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The Fourth Wave of the Indonesia Family Life Survey: Overview and Field Report

Volume 1

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We recommend the following citations for the IFLS data:

For papers using IFLS1 (1993):

Frankenberg, E. and L. Karoly. "The 1993 Indonesian Family Life Survey: Overview and Field Report." November, 1995. RAND. DRU-1195/1-NICHD/AID

For papers using IFLS2 (1997):

Frankenberg, E. and D. Thomas. "The Indonesia Family Life Survey (IFLS): Study Design and Results from Waves 1 and 2". March, 2000. DRU-2238/1-NIA/NICHD.

For papers using IFLS3 (2000):

Strauss, J., K. Beegle, B. Sikoki, A. Dwiyanto, Y. Herawati and F. Witoelar. "The Third Wave of the Indonesia Family Life Survey (IFLS3): Overview and Field Report". March 2004. WR-144/1-NIA/NICHD.

For papers using IFLS4 (2007):

Strauss, J., F. Witoelar, B. Sikoki and A.M. Wattie. "The Fourth Wave of the Indonesia Family Life Survey (IFLS4): Overview and Field Report". April 2009. WR-675/1-NIA/NICHD.

Preface

This document describes the design and implementation and provides a preview of some key results of the Indonesia Family Life Survey, with an emphasis on wave 4 (IFLS4). It is the first of six volumes documenting IFLS4.

The Indonesia Family Life Survey is a continuing longitudinal socioeconomic and health survey. It is based on a sample of households representing about 83% of the Indonesian population living in 13 of the nation's 26 provinces in 1993. The survey collects data on individual respondents, their families, their households, the communities in which they live, and the health and education facilities they use. The first wave (IFLS1) was administered in 1993 to individuals living in 7,224 households. IFLS2 sought to re-interview the same respondents four years later. A follow-up survey (IFLS2+) was conducted in 1998 with 25% of the sample to measure the immediate impact of the economic and political crisis in Indonesia. The next wave, IFLS3, was fielded on the full sample in 2000. IFLS4 was fielded in late 2007 and early 2008 on the same 1993 households and their splitoffs; 13,535 households and 44,103 individuals were interviewed.

IFLS4 was a collaborative effort of RAND, the Center for Population and Policy Studies (CPPS) of the University of Gadjah Mada and Survey Meter. Funding for IFLS4 was provided by the National Institute on Aging (NIA), grant 1R01 AG026676, the National Institute for Child Health and Human Development (NICHD), grant 1R01 HD050764 and grants from the World Bank, Indonesia and AUSAID.

The IFLS4 public-use file documentation, whose six volumes are listed below, will be of interest to policymakers concerned about socioeconomic and health trends in nations like Indonesia, to researchers who are considering using or are already using the IFLS data, and to those studying the design and conduct of large-scale panel household and community surveys. Updates regarding the IFLS database subsequent to publication of these volumes will appear at the IFLS Web site, http://www.rand.org/FLS/IFLS.

Documentation for IFLS, Wave 4

WR-675/1-NIA/NICHD: *The Fourth Wave of the Indonesia Family Life Survey (IFLS4): Overview and Field Report*. Purpose, design, fieldwork, and response rates for the survey, with an emphasis on wave 4; comparisons to waves 1, 2 and 3.

WR-675/2-NIA/NICHD: *User's Guide for the Indonesia Family Life Survey, Wave 4*. Descriptions of the IFLS file structure and data formats; guidelines for data use, with emphasis on using the wave 4 with the earlier waves 1, 2 and 3.

WR-675/3-NIA/NICHD: *Household Survey Questionnaire for the Indonesia Family Life Survey, Wave 4.* English translation of the questionnaires used for the household and individual interviews.

WR-675/4-NIA/NICHD: *Community-Facility Survey Questionnaire for the Indonesia Family Life Survey, Wave 4.* English translation of the questionnaires used for interviews with community leaders and facility representatives.

WR-675/5-NIA/NICHD: *Household Survey Codebook for the Indonesia Family Life Survey, Wave 4.* Descriptions of all variables from the IFLS3 Household Survey and their locations in the data files.

WR-675/6-NIA/NICHD: *Community-Facility Survey Codebook for the Indonesia Family Life Survey, Wave 4.* Descriptions of all variables from the IFLS3 Community-Facility Survey and their locations in the data files.

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A survey of the magnitude of IFLS4 is a huge undertaking. It involved a large team of people from both the United States and Indonesia. We are indebted to every member of the team. We are grateful to each of our respondents, who gave up many hours of their time.

The project was directed by John Strauss (University of Southern California and RAND). Firman Witoelar (Survey Meter), Bondan Sikoki (Survey Meter) and Sukamdi (Director of CPPS) were co-PIs. Sikoki was Field Director of IFLS4, as she was for IFLS2, 2+ and 3. Anna Marie Wattie, Director of Research for CPPS directed the CPPS staff who were involved in the project.

Five people played critical administrative roles in the project. Edi Purwanto and Dani Alfah were the Field Coordinators for the Household Survey, Naisruddin was Field Coordinator for the Community-Facility Survey, Junedi was Field Coordinator for the Computer-Assisted Field Editing (CAFE) and was responsible for data entry software development, and Roald Euller of RAND was Chief Project Programmer. Trevor Croft of Blancroft oversaw the CAFÉ programming in CSPro.

Sheila Evans helped with the technical production and layout of the English and Indonesian versions of the questionnaires and field forms. Jevri Ardiansyah of CPPS, Zainal Abidin Ala Mutho and Lulus Kusbudihardjo of Survey Metre also worked on the layout of field forms and Jevri coordinated technical production of the Indonesian questionnaires.

Strauss and Witoelar oversaw the construction of the sampling weights. Witoelar also did the work to update geographic location codes using updated BPS location codes; as well as to update the IFLS "commid" community codes for the new areas in which split-off households were found in 2007. He also did most of the work in obtaining the tables and figures in the Field Report and the User's Guide. Aryah Gaduh worked on the coding of the job-type and sector of work.

The IFLS4 public-use data files were produced with much painstaking work, by our Chief Programmer, Roald Euller. Euller also prepared the information used in the preprinted rosters and master household location files that were used in the field work.

Many of our IFLS family colleagues have contributed substantially to the survey. Most of all, however, we are immensely grateful to Duncan Thomas and Elizabeth Frankenberg, whose inputs continue to be invaluable and essential

The survey could not have taken place without the support of the CPPS senior staff and administrative staff, including Agus Dwiyanto, Sukamdi, Ana Marie Wattie, Wanti Sulistyoningsih Nugroho and Endah Setia Lestari. All played key roles during all phases of the project: questionnaire development, pretest, training and fieldwork. We are indebted to the Population Study Centers in each of the thirteen IFLS provinces, which helped us recruit the 400 some field staff.

The success of the survey is largely a reflection of the diligence, persistence and commitment to quality of the interviewers, supervisors, field coordinators and the support staff at our central headquarters in Yogyakarta. Their names are listed in the *Study Design*, Appendix A.

Finally, we thank all of our IFLS 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.

1. Introduction

By the middle of the 1990s, Indonesia had enjoyed over three decades of remarkable social, economic, and demographic change. Per capita income had risen since the early 1960s, from around US$50 to more than US$1,100 in 1997. Massive improvements occurred in many dimensions of living standards of the Indonesian population. The poverty headcount measure as measured by the World Bank declined from over 40% in 1976 to just 18% in 1996. Infant mortality fell from 118 per thousand live births in 1970 to 46 in1997. Primary school enrollments rose from 75% in 1970 to universal enrollment in 1995 and secondary schooling rates from 13% to 55% over the same period. The total fertility rate fell from 5.6 in 1971 to 2.8 in 1997.

In the late 1990s the economic outlook began to change as Indonesia was gripped by the economic crisis that affected much of Asia. At the beginning of 1998 the rupiah collapsed and gross domestic product contracted by an estimated 13%. Afterwards, gross domestic product was flat in 1999. Between 2000 and 2007 GDP growth fluctuated between 4.5% and 5.5% per year and recovery ensued.

Different parts of the economy were affected quite differently by the 1998 crisis, for example the national accounts measure of personal consumption showed little decline, while gross domestic investment declined 35%. Across Indonesia there was considerable variation in the impacts of the crisis, as there had been of the earlier economic success. The different waves of the Indonesia Family Life Survey can be used to document changes before, during and 3 years and 10 years after the economic crisis for the same communities, households and individuals.

The Indonesia Family Life Survey is designed to provide data for studying behaviors and outcomes. The survey contains a wealth of information collected at the individual and household levels, including multiple indicators of economic and non-economic well-being: consumption, income, assets, education, migration, labor market outcomes, marriage, fertility, contraceptive use, health status, use of health care and health insurance, relationships among co-resident and non- resident family members, processes underlying household decision-making, transfers among family members and participation in community activities.

In addition to individual- and household-level information, IFLS provides detailed information from the communities in which IFLS households are located and from the facilities that serve residents of those communities. These data cover aspects of the physical and social environment, infrastructure, employment opportunities, food prices, access to health and educational facilities, and the quality and prices of services available at those facilities.

By linking data from IFLS households to data from their communities, users can address many important questions regarding the impact of policies on the lives of the respondents, as well as document the effects of social, economic, and environmental change on the population.

IFLS is an ongoing longitudinal survey. The first wave, IFLS1, was conducted in 1993–1994. The survey sample represented about 83% of the Indonesian population living in 13 of the country's 26 provinces.[1] IFLS2 followed up with the same sample four years later, in 1997–1998. One year after IFLS2, a 25% subsample was surveyed to provide information about the impact of Indonesia's economic crisis. IFLS3 was fielded on the full sample in 2000 and IFLS4 in 2007-2008

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[1] Public-use files from IFLS1 are documented in six volumes under the series title *The 1993 Indonesian Family Life Survey*, DRU-1195/1–6-NICHD/AID, The RAND Corporation, December 1995. IFLS2 public use files are documented in seven volumes under the series *The Indonesia Family Life Survey*, DRU-2238/1-7-NIA/NICHD, RAND, 2000. IFLS3 public use files are documented in six volumes under the series *The Third Wave of the Indonesia Family Life Survey (IFLS3), WR-144/1-NIA/NICHD.*

1.1 Contributions of the IFLS

The Indonesia Family Life Survey complements and extends the existing survey data available for Indonesia, and for developing countries in general, in a number of ways.

First, relatively few large-scale longitudinal surveys are available for developing countries. IFLS is the only large-scale longitudinal survey available for Indonesia. Because data are available for the same individuals from multiple points in time, IFLS affords an opportunity to understand the dynamics of behavior, at the individual, household and family and community levels.

In IFLS1 7,224 households were interviewed, and detailed individual-level data were collected from over 22,000 individuals. In IFLS2, 94.4% of IFLS1 households were re-contacted (interviewed or died-see Table 2.1). In IFLS3 the re-contact rate was 95.3% of IFLS1 dynasty households (any part of the original IFLS1 households).[2] In IFLS4 the recontact rate of original IFLS1 dynasties was 93.6% (of course the period between waves was 7 years, not 3). For the individual target households (including splitoff households as separate) the re-contact rate was a little lower, 90.6%. Among IFLS1 dynasties, 90.3% were either interviewed in all 4 waves, or died (Tables 2.1, 2.2), some 6,523 households, of which 6,329, or 87.6% are actually interviewed in all 4 waves. These re-contact rates are as high as or higher than most longitudinal surveys in the United States and Europe. High re-interview rates were obtained in part because we were committed to tracking and interviewing individuals who had moved or *split off* from the *origin* IFLS1 households. High re-interview rates contribute significantly to data quality in a longitudinal survey because they lessen the risk of bias due to nonrandom attrition in studies using the data.

Second, the multipurpose nature of IFLS instruments means that the data support analyses of interrelated issues not possible with single-purpose surveys. For example, the availability of data on household consumption together with detailed individual data on labor market outcomes, health outcomes and on health program availability and quality at the community level means that one can examine the impact of income on health outcomes, but also whether health in turn affects incomes.

Third, IFLS collected both current and retrospective information on most topics. With data from multiple points of time on current status and an extensive array of retrospective information about the lives of respondents, analysts can relate dynamics to events that occurred in the past. For example, changes in labor outcomes in recent years can be explored as a function of earlier decisions about schooling and work.

Fourth, IFLS collected extensive measures of health status, including self-reported measures of general health status, symptoms, pain, doctor diagnosed chronic conditions, time spent on different physical activities and biomarker measurements conducted by a nurse (height, weight, leg length, blood pressure, pulse, waist and hip circumference, hemoglobin level, total and HDL cholesterol, grip strength, lung capacity, and time required to repeatedly rise from a sitting position). These data provide a much richer picture of health status than is typically available in household surveys. For example, the data can be used to explore relationships between socioeconomic status and an array of health outcomes.

Fifth, in all waves of the survey, detailed data were collected about respondents' communities and public and private facilities available for their health care and schooling. The facility data can be combined with household and individual data to examine the relationship between, for example, access to health services (or changes in access) and various aspects of health care use and health status.

Sixth, because the waves of IFLS span the period from several years before the 1998 financial crisis hit Indonesia, to just prior to it hitting, to one year, three years and now ten years after, extensive research can be carried out regarding the living conditions of Indonesian households during this very tumultuous period.

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[2] Households in which all members died are counted as contacted.

In sum, the breadth and depth of the longitudinal information on individuals, households, communities, and facilities make IFLS data a unique resource for scholars and policymakers interested in the processes of economic development. However, the data are complex. In this and other volumes of the IFLS documentation, we seek to provide scholars and policymakers interested in using the data with the information necessary to do so efficiently.

1.2 Organization of This Document

Section 2 documents the IFLS4 Household Survey (HHS), describing the sample and how it changed from IFLS1, providing response rates, and summarizing the questionnaire contents, with comments on respondent burden.

Section 3 documents the IFLS4 Community-Facility Survey (CFS), describing the sample and response rates, summarizing the contents of the questionnaires, and noting links between the household survey and community-facility survey data.

Appendix A describes the process of designing, testing, and fielding IFLS4. Appendixes B and C provide further detail about the household and community-facility survey instruments, respectively.

2. IFLS4 Household Survey

This section describes the IFLS household survey sample, the protocol that was adopted for following movers, and the substance of the survey instruments. Response rates and attrition are discussed.

2.1 Sample Design and Response Rates

2.1.1 IFLS1 Sampling Scheme

Because it is a longitudinal survey, the IFLS4 drew its sample from IFLS1, IFLS2, IFLS2+ and IFLS3. The IFLS1 sampling scheme stratified on provinces and urban/rural location, then randomly sampled within these strata (see Frankenberg and Karoly, 1995, for a detailed description). Provinces were selected to maximize representation of the population, capture the cultural and socioeconomic diversity of Indonesia, and be cost-effective to survey given the size and terrain of the country. For mainly cost-effectiveness reasons, 14 of the then existing 27 provinces were excluded.[3] The resulting sample included 13 of Indonesia's 27 provinces containing 83% of the population: four provinces on Sumatra (North Sumatra, West Sumatra, South Sumatra, and Lampung), all five of the Javanese provinces (DKI Jakarta, West Java, Central Java, DI Yogyakarta, and East Java), and four provinces covering the remaining major island groups (Bali, West Nusa Tenggara, South Kalimantan, and South Sulawesi).

Within each of the 13 provinces, enumeration areas (EAs) were randomly chosen from a nationally representative sample frame used in the 1993 SUSENAS, a socioeconomic survey of about 60,000 households.[4] The IFLS randomly selected 321 enumeration areas in the 13 provinces, over-sampling urban EAs and EAs in smaller provinces to facilitate urban-rural and Javanese–non-Javanese comparisons.

Within a selected EA, households were randomly selected based upon 1993 SUSENAS listings obtained from regional BPS office. A household was defined as a group of people whose members reside in the same dwelling and share food from the same cooking pot (the standard BPS definition). Twenty households were selected from each urban EA, and 30 households were selected from each rural EA. This strategy minimized expensive travel between rural EAs while balancing the costs of correlations among households. For IFLS1 a total of 7,730 households were sampled to obtain a final sample size goal of 7,000 completed households. This strategy was based on BPS experience of about 90% completion rates. In fact, IFLS1 exceeded that target and interviews were conducted with 7,224 households in late 1993 and early 1994.

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[3] The far eastern provinces of East Nusa Tenggara, East Timor, Maluku and Irian Jaya were excluded due to the high cost of fieldwork in these more remote provinces. East Timor is now an independent state. Aceh, Sumatra's northernmost province, was excluded out of concern for the area's political violence and the potential risk to interviewers. Finally, three provinces were omitted on each of the major islands of Sumatra (Riau, Jambi, and Bengkulu), Kalimantan (West, Central, East), and Sulawesi (North, Central, Southeast).

[4] A similar approach was taken by the Demographic and Health Surveys (DHS) fielded in Indonesia in 1987, 1991, 1994 and 1997. The SUSENAS frame, designed by the Indonesian Central Bureau of Statistics (BPS), was based on the 1990 census. The IFLS was based on the SUSENAS sample because the BPS had recently listed and mapped each of the SUSENAS EAs (saving IFLS time and money) and because supplementary EA-level information from the resulting 1993 SUSENAS sample could be matched to the IFLS sample areas. The SUSENAS EAs each contain some 200 to 300 households, although the BPS listed a smaller area of about 60 to 70 households for its annual survey.

In IFLS1 it was determined to be too costly to interview all household members, so a sampling scheme was used to randomly select several members within a household to provide detailed individual information. IFLS1 conducted detailed interviews with the following household members:

- the household head and his/her spouse
- two randomly selected children of the head and spouse age 0 to 14
- an individual age 50 or older and his/her spouse, randomly selected from remaining members
- for a randomly selected 25% of the households, an individual age 15 to 49 and his/her spouse, randomly selected from remaining members.

2.1.2 IFLS2 Re-contact Protocols

In IFLS2 the goal was to relocate and re-interview the 7,224 households interviewed in 1993 (see Frankenberg and Thomas, 2000, for a detailed description). The total number of households contacted in IFLS2 was 7,698,[5] of which 6,821 were original IFLS1 households and 877 were *split-off households*.[6] This represents a completion rate of 94.4% of the IFLS1 households. One reason for this high rate of retention was the effort to follow households that moved from their original housing structure.

