIJAYA	121	PELEBAGA
94	PAPUA	2	JAYAWIJAYA	222	YALENGGA
94	PAPUA	3	JAYAPURA	201	YOKARI
94	PAPUA	3	JAYAPURA	230	SENTANI
94	PAPUA	8	KEPULAUAN YAPEN	61	KOSIWO
94	PAPUA	9	BIAK NUMFOR	50	BIAK KOTA

<b>Prov. code</b>	<b>Province name</b>	<b>Kab. code</b>	<b>Kabupaten name</b>	<b>Kec. code</b>	<b>Kecamatan Name</b>
94	PAPUA	9	BIAK NUMFOR	90	WARSA
94	PAPUA	16	YAHUKIMO	45	YOGOSEM
94	PAPUA	20	KEEROM	50	SKANTO
94	PAPUA	31	MAMBERAMO TENGAH	40	ERAGAYAM
94	PAPUA	71	JAYAPURA	20	ABEPURA
94	PAPUA	71	JAYAPURA	30	JAYAPURA SELATAN
94	PAPUA	71	JAYAPURA	40	JAYAPURA UTARA

\*The codes are based on BPS list in 2012. The 98 IFLS East enumeration areas are spread in 7 provinces, 55 kabupaten, and 95 kecamatan..