If an entire household, or *target respondent*(s) moved then they were tracked as long as they still resided in any one of the 13 IFLS provinces, irrespective of whether they moved across those provinces. *Target respondents* were individuals who split off into new households provided they were a *main respondent* in 1993 (which means that they were administered one or more individual questionnaires), or they were born before 1968 (that is they were 26 years and older in 1993). Not all individuals were tracked in order to control costs.

Once a household was found, the rules for interviewing household members differed for origin and split-off households. In origin households the goal was to interview all members, unlike in IFLS1. In split-off households only target respondents (IFLS1 *main respondents* or IFLS1 household members who were born before 1968), their spouses, and any of their biological children living in the household were to be interviewed. The reasoning was to limit the size of the sample so that interviewers were not overwhelmed with large numbers of new respondents who had only a tenuous connection with the IFLS1 household members.

2.1.3 IFLS2+ Re-contact Protocols

IFLS2+ was fielded in the second half of 1998 in order to gage the immediate impact of the Asian economic crisis that had hit Indonesia starting in January 1998 (see Frankenberg, Thomas and Beegle, 1999). Since time was short and resources limited, a scaled-down survey was fielded, while retaining the representativeness of IFLS2 as much as possible. A 25% sub-sample of the IFLS households was taken from 7 of the 13 provinces that IFLS covers.[7] Within those, 80 EAs were purposively selected in order to match the full IFLS sample. As in IFLS2, all households that moved since the previous interview to any IFLS province were tracked. In addition, new households (split-offs) were added to the sample, using the

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[5] This includes households all of whose members died by 1997 and a few households that merged into other IFLS households.

[6] Italicized terms and acronyms are defined in the glossary.

[7] The provinces were Central Java, Jakarta, North Sumatra, South Kalimantan, South Sumatra, West Java and West Nusa Tenggara.

same criteria as in IFLS2 for tracking individuals who had moved out of the IFLS household. For interviewing individuals within households, the same rules used in IFLS2 were mostly used. In original IFLS1 households, all current members were interviewed individually. One difference was that all current members of split-off households were also interviewed individually, not just a sub-set.

2.1.4 IFLS3 Re-Contact Protocols

The sampling approach in IFLS3 was to re-contact all original IFLS1 households having living members the last time they had been contacted, plus split-off households from both IFLS2 and IFLS2+, so-called *target households* (8,347 households-see Strauss et al., 2004). Main field work for IFLS3 went on from June through November, 2000. A total of 10,574 households were contacted in 2000; meaning that they were interviewed, had all members died since the last time they were contacted, or had joined another IFLS household which had been previously interviewed. Of these, 7,928 were IFLS3 target households and 2,646 were new split-off households. A 95.2% re-contact rate was thus achieved of all IFLS3 "target" households. The re-contacted households included at least some part of 6,800 of the original 1993 households (dynastic households), or 95.3% of those.[8]

Of the contacted households, 10,435 households were actually interviewed in 2000.[9] Of these, 3,774 were split-off households since IFLS1 and 6,661 were IFLS1 households.

As in 1997 and 1998, households that moved were followed, provided that they still lived in one the 13 provinces covered by IFLS, or in Riau.[10] Likewise individuals who moved out of their IFLS households were followed. The rules for following individuals who moved out of an IFLS household were expanded in IFLS3. *Target respondents* for tracking were:

- 1993 main respondents,
- 1993 household members born before 1968,
- individuals born since 1993 in origin 1993 households,
- individuals born after 1988 if they were resident in an origin household in 1993,
- 1993 household members who were born between 1968 and 1988 if they were interviewed in 1997,
- 20% random sample of 1993 household members who were born between 1968 and 1988 if they were *not* interviewed in 1997.

The first two criteria were the same as used in IFLS2. The motivation behind expanding the group of individuals who would be tracked beyond the group followed in 1997 was to be able to follow small children in panel households (children 5 years and under in 1993 and children born subsequently to 1993) and to follow at least a subset of young adults, born between 1968 and 1988. This strategy was designed to keep the sample, once weighted, closely representative of the original 1993 population in the 13 IFLS provinces.

As for individuals, the rules for interviewing individual household members were expanded slightly in IFLS3 from IFLS2. In origin IFLS1 households, everyone who could be was interviewed or had a proxy

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[8] The 6,800 includes 32 households all of whose members died between IFLS2 and IFLS3.

[9] The difference between the 10,435 households interviewed and the 10,574 households found are households all of whose members died since the last survey contacted, or who joined other IFLS households.

[10] There were also a small number of households who were followed in Southeast Sulawesi and Central and East Kalimantan because their locations were assessed to be near the borders of IFLS provinces and thus within cost-effective reach of enumerators.

interview, whether or not they had been household members in IFLS1. In split-off households, all IFLS1 household members, their spouses and biological children, were to be interviewed, but not others (not just the target respondents for tracking, their spouses and children, as in IFLS2). However in many cases all household members were interviewed.

Some 43,649 persons were found currently living in the 10,435 households interviewed. Basic information is available on all persons in the household roster. Of these, 38,823 were to be interviewed with individual books according to the IFLS3 rules laid out above, and of those 37,173 had a direct interview and 1,260 proxy interviews; nearly all of those who should have had either a direct or proxy interview.

2.1.5 IFLS4 Re-Contact Protocols

The target households for IFLS4 were the original IFLS1 households, minus those all of whose members had died by 2000, plus all of the splitoff households from 1997, 1998 and 2000 (minus those whose members had died). Main fieldwork went on from late November 2008 through May 2009. In total, we contacted 13,995 households, including those that died between waves, those that relocated into other IFLS households and new splitoff households. Of these, 13,535 households were actually interviewed. Of the 10,994 target households, we re-contacted 90.6%: 6,596 original IFLS1 households and 3,366 old splitoff households. An additional 4,033 new splitoff households were contacted in IFLS4. Of IFLS1 dynastic households, we contacted 6,761, or 93.6%. Lower dynasty re-contact rates were achieved in Jakarta (80.3%), south Sumatra (88%) and north Sumatra (88.6%). Jakarta is of course the major urban center in Indonesia, and Medan, Indonesia's second largest city is in north Sumatra. It has always been the case for IFLS that in these two metropolitan areas it is hardest to find panel households. On the other hand, in places like west Nusa Tenggara and east Java, our re-contact rates were extremely high (99.3% and 98.1% respectively of dynastic households).

IFLS4 used the almost the same re-contact protocols as IFLS3. In particular, the rules for tracking individuals who had moved were:

- 1993 main respondents,
- 1993 household members born before 1968,
- individuals born since 1993 in origin 1993 households, also in splitoff households if they are children of 1993 IFLS household members
- individuals born after 1988 if they were resident in an origin household in 1993,
- 1993 household members who were born between 1968 and 1988 if they were interviewed in 2000,
- 20% random sample of 1993 household members who were born between 1968 and 1988 if they were *not* interviewed in 2000.

One small change in IFLS4 was that whereas in IFLS3 new babies born since IFLS2 were to be tracked if they were considered household members in 2000, now they were to be tracked even if they were not considered household members in 2007, that is they had moved out in earlier years, but were still alive. Interviewing rules were also kept the same as 2000. In particular, in origin IFLS1 households, everyone who could be was interviewed or had a proxy interview, whether or not they had been household members in IFLS1. In split-off households, all IFLS1 household members, their spouses and children, were to be interviewed, but not others. However as in previous waves, basic information was collected on everyone living in the household in Book K, section AR.

In Tables 2.3a and b it is apparent that tracking is quite important if we want to keep households in the survey. Since IFLS3, only 57% of households did not move, and only 63% stayed within the village/urban community (the later is a decrease of households that did not move from 80% from IFLS2 to IFLS3

waves; presumably in part because of the longer time period between waves 3 and 4). Most of the movers are people who start new splitoff households, ¾ of original IFLS1 households stayed in the same village since IFLS3, but only ½ of splitoffs. Since IFLS1, 70% of original IFLS1 households have stayed within the same village, but only 30% of splitoff households. So, tracking is important. Had we not tracked mover households and splitoffs outside of the village where they were last found, we would have lost a full 1/3 of the households we interviewed in IFLS4.

There were 50,580 individuals in the interviewed households (Table 2.4a). We have at least some information on all of those persons in the household books. In addition, we have information in the individual books on 44,103 persons, whom we interviewed directly or by proxy (only 1,532 were by proxy interview). Of the individuals found in the contacted households, 25,804 (51.0%) were female and 14,388 (28.4%) were 40 years old or older.

To demonstrate the importance of splitoff households in IFLS, we can compare the number of persons found in original IFLS1 households to those found in households that were splitoffs since 1997 (wave 2). They are now approximately equal, 26,160 persons found in IFLS4 in original IFLS1 households and 24,420 in splitoff households (Tables 2.4b and 2.4c).

Among the original 33,081 IFLS1 household members, about half, 16,559 were found in their original IFLS households during IFLS4 (Table 2.5). Another 7,340 were found elsewhere and another 3,116 had died by IFLS4. The recontact rate (including deaths) in IFLS4 among IFLS1 individuals is thus 81.7%. Of IFLS1 main respondents, the recontact rate is higher, 87%. Among age groups, the lowest recontact rates of IFLS1 household members are for persons who were teenagers (15-19) in 1993, while the highest recontact rates are for persons who were older than 40 years in 1993. Over the course of IFLS, 21,357 individual respondents are found in all 4 waves (64.6% of IFLS1 household members), of which 15,117 (68.7% of IFLS1 "main respondents") have interviews in all four (Tables 2.6a, 2.6b).[11]

2.2 Household Survey Instruments

IFLS is a comprehensive multipurpose survey that collects data at the community, household and individual levels. The household survey includes household- and individual-level information. One or two household members were asked to provide information at the household level. The interviewers then attempted to conduct an interview with every individual age 11 and over. For children less than 11, interviewers attempted to interview a parent or caretaker. The strategy used by IFLS2, 2+, 3 and 4 of interviewing all household members, was more expansive than the IFLS1 strategy of interviewing a sample of household members. Because obtaining interviews with all household members is difficult, IFLS4, like earlier waves, included a proxy book that was used for collecting more limited information (from other household members) about individuals who could not be interviewed in-person.

The household questionnaire in IFLS4 was organized like its earlier counterparts and repeated many of the same questions to allow comparisons across waves. The IFLS1 questionnaire contained many retrospective questions covering past events. IFLS4 followed IFLS2 and 3 in asking full retrospectives of new respondents. Respondents in IFLS4 were considered to be *panel respondents* if they had answered individual books in IFLS3. *Panel respondents* were usually only asked to update the information, from the information they provided in IFLS3, although in some cases they were asked to recount histories since 2000. Enumerators had pre-printed forms for every individual they interviewed, containing the answers from which the information was to be updated. For example, in module CH in book 4, women are asked questions about their biological children. Children who were born before 2000 and listed in the relevant sections (CH and BA) of IFLS3 would be listed on the preprinted forms and the enumerator would prompt the respondent with the children born to-date then and then update the information in CH. Table 2.7 outlines the questionnaire structure and contents, which are described in more detail below.

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[11] The difference is because not all IFLS1 members were given individual books.

The household survey questionnaire was divided into *books* (usually addressed to different respondents) and subdivided into topical *modules* or sections. Four books collected information at the household level, generally from the household head or spouse[12]: books T, K, 1, and 2. The next four books collected individual-level data from adult respondents (books 3A and 3B), ever-married female respondents (book 4), and children younger than 15 (book 5). Some modules appear in more than one book to facilitate collecting the data efficiently (for example, ever-married women under 50 answer questions about marriage in book 4, whereas other respondents answer marriage questions in book 3A). Some modules appear in both a household book and an individual book (for example HR), because we wanted to make sure that we collected data for the household as a whole, in addition to collecting data from individuals. Individual measures of health status were recorded for each household member (books US1 and US2). Household members older than age 7 were asked to participate in cognitive assessments of their general intellect, as well as their skills in mathematics (book EK). More detail on the contents of the individual books is provided in Appendix B and in the User's Guide.

Book T: Tracking Book. Book T is a contact book for households, all target households: all original IFLS1 households plus split-off households from IFLS2, 2+ and 3 have at least one book T. A book T was filled out at every location where a household was searched. In the public release only one book T is provided for each household, from when a household was actually contacted, or from the last place where it was searched. For the purpose of users, the key variables are TB1 and TB2, which record whether the household was found and interviewed or not, had all members die, moved or moved into another IFLS household, in which case TB2 lists the household id of the destination household. Book T also has location and other tracking information, which will generally not be important for users and is not in the public release.

Book K: Control Book and Household Roster. Book K records the location of the household, for households that were found and interviewed. Information on the composition of the household and on basic socio-demographic and some economic characteristics were collected, as were information on key characteristics of the housing structure that the interviewer could observe and about the household's plans to move in the future (helpful in planning for subsequent rounds of data collection and in tracking respondents who moved).

Book 1: Household Expenditures and Knowledge of Health Facilities. This book was typically answered by a female respondent, either the spouse of the household head or another person most knowledgeable about household affairs. The first module recorded information about household expenditures[13] and about quantities and purchase prices of several staples. The second module obtained details about transfers from key government programs, including food aid programs, unconditional and a new conditional cash transfer program. The third section elicited the household experience with crime in the past year. Finally the last section probed the respondent's knowledge of various types of public and private outpatient health care providers. This information was used in drawing the sample of facilities for interviews in the Community-Facility Survey.

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[12] In every IFLS wave, one member of the household was designated the household head by the person who provided information on the composition of the household. The head of the household is defined as a person who is responsible for keeping up the daily need of the household or a person whom the members of the household considered to be the head. Where a married couple headed the household, the husband was generally designated the head and the wife, the spouse of the head. The head of the household in IFLS1 was not always the head of the household in IFLS2 or IFLS3, even when still present in the subsequent wave.

[13] IFLS1, 2, 3, and 4 included essentially the same items and reference periods for food expenditures. For non-food expenditures IFLS1 is differently constructed. For each non-food item, IFLS1 asked whether the reported expenditure pertained only to the individual answering the question or the household as a whole. This way of asking about expenditures is not standard in budget surveys and was dropped in IFLS2, with the cost that 1993 expenditures are not directly comparable with expenditures in later waves. IFLS2, 2+,3 and 4 expenditures, however, are directly comparable. The IFLS expenditure module is a shortened version (about 30 minutes) of the three-hour module included in every third year of the SUSENAS. It is very similar to the SUSENAS short-form consumption module.

Book 2: Household Economy. This book was usually answered by the household head or the head's spouse. Sections asked about housing characteristics, household businesses (farm and nonfarm), nonbusiness assets, and nonlabor income. Combined with individual-level data on labor and nonlabor income collected in book 3A, this information can be used to provide a picture of current household income from market-wage income, family businesses and nonlabor income. In addition, new sections in IFLS4 asked about conditions related to avian flu and to the many natural disasters that have plagued Indonesia in recent years. A final section asked about borrowing and repayment of loans taken out in the last year.

Book 3A: Adult Information (part 1). This book asked all household members 15 years and older about their educational, marital, work, and long-run migration histories. In addition, the book included questions on asset ownership and non-labor income, household decision-making, fertility preferences, (for women 50 and older) cumulative pregnancies, subjective views of their happiness and living standards. New sections were asked about retirement and pensions, attitudes about risk and time-preferences, the degree of trust of their neighbors, individual religiosity and attitudes of religious tolerance.

The amount of retrospective information collected varied by section and by whether the respondent had answered book III in IFLS3. Respondents who did not complete book III in IFLS3 were typically asked for lengthy histories that mirrored the data obtained in IFLS1. Respondents who had answered book III in IFLS3 were generally asked only to update the information for the period since 2000. The specific rules varied by module (see *User's Guide* (WR-675/2-NIA/NICHD), Table 2.2.).

Book 3B: Adult Information (part 2). Book 3B emphasized current rather than retrospective information and was heavily devoted to heatlh. Separate modules addressed smoking habits, insurance coverage, detailed health conditions, food intake frequencies, use of inpatient and outpatient care, and participation in community development activities. New questions were added in IFLS4 to make IFLS more comparable to the Health and Retirement Studies (HRS). In this section we added questions about doctor diagnoses of the respondent's chronic health conditions, pains and mental health (depression). Another new module asked respondents to rate the health in imaginary health vignettes that were asked to a random sub-sample of respondents. These health vignettes can be used to anchor the responses to self-reported health questions across groups of respondents, who may have rather different standards of what constitutes poor health. Two other sections (BA and TF) asked in detail about the existence and characteristics of non- resident family members (parents, siblings, and children) and about whether money, goods, or services were transferred between these family members during the year before the interview. Another, new section asked about parental expectations of their children's schooling, health and living standards.

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. The proxy book contains shortened versions of most of the sections included in books 3A, 3B, and 4.

Book 4: Ever-Married Woman Information. This book was administered to all ever-married women age 15–49 and to women who completed book 4 in IFLS3, irrespective of age. 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, although we dropped the contraceptive calendar for IFLS4.

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. For example, the list of acute health conditions specified conditions relevant to younger children. We also made the education section, DLA, more comparable to Section DL in Book 3A, in order to facilitate analyses that follow a child' schooling progression in one wave in Book 5 to Book 3A in a later wave. That was not easily done before, but now it is.

Books US1 and US2: Physical Health Assessments. In addition to the respondent-assessed health status information recorded in books 3B and 5, IFLS4 continued the practice of earlier waves in seeking to collect physical health assessments on every respondent. In IFLS4 two health workers (typically nurses) visited each household to record various measures of physical health for each household member. The specific measurements are listed in Appendix B.

Books EK: Cognitive Assessments. Respondents aged 7-24 were administered cognitive tests to assess their general cognitive level, as well as skills in mathematics. The tests were the same as used in IFLS3. 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. The easy test, EK1, was re-administered to those who had taken it in IFLS3, and the harder test, EK2, also given as these children were now older than 14. Those IFLS3 respondents who had taken EK2 were also administered it again in IFLS4, so long as they were under 35 years in age.

2.3 Notes on Response Burden

The household survey instrument is complicated and takes time to complete. In IFLS we attempt to organize and format the instrument so as to minimize response burden. As Tables 2.8a, b show, the lion share of questionnaire books were completed in one visit. Sometimes the health books took more than one visit, but only 20-23% of the time. The median time to complete a book varied across the books, with the longest times observed for the household expenditure book and the individual-level books addressed to adults, about 40 minutes each.

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 2.8 shows median completion times for respondents of different types. Ever-married women age 15–49 generally spent more time being interviewed than others, the median time being 3 hours, including all books that they were administered. They were asked to answer three individual-level books for themselves and were likely to answer book 1 (household expenditures and knowledge of health services) as well as book 5 if they had young children. The median time for women 50 and older, regardless of marital status, was 130 minutes, and it was the same for married men. Never-married women age 15-49 spent only 100 minutes total answering questions, and a little less for unmarried men. For children aged 11-14, the only children who might have answered questions, the median response time was only 25 minutes.

3. IFLS4 Community-Facility Survey

IFLS collected very detailed information on the characteristics of communities that might affect individual behavior. For each IFLS community in which we interviewed households, extensive information was collected from community leaders and from staff at schools and health facilities available to community residents. In past waves, these data had been collected only in the original 312 IFLS1 communities (9 of which were so-called "twin" enumeration areas, that resided in the same larger community, thus making up 321 communities in total). In IFLS3, a reduced, basic set of data for new communities to which IFLS3 households moved was also collected and this was continued in IFLS4.

This section describes the community-facility survey sample for IFLS4, summarizes the contents of the survey instruments, and notes the links between community-facility and household survey data.

3.1 Sample Design

The community-facility survey sought information about the communities of household respondents. We followed the procedures of IFLS2 to obtain most of our information, but added some new modules and several new books: In part this was to facilitate analysis of the large decentralization of control government services that began in early 2001, and in part to track recent social safety net programs and allow evaluations to be conducted.

- The official village/township leader[14] and a group of his/her staff were interviewed about aspects of community life. Data were extracted from community records, reported in Book 2. Supplementary information was obtained by interviewing the head of the community women's group,[15] who was asked about the availability of health facilities and schools in the area, as well as more general questions about family health, Book PKK.

- In visits to local health facilities and schools, staff representatives were interviewed about the staffing, operation, and usage of their facilities, prices and the availability of appropriate equipment and supplies. For health facilities, measures of process quality were taken. We also added a new book regarding a new set of local health services for the elderly and re-introduced an old one for traditional practitioners.

- Data on prices were collected from three complementary sources: from a large local market, two stores or street stalls and an interview with a group of up to three knowledgeable local informants.

- We interviewed up to two local informants from different backgrounds about various aspects of village life, including social safety nets, decentralization and local governance.

- We re-introduced the ADAT book, which collects information about local traditions regarding many aspects of life, ranging from marriage, to childbirth, to death and inheritance, to land use, to conflict and mutual cooperation in the community. This was last collected in 1997, in IFLS2, so now we can see what changes, if any occur in these village norms.

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[14] In Indonesia, village leaders are typically elected whereas municipality leaders are appointed. We use the terms "village" and "municipality" interchangeably.

[15] Besides having a village leader, Indonesian villages have a Family Welfare Group (PKK), usually headed by the wife of the village leader. The PKK is responsible for implementing a 10-point program mostly relating to family health. Although the village leader is nominally responsible for family health, activities related to family health are almost always sponsored by the PKK.

- Another new addition of IFLS3 continued in IFLS4 was to interview the official village/township leader of the communities to which IFLS respondents had moved (different from the 312 original IFLS1 communities) to obtain a minimal amount of information on communities to which households had re-located. We collected information on factors such as total population, conditions of the village, access to the village, electricity availability, water, schools and health services in the village, existence of social safety net programs and some prices. This book was expanded some in IFLS4 to include better coverage of safety net programs and prices.

3.1.1 Sample Selection for Facilities

To cover the major sources of public and private outpatient health care and school types, we defined six strata of facilities to survey:

- Government health centers and subcenters (*puskesmas, puskesmas pembantu*)
- Private clinics and practitioners including doctors, midwives, nurses, and paramedics (*klinik, praktek umum, perawat, bidan, paramedis, mantri*)[16]
- Community health posts (*posyandu*)
- Community health posts for the elderly (*posyandu lancia*)
- Traditional health practitioners
- Elementary schools (*SD*)
- Junior high schools (*SMP*)
- Senior high schools (*SMU*) / Senior vocational high schools (*SMK*)

IFLS4 used the same protocol for selecting facilities as in earlier waves. 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. We followed the strategy first used in IFLS3, to track households that moved to or near the EA (in the same village/ kecamatan) during the main field work period, rather than after main fieldwork was over. This enabled us to add facilities to the sample frame from locally- tracked households. This strategy was adopted since it was felt that the tracked household information would cover facilities in the EA.

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.

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[16] Because of time and money constraints, IFLS2 and IFLS3 did not interview traditional practitioners, as did IFLS1. In IFLS4 we added them back in part because there were indications that they had become more important in recent years. And whereas IFLS1 grouped doctors and clinics in a different stratum from midwives, nurses, and paramedics, those strata were combined in IFLS2 and IFLS3 because of the difficulty of categorizing practitioners correctly. An advantage of grouping all private practitioners in one stratum is that the mix of provider types interviewed within the stratum better reflects what is available in the community. For example, in communities where paramedics were more plentiful than doctors, the mix of interviewed providers reflects that fact.

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.

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 household attending.

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. The goal was to obtain, for each stratum, data on multiple facilities per community. The quotas were different for different strata. For example, a larger quota was set for private practitioners than for health centers because Indonesian communities tend to have more private practitioners than health centers.

Stratum	*Quota per EA*
Government Health centers and subcenters	3
Private clinics and practitioners	5
Community health posts	2
Community health posts for the elderly	1
Traditional practitioners	2
Community informants	2
ADAT book	1
Elementary schools	3
Junior high schools	3
Senior high schools	2

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.[17] Note that because we sampled randomly from sample frames constructed by householder knowledge of facilities in 2007, we may not necessarily have re-sampled facilities that were sampled in IFLS1, 2 or 3; however many facilities will be the same.

[17] 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.

Community Informant and ADAT Sampling Frame. Sampling was also used to identify the informants to be interviewed for the community informant and ADAT books. Six potential informants were listed for the community informant book, out of which up to 2 were chosen randomly. The six were suggested by the community leader (kepala desa or kelurahan), one each in six categories: elementary school principal, religious leader, youth activist, political party activist and business leader. Two random numbers one to six per EA were generated by the RAND programmer before field work and those were used to choose the type of informants for that EA. For the ADAT book, we asked for ADAT leader to be mentioned, and that person was chosen. In communities with no ADAT leader, usually urban, religious leaders who know about ADAT were asked for and if needed elderly knowledgeable about ADAT. The extra issue for the ADAT book was for communities with multiple ethnic groups (ADAT tends to be specific to a group). If there was a group that comprised over 50 percent of the local population, then people from that group were solicited. If however there was no dominant group, we collected two ADAT books, one for each of the largest two ethnic groups.

3.1.2 Response Rates

Table 3.1 shows the number of community-facility respondents and facilities covered in IFLS1, 2, 3 and 4. In all waves we met our interviewing quotas. In IFLS4 over 950 public health clinics and sub-clinics; almost 1,600 private health facilities; over 600 community health posts and 300 health posts for the elderly and over 2,500 schools were interviewed. Table 3.2 shows the number of facilities interviewed in each province, by stratum.

Despite not being intended, a number of the same facilities interviewed in IFLS4 were also interviewed in IFLS3, 2 and 1. This was especially true for public health centers and sub-centers and for schools. For these groups the turnover rate is small and the number available to be sampled per community is also small. The lowest re-interview rate was in private health facilities. This is not surprising since there are numerous private facilities, so the sampling rates are smaller, plus the yearly turnover is larger. The re-interview rate could have been increased by deciding *a priori* to go back to the same facilities that we visited in the previous waves. However, we judged it important to refresh the sample in 1993 and 1997 to allow for new facilities, since the community-facility survey was intended to portray the current nature of the communities and the facilities in which IFLS households resided. Table 3.3 shows the number of facilities interviewed in IFLS4 for which IFLS1, 2 or 3 data also exist, and the number of new facilities interviewed only in IFLS4. The exception is community health posts (posyandu). No community health post interviewed in IFLS4 has the same ID as its previous IFLS counterparts. That is because both the locations and volunteer staff change over time, so determining whether an IFLS4 post was the same as a post in IFLS1, 2 or 3 is effectively impossible. It is perhaps more appropriate to regard a community health post as an activity rather than a facility. As one can see, many IFLS4 facilities were interviewed in at least one earlier wave, especially for government health clinics, primary and junior high schools.

3.2 Survey Instruments

As with the household survey, the community-facility questionnaires were divided in *books* (addressed to different respondents) and subdivided into topical *modules*. Community-level information was collected in six books: book 1, book 2, book *PKK*, book *SAR*, book informant, the prices books and book *ADAT*. Health facility information was collected in books *Puskesmas*, Private Practice, *Posyandu* and *Posyandu Lancia* and Traditional Practitioner. Each level of school was covered in a single book, because the contents were nearly identical: book School. Table 3.4 briefly summarizes the structure and contents of each book, which are described below and in Appendix C in more detail.

3.2.1 Community Questionnaires

Book 1: Community History and Characteristics. This book collected a wide range of information about the community. It was addressed to the head of the community in a group interview. Ideally the group included 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 varied across villages, reflecting who was available and whom the village leader wanted to participate. Respondents were 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. New sections in IFLS4 asked about new social safety net programs, social interactions trust, governance decentralization and natural disasters.

Book 2: Community Statistics. This book provided 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. In IFLS4, like IFLS3, information on local budgets and revenues were gotten. The village or township leader or their staff showed the interviewers information from the APPK (Kelurahan Budget Management) or APPKD (Village Revenue and Expenditure Budget). If neither source was available, the village head was asked to estimate the answer, which was recorded as an estimate. Separate modules asked the interviewer to make direct observations about community conditions.

Book PKK: Village Women's Organization. This book was administered to the head of the village women's group, the PKK. Respondents were 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 SAR: Service Availability Roster. The Service Availability Roster (SAR) was intended to gather in one place cumulative information across all waves, on all the schools and health facilities available to residents of IFLS communities. It included

- Facilities cumulatively identified in the previous waves, IFLS3- SAR (which included facilities listed in IFLS1, 2 and 3)
- New facilities identified by respondents in IFLS4 household modules PP and AR but not mentioned in IFLS3-SAR
- Any other facilities mentioned by the head of the village/township or the women's group head in Modules I and J in IFLS4 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, covering the period of IFLS. 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.

Book ADAT: Traditional law and community customs. This book, re-introduced in IFLS4 after 10 years, was designed to collect detailed information on the community traditions regarding many aspects of life in the community. Many modules were the same as in IFLS2, but some new modules were added. Aspects of life covered ranged from marriage and birth to death and intergenerational transfers, to land and other disputes, to decision making in the community. Comparing the common sections between IFLS2 and 4 one can track changes in local customs over this ten year period that saw such major changes in Indonesia.

3.2.2 Health Facility Questionnaires

Separate books were designed for each health facility stratum:

- Book Puskesmas for government health centers and sub-centers
- Book Private Practice for private doctors, clinics, midwives/village midwives, nurses, and paramedics
- Book Posyandu for community health posts
- Book Posyandu Lancia for community health posts for the elderly
- Book Traditional practice for traditional health practitioners

The contents of books Puskesmas and Private Practice were very similar to those in earlier waves to maximize comparability. Both books were 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.

Both Puskesmas and Private practice books collected data on the availability and prices of services, lab tests, and drugs; and on the availability of equipment and supplies. Both allowed the interviewer to record direct observations about the drugs stocks, laboratory, and vaccine storage rooms. A module in both books was concerned with the availability and prices of services for "poor" patients, covered by new health social safety net programs. Special modules in book Puskesmas focused on decentralization, decision making, and finance, repeating baseline modules from IFLS3. Also health vignettes were re-introduced in IFLS4. 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 books Posyandu and Posyandu Lancia reflected the different roles these facilities play in providing health services to mothers and children and to old people. They asked 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 were general questions about health problems in the village. Modules, added in IFLS3, were continued about the posyandu revitalization program and resources.

3.2.3 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 EBTANAS) for a random sample of 25 students for each test,[18] and counts of teachers and students for the school year 2006/2007.

3.2.4 Mini-CFS questionnaire

This book was new in IFLS3 and continued in IFLS4. It applied to community leaders from villages that were not original IFLS villages, where the IFLS households/members had moved. This book contained a shortened combination of questions of books I and II. It collected basic data of the village's infrastructure such as total population, main sources of income, number of health facilities by type, and price and wage data. The information collected in this abbreviated book was expanded in IFLS4.

[18] UAN and EBTANAS tests are national achievement tests administered at the end of each school level (e.g., after grade 6, for students completing elementary school). The scores can be used to judge student achievement levels in a school.

Appendix A:
Survey Operations

This appendix describes the process of developing and fielding IFLS4. The survey was designed between February and September 2007. Interviewer training began in mid-October 2007 (after Ramadan and Idul Fitri), and field work took place largely between late November 2007 and the end of April 2008, with long distance tracking extending through the end of May 2008. Table A.1 shows a timeline of IFLS4 activities.

Development of Questionnaire and Field Procedures

The household and community-facility questionnaires fielded in IFLS1, plus the improvements made in IFLS2, 2+ and 3, provided the base for the IFLS4 questionnaires. The goal was to keep the instruments as similar as possible across the four full waves in substantive content and questionnaire wording so as to maximize comparability to enable longitudinal analyses by users. Changes were made to correct mistakes considered large and important and to collect new data on topics of particular interest: coverage and workings of new public social safety net programs, decentralization and governance, risk and time preference attitudes, and total and HDL cholesterol blood tests, to name a few examples. A few questions and modules from earlier waves were deleted, skip patterns were occasionally changed to improve the interview flow and new modules and questions were added.

Piloting of new or heavily changed modules was done in Yogyakarta and other locations outside of Java, between February and June 2007. The contents of the IFLS4 questionnaires are summarized in Sections 2 and 3 of this document for the household survey and community-facility survey, respectively. More details are available in Appendices B and C of this document and in the *IFLS4 User's Guide 2 (WR-675/2-NIA/NICHD,)*.

The instruments, data entry software (CSPro), and field procedures were extensively tested before the fieldwork began. Protocols for locating and re-interviewing IFLS respondents were revised, based on IFLS3 protocols, and were tested and further revised during pilot tests and full-scale pretests for IFLS4. New questions and modules were developed and tested using focus groups and pilot tests. The household questionnaire and biomarker questionnaires were tested in their entirety during a full-scale pretest. The community-facility questionnaire had a separate pretest. Pretests allowed us to evaluate questionnaire changes in a field setting.

Pretest of Household Questionnaire

The pretest of the household questionnaire was conducted in Solo (urban) and nearby Sukaharjo (rural), Central Java from July 2 to July 21, 2007. The pretest focused on questionnaire content, field editing protocols and general field procedures. Its primary objectives were to:

- Fully test the revised household questionnaire under field settings, separately for an urban and a rural area
- Evaluate the length of the questionnaire, the length of each module, and the burden imposed on different types of respondents.
- Evaluate the content of new questionnaire modules or those with major changes.
- Testing the use of preprinted materials for panel respondents

We used 15 staff for the pretest, many of whom who had been senior field staff in earlier waves of IFLS and who were targeted to be senior field staff for IFLS4. The PI and co-PIs also participated. The three

weeks were spent in thoroughly training the staff in the use of the revised questionnaires by using and further developing teaching materials that would be later used in training. This training was very participatory and as a consequence many questionnaire revisions were made as a result of discussions. Live respondents were brought into the meeting rooms during the period for practice. At the end, a formal full field test was conducted on 50 households (25 each, rural and urban) over a six day period. Based on debriefings from the pretest and on statistical analysis of the data, further changes were made to the questionnaires.

CAFE Procedures. In order to use computer-assisted field editing, all questionnaires had to be keypunched in the field. This had the advantage of allowing for data checks in the field. The basic procedures and programs required for CAFE had been developed for IFLS2 and IFLS2+ and provided convincing evidence that CAFE was feasible. In IFLS3 we used CAFE for the household survey, but not for the community-facility survey because it did not prove possible to get the necessary programming completed before the community-facility survey fieldwork began. In IFLS4 we overhauled Café completely and used it for all operations, the community-facility survey as well as the household survey. The overhaul was to change the program from ISSA to CSPro. Our three programmers worked under the supervision of Trevor Croft to accomplish this task.

CAFE allowed a far more thorough check of completed questionnaires than is possible with traditional manual (e.g., eyeball) methods of editing. CAFE reduced missing data and cleared up confusion due to interviewer handwriting. When interviewers completed a questionnaire book, they first edited it themselves, then turned it over to the editors, who entered the data using laptop computers. If the software indicated a problem with data being entered, the editor conferred with the interviewer to resolve the problem. If interviewer wasn't immediately available, the question was flagged and held until the interviewer's return. Interviewers were usually able to correct a problem on the spot without having to return to the household, but did return to the household when deemed necessary.

The new CSPro program was thoroughly tested before training and during training. When errors were found they were immediately corrected. Once in the field, new versions of the program, when required, were distributed to teams on the IFLS4 website. Teams were notified by SMS that new versions needed to be downloaded.

Pretest of Household Tracking Procedures

Because re-interviewing panel respondents was deemed to have been a key to the success of prior waves of IFLS, much effort was devoted to testing and training in procedures for finding households and respondents. We used the survey management information systems that we had developed for IFLS3 to make sure that all households and individuals had been interviewed as appropriate, that tracking had been done where it should have, and so forth. In May 2007 we conducted a field test for 7 days, in two locations: one in Semarang and one in Bantul, just south of Yogyakarta. We successfully tested both our tracking procedures and our management information system, as well as developed the training procedures to be used**.** We tracked in actual enumeration areas and were able to find all of our target IFLS households, enumerated them and found splitoff households. This information was later passed on to the field teams. The Bantul area had been hard hit by a major earthquake, so that finding households there was a good test of our ability to find households in areas that experienced major natural disasters.

Health Measurement Pilot Test and Training

During the main household pretest, we conducted a pilot test of the new physical health measurements:

the grip strength dynometer and the cholesterol blood test.using pinprick blood samples and the cholesterol meter.

A full field test of the health procedures was undertaken during the training of the health workers, which was held in Solo, November 8-November 13 2007, coordinated by our staff. 48 trainees began, of which forty-six were chosen. Teams of two health workers per team were assigned, a man and a woman paired together whenever possible (we did not have enough male health workers to do this in all cases). After the health training ended, those health workers who were part of the first wave of field work then joined the first household enumerator training session for field practice. At that time we developed protocols to fully integrate the health workers into the interview teams. Those health workers who were not going into the field until December with the second wave of teams were sent home temporarily. They came back to Solo towards the end of the second household enumeration training, at which point they received a refresher training for one day and then joined the household enumerators for field practice.

Pretest of the Community-Facility Survey

The community-facility survey pretest was held July 30-August 15, 2007 in Solo.. It was a full test of the instruments and procedures, in both rural and urban areas. There were 15 participants, plus the PI and 2 co-PIs.

Field Staff for the IFLS4 Surveys

The IFLS4 interviews were conducted by household and community-facility survey teams under the coordination of a field coordinator or assistant field coordinator. Thirteen field coordinators were assigned to head the teams in each of the province enumerated. They were senior staff who had been involved in previous waves of IFLS. In some provinces there were two teams under the same field coordinator, in which case the coordinator moved from team to team. Also the household team and café supervisors undertook some responsibility. The field coordinators also had responsibility to oversee the CFS teams, although in this case the CFS team supervisor also carried responsibilities.

There were a total of 23 teams in the 13 provinces. The composition of the household and community-facility teams is as follows:

HHS Team	CFS Team
1 Supervisor	1 Supervisor
6-8 interviewers	2 interviewers
1 CAFE supervisor	1 CAFÉ editor
2 CAFE editors	
2 Health workers	

The interviewers and CAFE editors were recruited from within the provinces in which we interviewed by senior staff from CPPS and Survey Meter, who traveled to visit the provinces' Population Studies Centers. The CPPS and Survey Meter staff interviewed potential interviewers while there and collected resumes on all applicants. Interviewers were selected to obtain an appropriate mix of language abilities. For example, the team that was sent to the island of Madura contained some Maduranese-speaking interviewers. Language ability was less of an issue for the community-facility teams, since most community-facility survey respondents were in a position of authority and thus likely to speak Bahasa Indonesia.

Team supervisors were selected among the prospective candidates at the end of the interviewers' training. They were selected based on criteria such as the previous experience, knowledge of the local area, knowledge of the questionnaires and leadership qualities.

The names of the field staff in each province are listed in Table A.2.

CAFE supervisors were recruited from those who had showed a good understanding of the questionnaires, plus who were versatile with computers. Each pair of household and community-facility teams was supervised by either a Field Coordinator or an Assistant Field Coordinator (with backstopping from a Field Coordinator). Field and Assistant Field Coordinators were recruited as much as possible from those with data entry experience in prior waves of IFLS.

Supervisory training was held for all senior personnel: potential household and community-facility survey and CAFE supervisors, Field and Assistant Field Coordinators; in Salatiga, Central Java, from August 27-September 15 2007. Most of these personnel had participated during the household or community-facility survey pre-tests. This "training of trainers" included reviewing all parts of the survey: household, community-facility, health, CAFE, tracking and the management information systems. The idea was to make everyone who had senior positions and would be involved in training of enumerators completely familiar with all aspects of the survey.

Each team (household and community-facility) was designated by a letter code. In addition, each team member received a two-digit numeric code, of which the first digit signifies the team member's job (see below for designations). The combination of the letter and numeric code uniquely identifies each field staff member. This information is recorded on every questionnaire book cover.

Field Staff Codes

11 = Field Coordinator

31 = HHS supervisor
41 = CAFE supervisor
51 = CFS supervisor
61–69 = HHS interviewer
71–74 = CFS interviewer
81–84 = CAFE editor
91–94 = Health worker

Interviewer Training

Household interviewer training was conducted in two phases and took place in Solo, Central Java. The training was divided in order to keep the number of trainees at any one time to a manageable level. Thirteen teams from South Kalimantan, South Sulawesi, West Nusa Tenggara, South Sumatra, East Java, Jakarta, and West Java, were trained in the first wave, from October 22-November 19 2007. Some 151 trainees took part of whom 127 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. The second training, for 10 teams covering Central Java, Yogyakarta, Bali, North Sumatra, West Sumatra and Lampung ran during the period November 21-December 19 2007. There were 108 participants, out of which 96 were used as household enumerators, data entry workers and supervisors. Training for the community-facility survey ran from January 7, 2008-January 26 2008, in Salatiga. We began with 106 trainees of whom 92 were chosen for field work. As mentioned, the health workers were trained from November 8- 2007 in Solo.

Field work was divided into two phases, like the training. As soon as the first wave training was complete, the first wave teams went into the field. Likewise the second phase fieldwork began immediately after second phase training.

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 Solo, 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. Community-facility survey interviewers were trained for 16 days in the classroom and 4 days in field practice.

For household survey enumerators, field practice lasted four days. Household interviewer teams were assigned to interview certain households, and supervisors were responsible for making sure that the work got done, while CAFE editors and supervisors were responsible for entering the data. Health workers joined the field practice and conducted health assessments on members of the practice households. Community-facility survey teams had x days of field practice following their classroom training.

Fieldwork

A total of 23 pairs of teams (household and community-facility) were sent into the field; 315 persons working on household survey teams and 69 on community-facility survey teams (See Appendix Table A.2). An additional 12 staff worked in our central headquarters in Yogyakarta facilitating logging in and cataloging data, coordinating the logistics of sending money and supplies to teams, checking problems identified by teams, and using our management information system to check that questionnaires that were supposed to be filled out, were, and sending back lists of cases that needed completion (see Appendix Table A.3).

As mentioned, there were two phases of main fieldwork: the main fieldwork periods went from November 25 2007 to end of May 2008 and from December 26 to mid-June 2008. As teams finished their main fieldwork period they began their long-distance tracking phase (from roughly mid-April to early July 2008). During main fieldwork, each pair of teams was assigned a route that would take them to 8–12 enumeration areas. The household survey team interviewed first, typically taking just over one week per EA, with the community-facility team visiting the same EA shortly after the household team had left. Table **A.3** indicates which teams worked where, and how many EAs were in each province. Teams worked in only one province, but some provinces required multiple teams. After the main fieldwork ended, some interviewers moved to different provinces to help locate and re-interview movers during the tracking phase.

Main Fieldwork

In each EA, the following sequence of events took place:

1. The household supervisor (also the location assistant) made an advance visit to the EA to meet the leaders of the community, obtain local permissions, arrange a base camp, and scout for target IFLS households, making a map of the EA and the location of IFLS households within the EA for interviewers to use while canvassing.

2. The household, health interviewers and CAFE team arrived. Pairs of interviewers (typically one male, one female) were assigned households to contact and re-interview.[19] Their initial task was to establish "first contact" with an IFLS target household member and complete the household preprinted roster. The supervisor would typically go with each team when they first arrived in an EA to help find the household for the first time. Interviewers were responsible for turning in a book T for every IFLS household target household, even if they

[19] Male-female pairs were used because households appeared to feel more comfortable than when approached by two males, and it was more culturally appropriate to have female interviewers complete the questionnaire modules pertaining to pregnancy and contraception.

were unable to locate the household or receive consent from the household to participate, and a book K for every household interviewed.

3. As household interviewers completed questionnaire books, they turned them over to the CAFE team, which entered the data, edited the data, and resolved any questions or inconsistencies with the interviewers. Sometimes interviewers returned to the respondents to clarify answers.

4. The household supervisor monitored progress using a variety of management information system forms, observed interviews that were randomly chosen, randomly visited households to check interviewers' work, and handled financial and logistical issues.

5. The household supervisor in his/her role as location assistant, sometimes with the help of the Field or Assistant Field Coordinator, oversaw the collection of information about households or target respondents who moved and worked with the team and the Field Coordinator to determine whether a mover could be tracked locally. If the mover was thought to be within a 45 minute trip by public transport, the team attempted to track the mover while working in the mover's origin EA (local tracking). In addition, for these local movers, the local community leader was sought out, usually by the household supervisor or the Field Coordinator, in order to fill out the Mini-CFS book.

6. The health workers visited each household to conduct the physical health assessments.

7. When all household interviews were completed, the household supervisor assembled the *NCR pages* from the household questionnaires that the community-facility team needed for drawing the facility sample. He or she then had the pages delivered to the community-facility team, either by the Field Coordinator or a hired messenger. The household supervisor also attempted to electronically transfer the data files to the central field headquarters in Yogyakarta, at a local internet cafe. This was done by uploading data directly onto our field website, which was protected by security codes. If this was not possible in an area, then the supervisor mailed diskettes with the data. The supervisor also completed a financial report and mailed it along with the paper questionnaires to IFLS headquarters in Yogyakarta. Dried blood spots were mailed special mail to our headquarters so that they could be logged in and put into the deep freezer. They were not kept in the field for more than 3-4 days.

8. When the electronic data were received on our website Roald Euller, our main programmer at RAND, downloaded them onto a security-protected computer at RAND In Yogyakarta the data were checked to make sure that all books that should have been filled in, were, and that data from those books were in the electronic files. Sometimes corrections were made in which case new files were uploaded to our Indonesia website.

9. The community-facility team arrived, after the completion of household interviews. The community-facility survey supervisor drew the facility sample, assigned interviews to the interviewers, completed the Service Availability Roster (SAR), and assigned identifier codes to facilities on the SAR and on the NCR pages from the households.

10. The community-facility interviewers conducted their assigned interviews and the CAFÉ editor input the data into our laptops.

11. When all community-facility interviews were completed and entered into our CAFÉ program, the supervisor completed a financial report and mailed it, along with the paper questionnaires, to Yogyakarta Like the household data, CFS data were uploaded onto our IFLS website and then downloaded by Euller.

Tracking

Once each team had completed work in all of its assigned EAs, the household interviewers were given additional tracking assignments for households or individuals that had not been located during the main fieldwork period but were thought to reside in that province. In addition to being provided with the names of the households and individuals that needed to be tracked, the teams were given the tracking forms (T1, T2) that had been collected in the origin EA (with contact information, for example, from local informants) and in prior survey waves (a complete file on each household of where it had ever been found and contact information) about the potential whereabouts of each case. If an EA showed a low household re-contact rate that we thought could be raised through revisits (for example, if households had been located in the original EA but had not been able to participate at the time the team was there, or if information on movers was inadequate), the teams were asked to return and try to re-contact households or to obtain better information on movers. Also, if a prime-aged, healthy person had not been found, so a proxy book used to acquire information, an interviewer was sometimes sent back to attempt to find and interview that person. Also if several persons in a household had been missed by the health workers, they were sent back to get measurements.

Managing the tracking information was centralized in Yogyakarta, and tracking assignments were made from there after consultation with the team's Field Coordinator. Tracking progress was monitored daily from Yogyakarta based on faxed reports from the field. Records of each household's and target individual's interview status were maintained in an electronic database, which was developed from the survey data entered during the main fieldwork and updated as cases were completed. The fact that we had information on who needed to be tracked along with their whereabouts played an important role in the success of our tracking.

The tracking phase was one of the most arduous in terms of managing the work and keeping the staff motivated. We judged it important to centrally monitor success rates and set work priorities. As interviewers tired and remaining cases became more stubborn, we assigned smaller and smaller tracking teams. The most talented field supervisors were sent to particularly difficult areas, where they worked with tracking teams and on their own to pursue respondents' whereabouts. Teams and sometimes respondents were visited by the RAND project director and assistant directors, as well as by senior staff from the central office. Team prizes in the form of interviewer bonuses were offered to the teams with the best records in finding respondents.

Data Entry, Verification, and Data Cleaning

In the Field: CAFE Editing, Interviewer Rechecks

CAFE operations were an important ingredient to the success of IFLS. This was an innovation begun in IFLS2. 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.

A process of Computer-Assisted Field Editing (CAFE) was used to help maintain data quality for both the household and community-facility survey data.[20] 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.

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[20] Café data entry for the Community-Facility Survey was introduced for the first time in IFLS4..

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. For example, if in section TK, a person reported income from self-employment, the interviewers checked sections UT and NT to see if we had a corresponding entry there. If not they would go back to the household to re-check.

When the CAFE team's work was finished for an EA, the data were uploaded to our website and subsequently downloaded by Roald Euller at RAND. 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, pioneered during IFLS2 for the household survey. We extended its use in 2000 to the community-facility survey data in IFLS3. 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. There were 26 persons working on the household survey lookups and related activities and 12 on the community-facility side (see Appendix Tables A.4 and A.5 for a list of persons). The look-up period began in June 2008 and continued through the end of July.

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.

For IFLS4 the lookup checks were greatly streamlined from past waves in order to speed up the generation of public use data. Lookups concentrated on:

1. Examining the data for duplicate pidlinks and fascodes and recommending fixes for those cases. There were several errors in pidlinks that were found, discussed in User's Guide Volume 2, that basically involved individuals who were thought to be new in IFLS3, but who were actually panel respondents. This had been carefully checked during the IFLS4 fieldwork, and reviewed during the lookups phase.
2. entering fascodes for facilities into the household data where they should appear, such as codes for the health facilities visited in modules RJ and RN
3. Checking line numbers in AR, for instance of mothers and fathers, to be sure they were correct
4. Corrections for data errors in the very early enumeration areas due to errors (corrected later) of the data entry program
5. Checking for any sex changes for panel individuals (none were found)
6. Double data entry for several randomly chosen households for every data entry person to check for systematic errors from the original entry (none were found). Some facilities had duplicates in the data base, but appear as separate facilities because their facility codes are different. This occurred when some EAs were located so closely together that some facilities could appear in mulitple EAs. In the field, it was sometimes difficult to know whether the facility had appeared in other EAs or not, especially if the field teams for those EAs were different. In principal we want

duplicate facilities in different EAs to have identical facility numbers. To allow for this, we did extensive checking on facility codes, comparing between names, addresses, locations, GPS data on locations, and also interviewers notes.

7. In the field we used 2005 BPS location codes, that were preprogrammed into the data entry laptops. These codes were later updated to 2007 codes (appropriate for the 2008 SUSENAS). This required obtaining a crosswalk for the two years' codes and crosswalks going back to the last codes we had used for IFLS3 (1999). Unfortunately the crosswalks, obtained from BPS were incomplete and had to be updated by hand. This took time and care and was done by a small team in Yogyakarta under th esupervison of Witoelar. Once this crosswalk was created, we created the variable SC21, which indicates whether the household has moved out of the village, out of the kecametan, kabupaten, or province. We needed to convert the 2007 BPS codes to the 1999 codes used in IFLS3 to create this variable.

In Santa Monica and Washington D.C.

In Santa Monica and Washington D.C. we did additional cleaning to correct remaining errors and to make the publicly available files as easy to use as possible.

Occupation and sector codes

We continued our practice to assign occupation and sector codes from the descriptions that respondents provided. Arya Gaduh, a graduate student in economics at USC was dedicated to this task, supervised by Strauss and Witoelar, which involved using an programmed dictionary of terms and assignments from those terms to 2-digit occupation and 1-digit sector codes. This was a fairly long and tedious iterative process. Roald Euller did the programming and sent outputs to Gaduh to check and resolve.

New PIDLINKS, COMMID and MKID

As in prior waves, new pidlinks were created after lookups and checks for duplicate pidlinks. Also new COMMIDs and MKIDs had to be created for new 2007 movers. The latter two required the location codes to be updated as described. This was done in a process that involved Witoelar, Euller and Strauss.

HTRACK and PTRACK

New HTRACK and PTRACK files had to be created. To do this required constructing several new variables such as SC21, and variables such as RESULT07 and MOVER 07. See Volume 2 of the User's Guide for more details. This was done by Euller, under the supervision of Witoelar.

Module Checks

For each data module, we made an effort to

- Create or correct X variables so that the special codes were preserved and the associated numeric or character variable contained only valid responses. X variables are associated typically with a numeric value and indicate whether or not the person was able to answer the question (see the *User's Guide* for more details about X variables).

- Check that TYPE variables exist in grids (see the *User's Guide* for details about TYPE variables).

- Check for duplicate observations.

- Find and drop any variables that might enable identification of a respondent.

Created Variables and Files

We created some variables and data files to make the data easier to use. For example:

- Variable *MOVE07* summarizes the information on a household's current location relative to its location the last wave it was found in.

- Data files HTRACK07 and PTRACK07 indicate what data are available for households and individuals (respectively) in each survey wave. Population weights and complete location codes for district and sub-district are also included, as are special survey variables allowing users to link the households to the communities where they live.

- The district and sub-district location codes based on BPS codification have been provided in order for users to link IFLS with other, national data sources such as SUSENAS or SAKERNAS. In addition, since BPS codes change across years, in some cases multiple year codes are available.

- Since the age and date of birth information can be very different in different questionnaires, we construct our "best guess" of each person's age using all of the data in IFLS4 and report this in PTRACK07. This was also done for IFLS2 and 3 and we use the same algorithm, so that one has consistently derived best guesses for these two very important variables from each wave.

- Variable PPCHILD indicates whether a PP child roster was used. If so (PPCHILD = 1), a line number in the IFLS4 child roster refers to the same individual listed for that line number in the IFLS1, 2 or 3 child roster.

Appendix B:
Description of the IFLS4 Household Survey Questionnaire

This appendix expands on the summary presented in Section 2 for those interested in more detail about the IFLS4 household survey instrument. Other details appear in the *IFLS4 User's Guide (WR-675/2-NIA/NICHD, 2009)*.

Tracking Forms:

The tracking forms, T-1 and T-2 and Book T are not released in the public files because they contain private information, but we describe them here because it is helpful to understand the tracking procedures. The tracking forms contain information needed to track and contact households or individuals who moved within the IFLS study area (form-1 for households and form-2 for individuals). The tracking forms were filled out whenever a tracking book, Book T, indicated that the household or an individual within it could not be found (and the individual was one who was supposed to be tracked). The tracking forms contain information on the address and location of the household or individual being tracked; the name of informants in the origin and destination areas; the place of work of the head of household, the spouse or any other member of the household who works; and a sketch of the route taken to get to the tracking location.

Book K: Control Book and Household Roster

The interviewer completed this book, or a portion of it, for all households interviewed in IFLS4. Module SC indicates the precise location of the household. Much of this information is suppressed in the public-use data to protect respondent confidentiality.

Household roster. Module AR (the household roster) was preprinted with the name and characteristics of each member of a household interviewed in 1993, 1997, 1998 and/or 2000 (the information came from the last wave in which the household was found). Module AR is designed as a cumulative roster of everyone who was ever found in this household. The interviewer updated the preprinted information on those who were household members in previous waves and added new household members. The roster was used to indicate whether each past member was still living in the household and to enter basic information on age, sex, marital status, relationship to the head of the household, presence in the household of the individual's mother, father, and spouse, religion, whether the respondent worked or was in school, earnings in the last year (although detailed, individually reported earnings information was collected in book 3A), and highest level of education. For individuals who had left the household since the last wave the household was found, information was collected on the reason for and date of departure (or death) and the person's current location. For individuals who joined the household since the last wave covered by the preprinted forms, information was collected on the reason for and date of entry into the household.

House characteristics. Module KRK contained interviewer observations regarding the dwelling and its sanitation.

Information on repeat visit. Module IK is not in the public use data because it contains private information. This information included the name and address of a local family or friend who might be able to provide location information in the future should the household move.

Questionnaire tracking form. Module FP is also not in the public use data set. It helped the teams track which household members needed to be tracked and which members answered books.

Book 1: Household Expenditures and Knowledge of Health Facilities

This book was answered by the spouse of the household head or by another person knowledgeable about household affairs.

Consumption. Module KS recorded information on expenditures for a variety of food and nonfood goods and services, including foods purchased and the value of foods consumed from self-production or transfers in the last week, personal care and household items bought during the last month, and durable goods bought in the last year. Quantities and purchase prices for the last purchase of several staples were also collected, for various foods. The KS expenditure categories were kept identical to that in IFLS2 and 3, so that household expenditures between these waves are comparable. Note that for non-foods there is a lack of comparability with IFLS1 because of the way in which the expenditure information on nonfoods was collected in 1993. In IFLS4 quantity information was added for rice. Together with production information added to Section UT in Book 2, this will allow for users to calculate net production of rice, an important variable in the analysis of many policies.

Assistance. Module KSR, asked the respondent about assistance from key public transfer programs, new since 2000. Specifically we get details separately, about the receipt of subsidized rice in two programs: Raskin, a program of letting poor households access rice at subsidized programs, and market operations, which distributes rice and a few other foods to households. We collected information on receipt of two other programs, targeted towards the poor: the unconditional cash transfer program, which was set into place in late 2005 in response to increases in fuel prices, and a new conditional transfer program, set into place in late 2007.

Crime. Module CR was added in 2007. Questions were taken from various sources, including the Mexican Family Life Survey. We asked about the incidence of crimes in different categories, including theft/burglary, physical assault, sexual assault, and household violence. We obtained information on the value of the crime,and whether physical injury occurred. We also asked about whether the police were notified and if not, why not. Finally we asked about the incidence of civil violence in the community.

Knowledge of health and family planning services. Module PP probed the respondent's knowledge of various outpatient health care providers, both public and private. The name and address of known facilities were collected and the respondent was queried about the distance, travel time, and cost of travel to the facility. This information was used to compile the sample frame of health facilities in the community-facility survey.

Book 2: Household Economy

Book 2 was answered by the household head or other person knowledgeable about household affairs.

Household characteristics. Module KR included questions about the physical infrastructure of the household and participation in certain programs, especially public social safety net programs.

Family farm and nonfarm businesses. Modules UT and NT focused on household revenues, expenses, and value of assets of household-owned agricultural and nonagricultural businesses. Both UT and NT were redesigned for IFLS4. In Section UT we asked about details of rice production. We ask the number of rice crops grown in a year on rice land and asked about each of the rice crops: area, production of paddy and production of milled rice equivalent. We also asked prices and values of production. Comparing milled rice production with rice consumption in Section KS will provide an estimate of net rice production. We also began using unfolding brackets to elicit net income from UT in the cases in which the farmer was not sure. Unfolding brackets have become commonly used in many advanced surveys. They have proven to cut answers of don't know. We started with a bracket that is based on information

from IFLS3, supplemented with other sources such as SUSENAS and then allow the respondent to go to higher or lower brackets, depending on the first answer.

Book NT had changes made to it as well. Of particular importance is the addition of three new questions trying to elicit firm net income. In addition to the previously used question on net profits, we added questions on the value of production used for household consumption, the value of business net income used on household expenditures and the amount of cash left over. The sum of these three can be used as an estimate of net profits of the business, in addition to the direct question (see Lisa Daniels, 2001, "Testing alternative measures of microenterprise profits and net worth," *Journal of International Development*, 13:599-614. .We also add unfolding brackets to NT to elicit net profits when they are not known. .

Avian Flu This new section focused on the holdings of chickens, ducks and other poultry and birds susceptible to avian flu. We also asked about deaths of birds in the last 12 months and the cause. Finally we asked about who in the household takes care of the birds, if anyone, and the amounts of time spent doing so.

Household non-business assets. Module HR asked about the current value of household non-business assets (e.g., housing land, livestock, jewelry), as well as ownership shares. Unfolding brackets were introduced in IFLS4.

Household non-labor income. Module HI asked about household-level nonlabor income, by source.

Natural Disasters This section was new in 2007 and asked in detail about separate types of natural disasters in the past 5 years and their consequences. We asked about earthquakes, tsunami, floods, muslides, as well as civil violence. We asked about losses from the disasters such as assets destroyed and expenses on medical injuries and funerals, whether household members had to move in response and if so to which type of housing facility. We also asked about assistance the household received and the source.

Borrowing history. BH was a new module in Book 3B in IFLS3 and was moved to Book 2 in IFLS4. This means that now BH is asked at the household level instead of the individual level. This was done to save time. The structure was kept as in 2000, but the details were asked about the largest loan anyone in the household took in the last year.

Book 3A: Adult Information (part 1)

This book elicited current and retrospective information from each household member age 15 and older.

Education history. Module DL recorded the highest level of education attended and highest grade completed for new and panel respondents 50 years and older. Retrospective details by level of education are not collected for respondents 50 and over. For new respondents under 50 and panel respondents who had answered DLA in book 5 in IFLS3 (they had to be under 50), we get detailed retrospective information for each level of schooling that the respondent attended (elementary, junior high, senior high and post-secondary) in order to be able to construct schooling progression histories. The detailed information included for each level of schooling (primary, junior high school, senior high school and university) the start and stop dates, the number of grades completed within the level and if still enrolled which grade, details about specific grades failed, the type of school, the name and location of school (for those still enrolled), EBTANAS scores or their successor, the UAN/UN achievement test scores were collected for those still enrolled or those under 30. Details about school expenses, scholarships received, class size, travel time, and whether the respondent worked during school were collected for those enrolled currently or during the last year. Information on schooling interruptions, that used to be in Section DLR, was reinserted in condensed form into Section DL..

Panel respondents under 50 who had answered DL in Book 3A in 2000 were asked the same details about their schooling since 2000 as new respondents and, separately, an abridged set of questions about their schooling before 2000. The abridged questions included all the questions for the new respondents except for the test scores and school address information. The latter two questions take a lot of time and so we did get economies by not getting them from panel respondents over 30 or currently enrolled.

The same structure was used for DLA in Book 5. The goal in redesigning DL and DLA was to allow users to much more easily construct schooling transitions between levels. That was possible with some strong assumptions with DL, but not really possible with DLA. Hence it was not possible to connect children moving between DLA in one wave and DL in another. This has now been fixed.

Subjective welfare. This section asked subjective welfare questions. We continued to ask two kinds of questions, used in IFLS3. We added, first a question on general happiness, taken from the United States' General Social Survey. We then asked the questions from 2000. The first is a ladder question, similar to that used in the Russian Living Standards Monitoring Survey. It asked a person if there are six steps on a ladder, the poorest person being on step 1 and the richest on step 6, on which step would he/she place themselves now. We kept six steps as in 2000. This time we had a picture of the ladder which we showed respondents to give them a better image of what we were after. We also asked people to place themselves on the same ladder five years ago and where they expect to be five years from now. In addition to the ladder questions we asked people about specific dimensions of their standard of living, such as their overall standard of living, and adequacy of food consumption and healthcare. For respondents with children, we also asked about the adequacy of their children's food consumption, healthcare and schooling. For each of these, we allowed answers of: it is less than adequate for their needs, just adequate, or more than adequate.

Individual nonlabor income and assets. To round out the information on individual-level economic well-being, module HR asked respondents about the current value of their non-business assets (e.g., land, livestock, jewelry), as well as asset ownership and ownership shares. Module HI asked about non-labor income by source. Unfolding brackets were introduced in IFLS4.

Marriage history. Module KW obtained a complete marriage history from new respondents, including the start and end dates of their unions, characteristics of former or non- resident spouses, and dowries and living arrangements in the first marriage. Panel respondents were asked about the current marriage and any other marriage that had begun within the past four years. We added questions about current and past co-residence in IFLS4.

Household decision-making. Module PK asked respondents who were currently married and who had lived with their spouse in the past six months, about who made decisions within the household, and the relative status of the husband's and wife's families at the time of marriage. The Section was shortened some from earlier waves.

Pregnancy summary. Module BR elicited, from ever-married new women respondents older than 49, information about all pregnancies (women 15 to 49 answered these questions in book 4). Panel respondents age 50 or older in IFLS1 were not asked these questions since it was assumed that no pregnancy had occurred since the IFLS1 interview.

Migration history. Module MG collected information on the geographic mobility of individuals, as well as the causes and consequences of migratory movements. Information was recorded about the respondent's location at birth, age 12, and each subsequent location where a move crossed a *desa* (village) boundary and lasted for 6 months or longer. For each move, data were collected on dates and locations, motivation for moving, and distance moved. Panel respondents were treated differently from new respondents, as was the case for other modules. They were asked about location changes since the time we saw them in 2000. Section SR, on short run moves in the last 2 years was removed in IFLS4 because there had been too few observations to adequately use for analysis in 2000.

Employment history. Module TK asked in depth about respondents' current and retrospective labor market experience. Work was defined broadly to include formal and informal, full-time and part-time, and seasonal and year-round labor. Occupation, sector, type of employer, and hours and wages for up to two jobs were recorded for those employed at the time. An abridged set of employment information was collected for each of the years since 1999 (for primary job) and for the first job. Open-ended descriptions of occupation and industry were converted into standard ITC (2-digit) codes (see *IFLS3 User's Guide* for details).

In IFLS4 we added to TK a sub-section on firings and quits in the last 5 years. Special emphasis was placed on the receipt or not of severance pay, as dictated by Indonesian law under certain conditions. We also added questions about employer-based pensions. We get pension payment information detailed by whether the payment was a lump sum or an annuity, both of which are used in Indonesia..

Retirement. This is a new section for IFLS4 inspired by the different Health and Retirement Study-type surveys around the world. We ask individuals 50 and older about whether they consider themselves to be retired, semi-retired or not and then get details about the retirement and pensions, if there are any. The earliest retirement age in Indonesia is 55 and it was thought that people younger than 50 would not be focused on retirement yet. As users will see from the data, retirement in a poor country like Indonesia is a fuzzy concept, with no set retirement ages for many jobs, especially in farming and other self-employment.

Risk and time preference. In IFLS4 we added a short section trying to elicit attitudes towards risk and time preference. There is an old literature in Agricultural Economics which has tried to elicit risk preferences, summarized in the classic book by James Roumasset, Jean-Marc Boussard and Inderjit Singh, 1979, *Risk, Uncertainty and Agricultural Development*, Agricultural Development Council, and the following work by Hans Binswanger, 1980, "Attitudes toward risk: Experimental measurement in rural India", *American Journal of Agricultural Economics*, 62(3):395-407. While Binswanger's work, and later work by Thomas Walker in El Salvador, demonstrated that questions trying to elicit risk preferences without real payoffs can result in misleading estimates, recent work in the Mexican Family Life Survey has suggested that perhaps the biases are not so severe and reinvigorated interest in using this framework. We introduce a short version in Section SI, patterned after the questions used in MxFLS.

Trust. In Section TR, which is also new in IFLS4, we add questions about trust of neighbors. We started with general questions on trusting other people in the village, and went to specific questions about whether respondents would leave their children with their neighbors. We also use a series of questions on whether money found in a lost wallet would be returned to the rightful owner if certain types of people in the village found it. We also add questions on individual religiosity, such as how many times a day a person prays and whether they eat only halal food (if they are Muslem; other questions are asked of Christians or Hindus). Finally, we add questions on tolerance of people of different faiths, such as whether how respondent would feel about a group with a different faith or sect build a place of worship in the community, whether the respondent would rent a room to a person of differing faith or let such a person marry their child or close relative. We also ask about how important a candidate's religion or religiosity is in determining how the respondent would vote in an election.

Book 3B: Adult Information (part 2)

This book elicited current and retrospective information from each household member age 15 and older.

Smoking. Module KM asked respondents whether they currently smoked, and if so, how much. Respondents who had quit smoking were asked when they quit and how much they had smoked before quitting. We asked about prices paid for different brands of tobacco.

Health status and physical performance. Module KK was overhauled in IFLS4 in order to make it more consistent with the self-reported health questions asked in the Health and Retirement Study (HRS) and related surveys like ELSA and SHARE. We revamped the ADLs and IADLs to make them conform

better with the HRS. If the respondent needed assistance with their physical functioning, we asked questions about who helped and how much. We also added a set of questions on the types and times of physical activities engaged in, in all parts of life: work, home and exercise. These were taken from an international survey on physical activities. Module CD asked about whether the respondent had been diagnosed with a set of chronic conditions like hypertension and heat attack. In other HRS surveys these are asked to be doctor diagnoses. Because in poor countries so many do not see doctors, we asked about any modern sector diagnosis, and asked the type of practitioner that gave it: doctor, nurse, paramedic, trained mid-wife. Module MA, from previous waves, asked about symptoms in the past four weeks and about experience with conditions symptomatic of heart disease, diabetes, and high blood pressure. In IFLS4 we added questions about pain in specific parts of the body. We also added questions about automobile accidents and any falls a person may have had in the past two years. These additions bring IFLS much closer to the various HRSs.

Mental Health A new section, KP, was added in IFLS4 to ask questions related to depression., IFLS1 and 3 had a set of 8 questions, but in order to make IFLS more comparable with international surveys, including the HRSs, we replaced our questions with those from the short CES-D scale, a series of 10 questions which is one of the major international scales of depression.

Health vignettes In order to better anchor the questions on general health, we introduced health vignettes into IFLS4. These have been successfully used in surveys such as ELSA and SHARE and the WHO SAGE Surveys, as well as others. They start with a set of self-reports on different domains of health, one question per domain. Then for each domain, 3 vignettes are asked. Each vignette paints an imaginary case which the respondent is asked to rate using the same scale as is used in the self-reports. Within each domain, the vignettes are chosen to be of different levels of severity. This way analysts can tell whether a person is more optimistic or pessimistic in their evaluations of health. SHARE uses 6 domains, 3 vignettes each for each respondent. Because this was taking too much time when we pretested it, we limited the number of domains to 2 for each person (using all 3 vignettes per domain). We asked all 6 of the self-reports however, as aggregation of those is considered to be important. The domains asked of each person were randomized over dynastic households (original IFLS1 households and their splitoffs), that is every eligible adult in each household within the dynasty was asked about the same domains. We chose a random subset of 2,500 dynastic households (out of 7,200) who were given the vignettes.

Cognitive capacity In iFLS4 we added a section on cognition. We borrowed from the HRSs and used a list of 10 words, which were read slowly to respondents and then the respondents were asked to repeat back the list, once immediately after the list was read and a second time some minutes later, after additional sections of the questionnaire had been asked. This is standard practice in other surveys that use word recall. We used 4 lists of words, which were randomized across individuals within the household, so that one person could not learn from another's experience.

Health insurance Section AK, was repeated from eaerlier waves, but we updated the list of health insurance programs that were checked for.

Health benefits and health care utilization. Sectrion RJ asked for information on health care utilization, including from whom and where medical care was received, how much it cost, who paid for it, how far the respondent traveled, and whether drugs were purchased. Detailed information was collected on outpatient visits during the last four weeks (module RJ) and on inpatient visits during the previous 12 months (module RN). One change in both RJ and RN in IFLS4 was that details of each visit were asked only for the last visit in the reference period, not all visits as was the practice in earlier waves. The number of visits in the reference period was asked, as was the total costs on all visits, in addition to the details on the last visit. This change was made to save time to help make way for the new health sections.. Respondents were also asked about the type and cost of any self-treatments administered in the previous four weeks (module PS). In section FM we asked, in IFLS4, a series of questions about the frequency of specific types of foods eaten. The questions were redesigned questions asked in IFLS3 in section RJ. The foods in the list were representative of foods intensive in iron and vitamin A, two micronutrients thought to be lacking in the Indonesian population.

Community participation. Community development activities have long been important in Indonesia. Module PM asked about participation in, contributions of time and money to, and perceived benefits from, a slate of community development activities. We added in IFLS4 questions on voting participation, in the different levels of elections held in recent years, as well as expectations of whether the respondent plans to vote in the next elections, by type. As in IFLS3, questions were included on participation in rotating credit schemes (*arisan*).

Non- resident family roster and transfers. Module BA recorded detailed information on the location and socio-demographic characteristics of non- resident immediate kin for parents and children. This information included for instance whether the parents are alive, when they died if they did, and what they died of. In addition we continued to ask questions regarding transfers of money, goods, and time to and from non- resident parents and children in the last twelve months. Information on transfers to and from siblings, as a group, was also collected. For parents, BA covers only biological parents, transfers to and from non-biological parents living apart were collected in section TF. For siblings and children, Section BA includes both biological and non-biological relations.

Transfers. Module TF was repeated from IFLS3. It was designed to fill a gap in the transfer information collected in IFLS. Specifically in TF we collect transfer information to and from spouses and non-biological parents who live outside the household, other family members living outside the household (besides those covered in BA- parents, siblings, children), and friends or neighbors.

Expectations Section EP was new in IFLS4. We asked in it, parental expectations regarding specific aspects of their children's future. This included how much schooling the parents expect the children to complete, parents' expectations of their children's health and living standards. This is asked both in Book 3B and Book 4 so that all parents are covered.

Book 4: Ever-Married Woman Information

Book 4 was administered to all ever-married women 15 to 49 years old. Panel respondents who answered Book 4 in IFLS3 also answered in IFLS4 even though their age might be over 49, so long as they were under age 58 at the time of the IFLS4 interview. Modules KW, BR, BA (for children) and EP resembled the same modules described in books 3A and 3B but were administered to ever-married women as part of book 4 for the sake of efficiency. Module BF updated information on breastfeeding status for children who were still being breastfed at IFLS3. Module BX covered socio-economic information and data on transfers to and from adopted children living outside the household (in Book 4, transfers from biological children were covered in section CH, again to enhance efficiency).

Pregnancy history. Module CH asked new respondents about all pregnancies and recorded the outcome and date. For live births respondents were asked the child's gender and name, whether the child was ever breastfed, and the length of breastfeeding. For pregnancies in the last five years, respondents were asked whether and where prenatal care was received, number of visits made in each trimester, services received during pregnancy and (except for miscarriages), length of labor, place of birth, and type of attendant. For pregnancies that did not end in a miscarriage, information was collected on the infant's size and weight at birth. For all live births, questions on the survival status and (if dead) date of death were asked. Some information about breastfeeding and the introduction of other foods was collected for children born in the last five years. Module CH also contains questions from Module BA on transfers to and from adult biological children living outside the household. IFLS4 panel respondents (those interviewed in IFLS3) were asked only about pregnancies after the pregnancy that produced the youngest child listed in IFLS3; which was listed on a preprinted form.

Contraceptive knowledge and use and contraceptive calendar. Information on contraceptive knowledge was collected in an enhanced section CX by asking respondents whether they had ever heard of a number of modern and traditional contraceptive methods, whether they had ever used each method, and, if appropriate, whether they knew the price and where to obtain the method. Questions were added

from section KL on some history of contraception use, what was used prior to the current method, whether complications had occurred and some details about visits to providers. Section KL, the detailed contraceptive calendar, was dropped in IFLS4.

Book 5: Child Information

This book was administered to household members younger than 15. For children younger than 11, the mother, female guardian, or household caretaker answered the questions. Children between the ages of 11 and 14 were allowed to respond for themselves if they wished, but we always encouraged parents to attend so as to ensure better quality of answers. Topics included the child's educational history,(module DLA), general health status and morbidities (module MAA), self-treatment (module PSA), and inpatient and outpatient utilization (modules RJA and RNA). Generally each module paralleled a module in the adult questionnaire (books 3A and 3B), with age-appropriate modifications.

Section DLA was greatly modified in IFLS4 to look the same as section DL, which it was not in earlier waves. The purpose of these changes was to allow users to better track schooling progression for both children answering Book 5 as well as adults answering Book 3A. In the past tracking progression was possible with DL but not with DLA. That has been fixed. In section DLA we continued the innovation of IFLS3 by including questions about the child's work status for the last one month and ever. This includes questions about the type of work done, the hours and earnings. Section BAA, obtained information on parents who live outside the household. This included information on their schooling and work.

Books US1 and 2: Physical Health Assessment

Two specially trained nurses recorded physical measurements of health for household members. The heath workers (usually newly trained nurses) visited each household (often multiple times) to record various measures of physical health for each household member. The health workers received special training in taking the measurements, which included height and weight (all members), sitting height (members 40 years and older, taken to calculate leg length), waist and hip circumference (members 40 years and older), blood pressure and pulse (members 15 and older), lung capacity (members 9 and older), hemoglobin (members 1 year and older) and total and HDL cholesterol (members 40 and over) . In addition, respondents 15 and older were timed while they rose from a sitting to a standing position five times (nurses brought plastic stools for the respondents to sit on) and were also asked to squeeze in each hand a special dynamometer that measures grip strength. The nurses also assessed each respondent's health status on a nine-point scale. The sitting height, total and HDL cholesterol and grip strength are new to IFLS4. They were added to gain greater conformity with the HRS surveys.

In IFLS4 we continued to collect dried blood spots from a finger prick on SPRT filter paper. In principle these blood spots can be analyzed for many different purposes. Our aim is to test a random subsample for C-reactive protein, a measure of body inflammation, which has been shown to be correlated with adult chronic diseases, including heart disease. Half of the IFLS1 dynastic households were randomly sampled to get dried blood spots. The blood spots were collected in conjunction with using the Hemocue system to measure blood hemoglobin and the CardiochekPA system to measure cholesterol.. The first drops of blood were used with the hemoglobin and the cholesterol (for those over 40), and after up to two drops were put onto the SPRT paper. The filter paper was allowed to dry for at least 4 hours in the household on a special drying rack and then put into a small ziplocked bag, together with a desicant. The ziplock bags with desicants helped to keep the blood samples dry. The bags were sent back to the survey headquarters in Yogyakarta, where they were put into a deep freezer (kept at -25C) for storage until they are analyzed.. Each ziplock bag had a label with the household and person identification numbers, age and sex. Each card had the person id.

Book EK: Cognitive Assessment

In IFLS3 respondents between the ages of 7 and 24 were administered cognitive tests to assess their general cognitive level, as well as skills in mathematics. Those tests had been redesigned from what

was administered in IFLS2. Two levels of tests were given, EK1 was the less difficult, given to all respondents aged 7-14 and EK2, the harder test, to all respondents age 15-24. The tests had two parts: the first involved the matching of similar shapes, and the second was a numeracy test.

In IFLS4 we used the same tests. Panel respondents who had taken EK1, were given EK1 again, and in addition took EK2, if they were 15 or over in 2007. EK2 was given again to those panel members who took it in IFLS3. EK2 was given to other household members aged 15-24, who were administered individual books.

Book Proxy: Adult Information by Proxy.

This book was intended for adults who could not be given individual books. There were typically two types of individuals who got proxy books: very busy persons, usually prime-aged men who were constantly working, or away from the house; and persons who were too ill to answer (usually older persons). This results in various types of selection if proxy books are not used, depending on what the question is. On the other hand, the quality of answers in the proxy books is likely to be worse than the answers we obtain from the individuals themselves in individual books. The proxy book contains very shortened versions of questions from books 3A, 3B, and 4. Questions that we felt could not be answered accurately by proxy response were dropped.

Appendix C:
Description of the IFLS4 Community-Facility Survey Questionnaire

This appendix expands on the summary presented in Sec. 3 for those interested in more detail about the community-facility instrument. The *IFLS4 User's Guide* contains additional information.

Book 1: Community History and Characteristics

In a group interview, the village or municipal head (*Kepala Desa*) and other community leaders were asked detailed questions about their community, past and present.

Sampling information. Up to six names were gotten of people who could answer the informant book. Of these 2 were later chosen randomly. Also names were provided of local ADAT experts who could answer the ADAT book. This information is not in the public release.

Transportation. Module A determined the location of various institutions (market, bus stop, post office, telephone, administrative city) relative to the village leader's office, and the mode, time, and cost associated with using public transportation to reach those institutions. Questions were also asked about the availability of public transportation within the village and the availability of the main route to the community during the year.

Electricity. Module B determined the availability of electricity within the village, the approximate proportion of households using electricity, the most important sources of electricity (public versus private, individual generator, local community group), and the frequency of blackouts.

Water sources and sanitation. Module C determined primary and secondary sources of water for drinking, cooking, bathing, and laundry. If a piped water system existed, the module probed the date of its establishment, its source, the frequency of disruptions, and the most common source of drinking water before the system was installed. Other questions concerned the adequacy of water sources during the dry season and alternative sources should the primary source be inadequate. Respondents were also queried about the existence and establishment date of sewage systems, the most common and other types of toilets, and methods of garbage disposal. If a garbage collection system existed, the start up date and monthly subscription fee were asked.

Agriculture and industry. In rural enumeration areas, module D identified the three primary agricultural crops, the extent of irrigation, number of rice crops, the existence of animal husbandry projects, whether the village benefited from agricultural extension projects (and their duration), and male, female, and child wage rates for agricultural work. In both rural and urban areas module D queried village leaders about local factories. For up to five factories, the product, location, date of establishment, and wage rates (for males, females, and children) were collected. Finally, the module determined whether the village had a public employment project and, if so, the associated wage rates.

Community history and climate. Module E recorded any change that had occurred in the name of the village and the typical dates of the rainy season. Descriptions and dates were collected of significant village events since 2000 (e.g., major infrastructure changes). The leaders were also asked to estimate the proportion of the population affected by the event.

Natural disasters: This module collected information on natural disasters of various types (earthquake, volcano eruptions, tsunami, floods, drought, fires) in the last 5 years. We asked about the types and severity of infrastructure damage.

Credit institutions. Module G collected data on the presence, date of establishment, and ownership of formal credit institutions in the village, the distance to the nearest credit institution before a credit source was established within the village, whether an informal money lender existed in the village and, if so, the monthly interest rates for loans of various amounts.

School availability. Module I collected information on the current availability of elementary, junior high, and senior high schools. This is used to update the Service Availability Roster (SAR).

History of health services availability. Module J asked about outreach activities in the village conducted by staff from the area health center (including mass immunization campaigns since 1995) and about health-related volunteer activities in the village. This is used to update the Service Availability Roster (SAR).

Community development activities. Module PMKD queried leaders on the existence of various community development activities, when they began, and the estimated number of community members involved in the activities.

Subjective well-being. Module SW asked the subjective views of the leaders about the economic condition of the community before and after economic crisis, using the same 6 step ladder question used in module SW of household book 3A. We also asked about changes in welfare since the 1998 financial crisis.

Poverty alleviation programs. Module PAP, also new in IFLS4, collected data about recent public social safety net programs. These included two rice subsidy programs: Raskin and Market Operations; health insurance subsidies; unconditional cash transfers and conditional cash transfers. We asked about information campaigns about each program, about eligibility criteria, population coverage in the village, how the program was distributed (equal parts per household, targeted to eligible groups, usually the poor).

Perception on public services and infrastructure. Module PPS, new in IFLS4, asked the perceptions of the village leader about the existing public infrastructure and recent changes.

Social interactions. Also new in IFLS4, we asked about local conflicts and conflict resolution, crime in the village and local attitudes of trust of others in the community.

Book 2: Community Statistics

The interviewer recorded current community characteristics by being shown statistical records in the village head's office and through direct observation.

Direct observation. Module OL asked the interviewer to record observations about indicators of village; cleanliness, prosperity, and social cohesion (e.g., whether farm animals roamed freely in the village, whether public areas were well maintained).

Statistics. Modules KA, PL, ST, PR, LU, and KD recorded the village's forest cover and changes, pollution, types of land certification, number of households, employment structure, conventions of housing construction, housing prices, and village finance for last budget year. Module KD, on village finances can be compared to the same in IFLS3, just before the new regional autonomy laws (decentralization) went into effect. It contained information on the sources of village finance, including amounts received from the central and district governments; on the types of expenditures; on village lands and their disposition.

Market prices. Prices are now in 3 books: one, Market, contains price information collected from visits to up to a large local market. A second, Shops/stalls, collects data from 2 local shops and street stalls and a third, Informant, collects prices from a group of up to 3 local informants. Prices are collected on many foods and on a few non-food items. We made a big effort to specify specific quality of the goods, and

to check different sources so that we would not have so many missing values, which is common in collecting price data.

Book PKK: Village Women's Organization

This book was addressed to the head of the village women's group, the PKK. Several book 1 modules (or adaptations) were administered to obtain an additional perspective on community history and characteristics (see the descriptions of book 1 modules E, I, J, and PMKD), with emphasis on the histories of local schools and health facilities. These are used in adding to the SAR. In addition, the women's group head was asked to provide information on the operation of community-based assistance programs and food subsidies.

Book SAR: Service Availability Roster

The SAR gathered in one place information on all the schools and health facilities that had been available to residents of IFLS communities since 1993. It included:

- Facilities listed in SAR IFLS3, which includes facilities listed in IFLS1 and 2
- Facilities identified by household respondents in IFLS4 household modules PP and AR but not mentioned in SAR IFLS3
- Any other facility mentioned by the head of the village/township or the women's group head in IFLS4; community-facility books 1 or PKK

For each facility mentioned, 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 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. Two local informants were randomly selected from a list of 6 types of informants: school principal or senior teachers; health professionals; youth activists; religious leaders; local political party activists; and local business leaders.

Poverty Alleviation Program. Module PAP collects similar information on the existence and working of poverty alleviation programs as in Book 1. We collected information on the existence, date started, eligibility criteria used in fact in that village, what fraction of the population were covered, and how much they received. We also asked the informants their views regarding the transparency and fairness of the programs. Programs covered included the rice distribution program, Raskin, the rice market operations program, the unconditional cash transfer and the new conditional cash transfer.

Perception on public infrastructure and services. This module, PPS, asked informants to judge the state of local infrastructure and whether it has gotten better or worse. We also included governance and corruption questions here, regarding the goodness of local governance now, at the local and district levels, and changes. Also we asked about local corruption by different local groups, including the local politicians and the police.

Conflict. In this module we asked about the existence of local conflict and how well they were resolved.

Book ADAT: Traditional law and community customs. This book, re-introduced in IFLS4 after 10 years, was designed to collect detailed information on the community traditions regarding many aspects of life in the community. Many modules were the same as in IFLS2, but some new modules were added. Aspects of life covered ranged from marriage and birth to death and intergenerational

transfers, to land and other disputes, to decision making in the community. Comparing the common sections between IFLS2 and 4 one can track changes in local customs over this ten year period that saw major changes in Indonesia.

Book Puskesmas

This book was addressed to the director of the local government health center (*puskesmas*), or his/her designee. It covered both the local health centers (*puskesmas*) and sub-centers (*puskesmas pembantu*). It was the most comprehensive of the three health facility questionnaires (book Puskesmas, book Private Practice, and book Posyandu), reflecting the fact that this stratum provided the most elaborate array of services of the facility types we interviewed and conducted outreach activities.

Head of the Facility. Module A collected information about the director of the health center (typically a physician), such as age, tenure in position, education, and ability to speak the local language. The module also attempted to ascertain how much time the director spent examining patients, performing outside administrative duties, and conducting outreach activities. This module also asked if and how changing circumstances such as due to the economic crisis, affected the facility's service.

Development of the facility. Module B, administered to the professional staff member with the longest tenure at the facility, asked about the facility's development, including the dates when certain broad classes of service became available (e.g., inpatient, dental, pharmaceutical, laboratory), as well as characteristics of the current facility's infrastructure.

Service availability. Module C asked about which services were available, how often, and at what price. For supplies like medicines and vaccines, we checked whether they were in stock on the day of the interview and we asked about stock outages in the prior 6 months. These questions were moved from module F in prior waves. The module also asked about outreach activities and referral practices.

Staff. Module D recorded the number and training levels of full- and part-time staff. Information was also collected on the amount of time doctors, nurses, paramedics and midwives spent treating patients and whether those staff practiced privately and whether they were in attendance that day and if not why.

Equipment and supplies. Module E asked about the availability of various items of basic equipment needed to provide primary health care, such as stethoscopes, thermometers, and suturing material. It also addressed the availability of basic laboratory materials such as Giemsa dyeing solutions and centrifuges.

Resources of Puskesmas. Module SDP collected data about the budget in the last budget year and the source of the budget in detail. It asked about how patient fees were divided between the facility and the district health ministry (where fees often went).

Health insurance for the poor. New in IFLS4, Module AKM asked about a new health card for the poor, ASKESKIN, which in principal provides for free or subsidized health care for eligible poor people. We ask for prices charged to ASKESKIN card holders for different services provided by the PUSKESMAS.

Decision-making. Module DM was added in IFLS3 to inquire about the locus of control over specific decisions for the puskesmas. It was intended to serve as a baseline for future waves which might obtain how the new 2001 decentralization laws have changed this locus of control. We asked about whether the central health ministry, district health ministry, district planning office or the puskesmas itself controlled decisions over services offered, staffing, fees and the purchase of equipment and medicines. Comparing IFLS3 and 4 one can see what differences the decentralization made on the ground in how decisions are made.

Direct observation. Module F asked interviewers to record their observations about the cleanliness of the examination rooms, laboratory, and vaccine storage room.

Family planning services. Module G asked about the characteristics and scope of the center's family planning services.

Health Vignettes. Module H added back health vignettes, asked of the professional health staff. Four different cases were asked: about prenatal care, child health (diarrhea), adult health (upper respiratory) and adult diabetes. We began with a description of the case. Then we asked what questions the provider would ask, then what questions they would ask about medical history, then what things would be checked in a physical exam, then what laboratory tests would be performed. First the answers were spontaneous, and we checked against a prepared list.. We then prompted against the prepared list of questions to see if the provider agreed or not. Not all of our questions were considered good practice, some are considered unnecessary. In the public use data we provide which answers are considered correct and which not. Which practitioner answered the questions depended on the head of the facility. We asked which practitioner in each facility was trained in each type of case and who generally got those types of referrals. For private facilities it was not always possible to administer all four cases, though generally we were able to do so in the puskesmas.

Book Private Practice

This book focuses on private doctors, clinics, private and village midwives, nurses and paramedics. Book Private Practice had the same modules as book Puskesmas except that some modules were scaled down to reflect the differences in the scope and types of services provided. This book had a special module for the village midwife, which asked about various activities (module BD). Not all of the vignettes were asked of the private practice professional, depending on what their specialties were.

Book Traditional Practitioners

This book was re-inserted into IFLS4. Two traditional practitioners were sampled in each EA, one a traditional (untrained) midwife and another traditional practitioner. We focused on their herbal medicinal practices, plus practices such as acupuncture. If they practiced with charms and used witchcraft, we also covered that, but practitioners who practiced exclusively witchcraft were not included.

Book Posyandu

This book contains questions administered to volunteers who staffed the community health post (*posyandu*). Book Posyandu recorded information on community's utilization of the post and general health care in the community (module A), specific services provided (module B), characteristics of the volunteer staff, including their general education and health training (module C) and the availability of specific medications, supplies, and equipment (module D). Modules asked about the sources of posyandu resources (module SDP) and the posyandu revitalization program (module PRP).

Book Posyandu Lancia. This book, which was new in IFLS4 is similar to the posyandu book, but concentrates on posyandu for the elderly. Sometimes the same posyandu has both services. We separately sampled the two types of posyandu. If the main posyandu and the posyandu lancia from the same facility were sampled, we kept both,and gave the facility code of the posyandu to both. That way users can tell if the facilities are from the same parent posyandu.

Book School

This book is addressed to different school levels: SD (elementary school), SMP (junior high school), and SMU (senior high school). It was administered to the school principal or his/her designee.

Module A recorded characteristics of the school principal, for example, age, education level, experience in education, tenure in current job, current activities, and whether he or she held another position. One set of questions collected details about school feeding programs.

Module B recorded characteristics of the school, such as date of establishment, length of time in session per day and per year, administration and religious orientation, and whether particular facilities (gymnasium, library) were available.

Module SC asked about the School Committee. This module was new in IFLS4, as the School Committee is a new institution. We asked about whether the committee exists for this school, who are members, and some of the tasks that the committee is undertaking.

Module C was administered to the homeroom teacher.[21] The questions asked about the teacher's background, hours worked and salary, whether the teacher had applied for or gotten teacher certification, whether other jobs were held simultaneously, what curriculum was used, and the adequacy of books and instructional materials.

Module D recorded both the interviewer's direct observations and respondent's answers to questions about the quality of classroom infrastructure in grade 6, 9 or 12, depending on the level of the school.

Module E recorded student expenditures for school year 2006/2007.

Module F recorded math and language scores on UAN (the national successor to EBTANAS) achievement tests for a random sample of 25 students

Module G recorded counts of teachers and students in school year 2006/2007.

Module H is an observation sheet for interviewers to record who was present during the interviews with the homeroom teacher and whether the respondents were able to answer the questions well.

Book Mini-CFS

This book was new in IFLS3, continued and expanded in IFLS4. It was intended to give users at least some information on the communities where IFLS mover respondents live. Respondents who lived in one of the 321 IFLS1 communities have available the regular community-facility books to provide information on their communities. Respondents who lived outside these 321 IFLS1 communities now have Mini-CFS to describe a little about their community conditions. This book, combined questions from parts of books I and II (Modules S, A, B, C, D, H, I, J, JPS and SW), to provide data about the total population, the condition of the main road, availability of electricity and water, the number of schools by level, the number of health facilities by type, the main sources of income, the main crops grown, the price of rice, male and female wages, the availability of industries and social safety net programs in the village.

[21] In elementary schools this module was administered with respect to grade 4; in junior and senior high schools the designated level was grade 3.

Glossary

A–F	
Apotik Hidup	The plant, usually used for traditional medicine
APPKD/PAK	Village Revenue and Expenditure/Village Budget Management
Askabi	Public assurance for acceptor of control birth
Arisan	A kind of group lottery, conducted at periodic meetings. Each member contributes a set amount of money, and the pool is given to the tenured member whose name is drawn at random.
Bahasa Indonesia	Standard national language of Indonesia.
Bidan	Midwife, typically having a junior high school education and three years of midwifery training.
Bidan Desa	Midwife in village, Indonesia government's project to provide health service of maternal case in village such as; pregnancy check, delivery, contraception, etc.
bina keluarga balita	child development program.
bina keluarga remaja	Youth development program
bina keluarga manula	Ageing care program
Book	Major section of an IFLS questionnaire (e.g., book K).
BPS	Biro Pusat Statistik, Indonesia Central Bureau of Statistics.
BP3	Board of management and development of education, an school organization that has responsible on education tools supplies. Usually it consists of teachers and student's parents.
BUMN/BUMD	National committee/ Regional committee
CAFE	Computer-Assisted Field Editing, a system used for the first round of data entry in the field, using laptop computers and software that performed some range and consistency checks. Inconsistencies were resolved with interviewers, who were sent back to respondents if necessary.
CFS	IFLS Community-Facility Survey.
CPPS-UGM	Center for Population and Policy Studies of Gajah Mada University
DBO	Operational Aids for School from Social Safety Net Program
Dana Sehat	Fund for health service that was collected from community of village to be used for the community
Dasa Wisma	A group of community per 10 houses, but practically 10-20 houses, to run Village programs
data file	File of related IFLS3 variables. For HHS data, usually linked with only one HHS questionnaire module.
Desa	Rural township, village. Compare *kelurahan*.
DHS	Demographic and Health Surveys fielded in Indonesia in 1987, 1991, 1994, 1997.
Dukun	Traditional birth attendant.
EA	Enumeration Area.
EBTA	Regional Achievement Test, administered at the end of each school level, covered Agama, bahasa daerah, kesenian, ketrampilan, etc, exception subject of EBTANAS.
EBTANAS	Indonesian National Achievement Test, administered at the end of each school level (e.g., after grade 6 for students completing elementary school). Covered 5 subject; Bahasa Indonesia, Mathematic, PPKN, IPA, IPS

G–K	
HH	Household.
HHID	Household identifier. In IFLS1 called CASE; in IFLS2 called HHID97.
HHS	IFLS Household Survey. IFLS1-HHS and IFLS2-HHS refer to the 1993 and 1997 waves, respectively. IFLS3-HHS refers to the 2000 wave.
IDT	Presidential Instruction on Undeveloped Village
IFLS	Indonesia Family Life Survey. IFLS1, IFLS2 and IFLS3 refer to the 1993, 1997 and 2000 waves, respectively. IFLS2+ refers to the 25% subsample wave in 1998.
IFLS1 re-release, IFLS1-RR (1999)	Revised version of IFLS1 data released in conjunction with IFLS2 and designed to facilitate use of the two waves of data together (e.g., contains IDs that merge with IFLS2 data). Compare *original IFLS1 release*.
interviewer check	Note in a questionnaire for the interviewer to check and record a previous response in order to follow the proper skip pattern.
JPS	Social Safety Net
JPS-BK	Social Safety Net program for Health Service
Kangkung	Leafy green vegetable, like spinach.
Kabupaten	District, political unit between a province and a *kecamatan* (no analogous unit in U.S. usage).
kartu sehat	Card given to a (usually poor) household by a village/municipal administrator that entitles household members to free health care at a public health center. The fund was from Social Safety Net program
Kecamatan	Subdistrict, political unit analogous to a U.S. county.
Kejar Paket A	Informal School to learn reading and writing
Kejar Paket B	
Kelurahan	urban township (compare *desa*).
Kepala desa	Village head
klinik, *klinik swasta*, *klinik umum*	Private health clinic.
Kotamadya	Urban district; urban equivalent of *kabupaten*.
L–O	
Look Ups (LU)	Process of manually checking the paper questionnaire against a computer-generated set of error messages produced by various consistency checks. LU specialists had to provide a response to each error message; often they corrected the data.

L–O (cont.)

Madrasah	Islamic school, generally offering both religious instruction and the same curriculum offered in public school.
Madya	Describes a *posyandu* that offers basic services and covers less than 50% of the target population. Compare *pratama*, *purnama*, and *mandiri*.
Main respondent	An IFLS1 respondent who answered an individual book (3, 4 or 5)
Mandiri	Describes a full-service *posyandu* that covers more than 50% of the target population. Compare *pratama*, *madya*, and *purnama*.
Mantri	Paramedic.
mas kawin	Dowry—money or goods—given to a bride at the time of the wedding (if Muslim, given when vow is made before a Muslim leader or religious officer).
Mini-CFS	The miniature version of the community survey fielded in non-IFLS1 communities
Module	Topical subsection within an IFLS survey questionnaire *book*.
NCR pages	Treated paper that produced a duplicate copy with only one impression. NCR pages were used for parts of the questionnaire that required lists of facilities.
Origin household	Household interviewed in IFLS1 that received the same ID in IFLS2, 2+ and 3 and contained at least one member of the IFLS1 household. Compare *split-off household*.
original IFLS1 release	Version of IFLS1 data released in 1995. If this version is used to merge IFLS1 and IFLS2 data, new IFLS1 IDs must be constructed. Compare *IFLS1 re-release.*
"other" responses	Responses that did not fit specified categories in the questionnaire.

P–R

Panel respondent	Person who provided detailed individual-level data in IFLS2.
peningset	Gift of goods or money to the bride-to-be (or her family) from the groom-to-be (or his family) or to the groom-to-be (or his family) from the bride-to-be (or her family). Not considered dowry (see *mas kawin*).
perawat	Nurse.
pesantren	School of Koranic studies for children and young people, most of whom are boarders.
PID	Person identifier. In IFLS1 called PERSON; in IFLS2 called PID97; in IFLS3 called PID00.

Comment [j1]:

P–R (cont).	
PIDLINK	ID that links individual IFLS2 respondents to their data in IFLS1.
PKK	Family Welfare Group, the community women's organization.
PODES questionnaire	Questionnaire completed as part of a census of community infrastructure regularly administered by the *BPS*. Retained at village administrative offices and used as a data source for CFS book 2.
posyandu	Integrated health service post, a community activity staffed by village volunteers.
praktek swasta, *praktek umum*	Private doctor in general practice.
pratama	Describes a *posyandu* that offers limited or spotty service and covers less than 50% of the target population. Compare *madya*, *purnama*, and *mandiri*.
preprinted roster	List of names, ages, sexes copied from IFLS1 data to an IFLS2 instrument (especially AR and BA modules), to save time and to ensure the full accounting of all individuals listed in IFLS1.
province	Political unit analogous to a U.S. state.
purnama	Describes a *posyandu* that provides a service level midway between a *posyandu madya* and *posyandu mandiri* and covers more than 50% of the target population. Compare *pratama*, *madya*, and *mandiri*.
puskesmas, *puskesmas pembantu*	Community health center, community health subcenter (government clinics).
RT	Sub-neighborhood.
RW	Neighborhood.
S–Z	
SAR	Service Availability Roster, CFS *book*.
SD	Elementary school (*sekolah dasar*), both public and private.
SDI	Sampling form 1, used for preparing the facility sampling frame for the CFS.
SDII	Sampling form 2, used for drawing the final facility sample for the CFS.
Sinse	Traditional practitioner.

S–Z (cont.)

SMK	Senior vocation high school (*sekolah menengah kejuruan)*.
SMP	Junior high school (*sekolah menengah pertama*), both public and private. The same meaning is conveyed by SLTP (*sekolah lanjutan tingkat pertama*).
SMU	Senior high school (*sekolah menengah umum*), both public and private. The same meaning is conveyed by SMA (*sekolah menengah atas*) and SLTA (*sekolah lanjutan tingkat atas*).
special codes	Codes of 5, 6, 7, 8, 9 or multiple digits beginning with 9. Special codes were entered by interviewer to indicate that numeric data are missing because response was out of range, questionable, or not applicable; or respondent refused to answer or didn't know.
split-off household	New household interviewed in IFLS2, 2+ or 3 because it contained a target respondent. Compare *origin household*.
SPRT	Special filter paper for finger prick blood samples.
SUSENAS	Socioeconomic survey of 60,000 Indonesian households, whose sample was the basis for the IFLS sample.
system missing data	Data properly absent because of skip patterns in the questionnaire.
Tabib	Traditional practitioner.
target household	Origin household or split-off household in IFLS2 or 2+
target respondent	IFLS1 household member selected for IFLS3 either because he/she had provided detailed individual-level information in IFLS1 (i.e., was a *panel respondent*) or had been age 26 or older in IFLS1 or met other criteria, see text.
tracking status	Code in preprinted household roster indicating whether an IFLS1 household member was a *target respondent* (= 1) or not (= 3).
tukang pijat	Traditional masseuse.
Version	A variable in every data file that indicates the date of that version of the data. This variable is useful in determining whether the latest version is being used.
warung	Small shop or stall, generally open-air, selling foodstuffs and sometimes prepared food.

Table 2.1a Household Re-contact Rates

	IFLS1	All members died	IFLS2 target households contacted	Re-contact rate (%)	IFLS3 target households	IFLS3 target households contacted	Re-contact rate (%)	IFLS4 target households	All members died	IFLS4 Target Contacted	Re-contact rate (%)
IFLS1households	7,224	69	6,821	94.42	7,138	6,800	95.3	7,135	144	6,596	92.4
IFLS2 split-off households	-	-	877	-	865	819	94.7	876	7	769	87.8
IFLS2+ splitoff households	-	-	-	-	344	309	89.8	335	2	295	88.1
IFLS3 splitoff households	-	-	-	-		2,646		2,648	15	2,302	86.9
IFLS3 target households					8,347	7,928	95.0				
IFLS4 target households	-	-	-	-				10,994	-	9,962	90.6
IFLS4 splitoff households	-	-	-	-				-	-	4,033	
Total households		69	7,698			10,574			168	13,995	

Source: IFLS2, IFLS3, IFLS4

Number of households contacted includes those whose members all died and households that recombined into other households since the last survey.

Table 2.1b 1993 Dynasty Recontact Rates, IFLS1-IFLS4 (based on 93 members found alive and book T)

	IFLS1	IFLS2		IFLS3		IFLS4		All rounds	
	Households	Households	Re-contact rates (%)	Households	Re-contact rates (%)	Households	Re-contact rates (%)	Households	Re-contact rates (%)
Dynasty contacted	7,224	6,821	94.4	6,883	95.3	6,761	93.6	6,523	90.3
Dynasty interviewed		6,752	93.5	6,787	94.0	6,553	90.7	6,329	87.6
Dynasty died (cumulative)		69	1.0	97	1.3	211	2.9	211	2.9
Dynasty not contacted		403	5.6	341	4.7	463	6.4	701	9.7

Source: IFLS2, IFLS3, IFLS4

Number of dynasties contacted includes those whose members all died and households that recombined into other households since the last survey.

Table 2.2 Household Samples and Completion Rates, IFLS1-IFLS3

		1990 Population			IFLS1 HH Ivwd	IFLS2 Households					IFLS3 Households					Dynasties contacted	
						Interviewed, died, or joined other hh					Interviewed, died, or joined other hh						
		N(000)	%	IFLS EAs		% IFLS1 HH	(N)[c]	Split-off	Total	Inter-viewed	% IFLS1 HH [d]	(N)[e]	Split-off	Total	Inter-viewed	#	%
11	Aceh	3,476	1.9														
12	**North Sumatra**	10,391	5.7	26	563		(504)	44	548	545	90.7	(507)	241	748	738	511	90.8
13	**West Sumatra**	4,041	2.2	14	351		(329)	50	379	374	93.9	(325)	192	517	507	330	94.0
14	Riau	3,372	1.9														
15	Jambi	2,059	1.1														
16	**South Sumatra**	6,403	3.5	15	349		(318)	55	373	371	96.0	(332)	229	561	550	333	95.4
17	Bengkulu	1,213	0.7														
18	**Lampung**	6,108	3.4	11	274		(259)	38	297	297	93.8	(257)	164	421	414	257	93.8
31	**DKI Jakarta**	8,352	4.6	40	731		(642)	65	707	698	84.5	(610)	355	965	958	623	85.2
32	**West Java**	35,973	19.8	52	1,111		(1,066)	141	1,207	1,191	97.6	(1,067)	603	1670	1,658	1,082	97.4
33	**Central Java**	28,733	15.8	37	878		(868)	135	1,003	991	99.2	(859)	523	1382	1,362	870	99.1
34	**DI Yogyakarta**	2,923	1.6	22	478		(451)	49	500	494	92.8	(438)	203	641	636	445	93.1
35	**East Java**	32,713	18.0	45	1,044		(1,004)	117	1,121	1,111	99.0	(1,025)	462	1487	1,465	1,034	99.0
51	**Bali**	2,798	1.5	14	340		(322)	43	365	364	95.9	(325)	160	485	482	326	95.9
52	**West Nusa Tenggara**	3,416	1.9	16	407		(402)	54	456	447	99.5	(396)	278	674	668	404	99.3
53	East Nusa Tenggara	3,306	1.8														
54	East Timor	762	0.4														
61	West Kalimantan	3,292	1.8														
62	Central Kalimantan	1,431	0.8														
63	**South Kalimantan**	2,636	1.5	13	323		(296)	51	347	344	95.6	(306)	202	508	488	309	95.7
64	East Kalimantan	1,930	1.1														
71	North Sulawesi	2,504	1.4														
72	Central Sulawesi	1,735	1.0														
73	**South Sulawesi**	7,045	3.9	16	375		(359)	36	395	392	94.6	(352)	163	515	509	359	95.7
74	Southeast Sulawesi	1,382	0.8														
81	Maluku	1,885	1.0														
82	Irian Jaya	1,671	0.9														
	Total	181,548	100.0	321	7,224		(6,820)	878	7,698	7,619	95.2	(6,799)	3,775	10,574	10,435	6,883	95.3

a Boldface denotes IFLS provinces.
b Source of 1990 population data: BPS.
c Includes 69 IFLS1 origin households whose members had died and 10 that had merged with other IFLS households by 1997.
d Percentage is over IFLS1 households with at least some members living in last survey.
e Includes 35 IFLS1 origin households whose member had died and 7 that had merged with other IFLS households since

Table 2.2 Household Samples and Completion Rates, IFLS4

		1990 Population			IFLS1 HH Ivwd	IFLS4 Households					Dynasties contacted	
						Interviewed, died, or joined other hh						
		N(000)	%	IFLS EAs		% IFLS1 HH [c]	(N)[d]	Split-off	Total	Inter-viewed	#	%
11	Aceh	3,476	1.9									
12	**North Sumatra**	10,391	5.7	26	563	87.6	(493)	532	1025	998	499	88.6
13	**West Sumatra**	4,041	2.2	14	351	89.5	(314)	421	735	714	330	94.0
14	Riau	3,372	1.9									
15	Jambi	2,059	1.1									
16	**South Sumatra**	6,403	3.5	15	349	86.2	(301)	435	736	712	307	88.0
17	Bengkulu	1,213	0.7									
18	**Lampung**	6,108	3.4	11	274	93.4	(256)	329	585	569	261	95.3
31	**DKI Jakarta**	8,352	4.6	40	731	75.4	(551)	637	1188	1147	587	80.3
32	**West Java**	35,973	19.8	52	1,111	93.4	(1,038)	1227	2265	2207	1,065	95.9
33	**Central Java**	28,733	15.8	37	878	95.7	(840)	973	1813	1733	861	98.1
34	**DI Yogyakarta**	2,923	1.6	22	478	91.0	(435)	382	817	786	446	93.3
35	**East Java**	32,713	18.0	45	1,044	96.6	(1,009)	932	1941	1869	1,024	98.1
51	**Bali**	2,798	1.5	14	340	92.9	(316)	330	646	625	319	93.8
52	**West Nusa Tenggara**	3,416	1.9	16	407	98.0	(399)	484	883	858	404	99.3
53	East Nusa Tenggara	3,306	1.8									
54	East Timor	762	0.4									
61	West Kalimantan	3,292	1.8									
62	Central Kalimantan	1,431	0.8									
63	**South Kalimantan**	2,636	1.5	13	323	93.8	(303)	376	679	653	308	95.4
64	East Kalimantan	1,930	1.1									
71	North Sulawesi	2,504	1.4									
72	Central Sulawesi	1,735	1.0									
73	**South Sulawesi**	7,045	3.9	16	375	90.9	(341)	341	682	664	350	93.3
74	Southeast Sulawesi	1,382	0.8									
81	Maluku	1,885	1.0									
82	Irian Jaya	1,671	0.9									
	Total	181,548	100.0	321	7,224	91.3	(6,596)	7399	13,995	13,535	6,761	93.6

a Boldface denotes IFLS provinces.
b Source of 1990 population data: BPS.
c. Percentage is over IFLS1 households with at least some members living in last survey.
e Includes 144 IFLS1 origin households whose member had died and 24 that had merged with other

Table 2.3a Households Interviewed in IFLS4: Relocations since Last Survey

Relocation	All Households Interviewed	%	IFLS1 Origin Households	%	Split-off Households	%
Did not move	7,703	56.9	4,753	73.9	2,950	41.5
Moved within village/township	849	6.3	235	3.7	614	8.6
Moved within kecamatan	1,936	14.3	1,084	16.9	852	12.0
Moved within kabupaten	978	7.2	176	2.7	802	11.3
Moved within province	1,164	8.6	124	1.9	1,040	14.6
Moved to another IFLS province	732	5.4	47	0.7	685	9.6
Moved to non-IFLS province	174	1.3	10	0.2	164	2.3
Total	13,536		6,429	100.0	7,107	

Table 2.3b Households Interviewed in IFLS4: Relocations since IFLS1

Relocation	All Households Interviewed	%	IFLS1 Origin Households	%	Split-off Households	%
Did not move	5,771	42.6	4,292	66.8		
Moved within village/township	964	7.1	265	4.1	2,178	30.6
Moved within kecamatan	1,120	8.3	385	6.0	735	10.3
Moved within kabupaten	1,138	8.4	252	3.9	886	12.5
Moved within province	2,828	20.9	887	13.8	1,941	27.3
Moved to another IFLS province	1,540	11.4	333	5.2	1,207	17.0
Moved to non-IFLS province	175	1.3	15	0.2	160	2.3
Total	13,536		6,429	100.0	7,107	

Table 2.4a IFLS4: Individuals in All Interviewed Households in 2007

	Both Males and Females					Males					Females				
			Interviewed					Interviewed					Interviewed		
	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total
Age group															
0-4	5,429	5,152	5,097		5,097	2,798	2,659	2,626		2,626	2,631	2,493	2,471		2,471
5-9	4,882	4,554	4,504		4,504	2,543	2,390	2,362		2,362	2,339	2,164	2,142		2,142
10-14	4,343	3,948	3,909		3,909	2,153	1,980	1,962		1,962	2,190	1,968	1,947		1,947
15-19	4,055	3,558	3,364	102	3,466	2,009	1,762	1,653	65	1,718	2,046	1,796	1,711	37	1,748
20-29	9,588	8,709	8,132	290	8,422	4,518	4,052	3,696	194	3,890	5,070	4,657	4,436	96	4,532
30-39	7,895	7,202	6,732	261	6,993	4,048	3,717	3,376	218	3,594	3,847	3,485	3,356	43	3,399
40-49	5,758	5,007	4,747	132	4,879	2,742	2,431	2,265	96	2,361	3,016	2,576	2,482	36	2,518
50-59	4,070	3,303	3,088	113	3,201	1,936	1,586	1,470	63	1,533	2,134	1,717	1,618	50	1,668
60-69	2,597	2,144	1,908	169	2,077	1,188	971	876	63	939	1,409	1,173	1,032	106	1,138
70-79	1,322	1,109	831	253	1,084	561	469	378	85	463	761	640	453	168	621
80+	641	484	259	212	471	280	212	127	77	204	361	272	132	135	267
All individuals	50,580	45,170	42,571	1,532	44,103	24,776	22,229	20,791	861	21,652	25,804	22,941	21,780	671	22,451

[a] Those with ar01i=1.

Table 2.4b IFLS4: Individuals in IFLS1 Original Households

	Both Males and Females				Males				Females			
	Total ind. in household	Interviewed			Total ind. in household	Interviewed			Total ind. in household	Interviewed		
Age Group		Direct	Proxy	Total		Direct	Proxy	Total		Direct	Proxy	Total
0-4	1,842	1,819		1,819	910	896		896	932	923		923
5-9	1,975	1,946		1,946	1,009	994		994	966	952		952
10-14	2,537	2,511		2,511	1,289	1,276		1,276	1,248	1,235		1,235
15-19	2,615	2,459	77	2,536	1,375	1,285	51	1,336	1,240	1,174	26	1,200
20-29	3,924	3,528	180	3,708	2,062	1,824	118	1,942	1,862	1,704	62	1,766
30-39	2,966	2,713	119	2,832	1,343	1,178	88	1,266	1,623	1,535	31	1,566
40-49	3,896	3,704	96	3,800	1,735	1,620	70	1,690	2,161	2,084	26	2,110
50-59	2,957	2,762	97	2,859	1,394	1,296	50	1,346	1,563	1,466	47	1,513
60-69	1,979	1,755	153	1,908	886	799	55	854	1,093	956	98	1,054
70-79	1,019	761	236	997	432	346	80	426	587	415	156	571
80+	450	236	199	435	199	119	73	192	251	117	126	243
All individuals	26,160	24,194	1,157	25,351	12,634	11,633	585	12,218	13,526	12,561	572	13,133

* All individuals in IFLS1 original households are target interviewees.

*** Interviewed if interview is completed or partially completed

Table 2.4c IFLS4: Individuals in IFLS2, IFLS2+, IFLS3, IFLS4 Splitoff Households

	Both Males and Females					Males					Females				
			Interviewed					Interviewed					Interviewed		
Age group	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total	Total ind. in household	Target interviewees [a]	Direct	Proxy	Total
0-4	3,587	3,310	3,278		3,278	1,888	1,749	1,730		1,730	1,699	1,561	1,548		1,548
5-9	2,907	2,579	2,558		2,558	1,534	1,381	1,368		1,368	1,373	1,198	1,190		1,190
10-14	1,806	1,413	1,398		1,398	864	692	686		686	942	721	712		712
15-19	1,440	943	905	25	930	634	387	368	14	382	806	556	537	11	548
20-29	5,664	4,788	4,604	110	4,714	2,456	1,990	1,872	76	1,948	3,208	2,798	2,732	34	2,766
30-39	4,929	4,240	4,019	142	4,161	2,705	2,378	2,198	130	2,328	2,224	1,862	1,821	12	1,833
40-49	1,862	1,112	1,043	36	1,079	1,007	697	645	26	671	855	415	398	10	408
50-59	1,113	349	326	16	342	542	193	174	13	187	571	156	152	3	155
60-69	618	171	153	16	169	302	87	77	8	85	316	84	76	8	84
70-79	303	91	70	17	87	129	38	32	5	37	174	53	38	12	50
80+	191	38	23	13	36	81	14	8	4	12	110	24	15	9	24
All individuals	24,420	19,034	18,377	375	18,752	12,142	9,606	9,158	276	9,434	12,278	9,428	9,219	99	9,318

** Interviewed if individual book interview was completed or partially completed

[a] Those with ar01i=1.

Table 2.5 Status of IFLS1 Household Members in IFLS4

	Total IFLS1 Members	Still in origin HH	Moved from origin HH, found elsewhere	Died since IFLS1	Found or died in HH that were found	Moved from origin HH, not found	In HH that were not found	% found or died in HH that were found[c]
IFLS1 household roster members								
Total	33,081	16,559	7,340	3,116	27,015	3,839	2,244	81.7
Interviewed in IFLS3 [b]	27,193	16,022	7,256	-	23,278	-	-	
IFLS1 main respondents								
Total	22,019	13,088	3,335	2,743	19,166	1389	1479	87.0
Interviewed in IFLS3 [b]	18,973	12,764	3,300	-	16,064	-	-	
IFL1 household roster members by age group [c]								
Age 0-4								
Total	3,586	2,318	741	77	3,136	252	198	87.5
Interviewed	3,323	2,263	736	-	2,999			
Age 5-9								
Total	3,737	1,708	1192	55	2,955	609	177	79.1
Interviewed	3,451	1,648	1183	-	2,831			
Age 10-14								
Total	4,197	1,355	1705	85	3,145	836	221	74.9
Interviewed	3,400	1,257	1683	-	2,940			
Age 15-19								
Total	3,615	807	1338	95	2,240	1,077	298	62.0
Interviewed	2,229	758	1321	-	2,079			
Age 20-29								
Total	5,407	2,471	1,554	144	4,169	775	466	77.1
Interviewed	4,299	2,396	1,530	-	3,926			
Age 30-39								
Total	4,542	3,364	439	252	4,055	177	315	89.3
Interviewed	4,085	3,281	436	-	3,717			
Age 40-49								
Total	2,917	2,151	172	353	2,676	62	182	91.7
Interviewed	2,592	2,078	168	-	2,246			
Age 50-59								
Total	2,467	1,559	117	620	2,296	29	145	93.1
Interviewed	2,134	1,530	114	-	1,644			
Age 60-69								
Total	1,615	667	69	727	1,463	15	137	90.6
Interviewed	1,186	653	66	-	719			
Age 70-79								
Total	722	139	20	472	631	7	85	87.4
Interviewed	394	138	19	-	157			
Age 80+								
Total	276	20	0	236	256	0	20	92.8
Interviewed	100	20	0	-	20			

a Percentage is out of total IFLS1 household members.

b Interviewed means were respondents to individual books.

c Age is age of household members in 1993.

Table 2.6a Current IFLS4 Household Members

		Original IFLS1 household members	IFLS1 "Main Respondents"	New IFLS2 nembers	New IFLS2+ members	New IFLS3 members	New IFLS4 nembers	All household members	Panel roster members[a]	Panel members interviewed[b]
Total		23,886	16,417	4,176	757	6,190	15,572	50,581	21,357	15,117
	Male	11,384	7,558	2,051	390	3,104	7,847	24,776	10,095	6,923
	Female	12,502	8,859	2,125	367	3,086	7,725	25,805	11,262	8,194
Male[c]										
	Children 0 -14	264	152	1,124	146	1,514	4,446	7,494	243	141
	Adult 15 and above	11,120	7,406	927	243	1,589	3,356	10,565	9,852	6,782
	Adult 40 and above	4,727	4,082	384	97	581	883	6,672	4,451	3,825
Female[c]										
	Children 0 -14	263	135	1,103	135	1,382	4,274	7,157	243	128
	Adult 15 and above	12,239	8,724	1,022	232	1,703	3,404	10,968	11,019	8,066
	Adult 40 and above	5,611	4,979	413	95	603	912	7,634	5,361	4,693

[a] Household roster members in IFLS1, IFLS2, IFLS3, IFLS4.

[b] Household members with individual book interview in IFLS1, IFLS2, IFLS3, IFLS4

[c]Age is age of household members in 2007.

Table 2.6b Ever IFLS Household Members

		Original IFLS1 household members	IFLS1 "Main Respondents"	New IFLS2 nembers	New IFLS2+ members	New IFLS3 members	New IFLS4 members	All household members
Total		33,081	22,019	6,694	1,458	9,907	15,581	66,721
	Male	16,087	10,448	3,240	737	4,914	7,852	32,830
	Female	16,994	11,571	3,454	721	4,993	7,729	33,891
Male [a]								
	Children 0 -14	352	213	1,255	177	1,756	4,446	7,986
	Adult 15 and above	15,735	10,235	1,985	538	3,147	3,356	24,761
	Adult 40 and above	6,832	5,927	695	175	1048	883	9,633
Female [a]								
	Children 0 -14	357	201	1,256	170	1,633	4,274	7,690
	Adult 15 and above	16,637	11,370	2,198	529	3,347	3,404	26,115
	Adult 40 and above	7,654	6,741	753	182	1116	912	10,617

[a] Age is age of household members in 2007. The numbers by age exclude observations with missing age, unlike the total

Table 2.7

IFLS4 Household Survey Questionnaires

Respondent	*Module*		*Remarks*
Book T: Tracking Book			
All respondents	SC	Sampling and enumeration record	Same as IFLS3, not in public release
Book K: Control Book and Household Roster			
Household head, spouse, or knowledgeable other person	SC	Sampling and enumeration record	
	AR	Household roster	For panel respondents, preprinted with the names of all previous IFLS household members.
	KRK	Housing characteristics (interviewer's observations)	
	IK	Information about where the respondents moved	Not in public release
	FP	Interview book check and tracking form	Not in pubic release
	CP	*See Note at end of table.*	
Book 1: Expenditures and Knowledge of Health Facilities			
Wife of household head, household head, or other knowledgeable person	KS	Household expenditures	Same as previous waves except for adding quantities of rice last week, purchased and consumed from own production
	KSR	Assistance received by household	New in IFLS2+, updated in IFLS3 and again in 4
	CR	Crime	New in IFLS4
	PP	Knowledge of outpatient care providers	
	CP	*See Note at end of table.*	

Continued on the next page.

Respondent	*Module*		*Remarks*
Book 2: Household Economy			
Household head, wife of household head, or other household member	KR	Housing characteristics	
	UT	Farm business	Redesigned in IFLS3 and additions made in IFLS4
	VU	Avian Flu	New in IFLS4
	NT	Nonfarm business	Redesigned in IFLS3 and changes in IFLS4
	HR	Household assets	Same as previous waves
	HI	Household nonlabor income	Some subtractions to avoid double counting
	GE	Household economic shocks	Removed in 2007, replaced by Section ND on natural disasters
	ND	Natural Disasters	New in IFLS4
	BH	Loans	Moved from Book 3A in IFLS3, at household level now
	CP	*See Note at end of table.*	

Continued on the next page.

Respondent	*Module*		*Remarks*
Book 3A: Adult Information (part 1)			
Each household member age 15 and older (IFLS1: administered to only a subset of adult household members)	DL	Education history	Revised in IFLS4
	SW	Subjective well-being	New in IFLS3, small addition in IFLS4
	HR	Individual assets and nonlabor income	Same as previous waves
	HI	Nonlabor income	Parts removed to avoid double counting
	KW	Marital history	New part on co-habitation. Panel respondents were asked detailed questions about the current marriage and any other marriage that was current in 2000 or begun later.
	PK	Household decision-making (married respondents	New in IFLS2, partly redesigned in IFLS4
	BR	Pregnancy summary (women age 50 and older)	Panel respondents excluded (had already answered these questions)
	MG	Migration history	Panel respondents were asked about all migrations since 2000.
	SR	Circular migration	Not in IFLS2 and IFLS2+. Removed in IFLS4
	TK	Employment history	Respondents were asked about current work and work since 1999. New parts on contracts and severance pay.
	RE	Retirement	New in IFLS4
	SI	Risk and time preferences	New in IFLS4, taken from Mexican Family Life Survey
	TR	Trust	New in IFLS4
	CP	*See Note at end of table.*	

Continued on the next page.

Respondent	*Module*		*Remarks*
Book 3B: Adult Information (part 2)			
Each household member age 15 and older (IFLS1: administered to only a subset of adult household members)	KM	Tobacco smoking	
	KK	Health conditions	Heavily revised in IFLS4
	VG	Health Vignettes	New in IFLS4, taken from SHARE
	CD	Chronic conditions	New in IFLS4
	KP	Depression scale	New in IFLS4. CES-D scale
	CO	Cognitive test	New in IFLS4, word recall
	MA	Acute morbidity	Redesigned in IFLS4
	AK	Health Insurance	Updated in IFLS4
	PS	Self-treatment	
	RJ	Outpatient visits	Some redesign in IFLS4
	FM	Food intake frequency tables	Redesigned from Section RJ in IFLS3
	RN	Inpatient visits	Some redesign in IFLS4
	PM	Community participation	Redesigned
	BA	Non-coresident family roster and transfers	For panel respondents, preprinted with the names of IFLS1, 2 and 3 family members
	TF	Transfer to/from outside household member	Non-biological parents added in IFLS4
	EP	Expectations	New in IFLS4. Expectations about children
	BH	Borrowing history	Put into Book 2 in IFLS4
	CP	*See Note at end of table.*	

Continued on the next page.

Respondent	*Module*		*Remarks*
Book 4: Ever-Married Woman Information			
Each ever-married woman age 15–49 (IFLS1: administered to only a subset of ever-married woman age 15–49)	KW	Marital history	Co-habitation added in IFLS4. Panel respondents were asked detailed questions about the current marriage and any other marriage that was current in 2000 or begun later.
	BR	Pregnancy summary	Same as previous waves
	BA	Non-coresident children and transfers	For panel respondents, preprinted with the names of IFLS1 ,2 and 3 family members
	BF	Breastfeeding update	Same as previous waves
	CH	Pregnancy and infant feeding history	Some re-design. Panel respondents were asked only about pregnancies after the pregnancy that produced the youngest child as of the last date interviewed
	BX	Non-co resident adopted child roster	Same as IFLS3
	CX	Contraceptive knowledge and use	Redesigned in IFLS4, some questions from KL added
	KL	Contraceptive use on a monthly basis	Dropped in IFLS4, some questions added to CX
	CP	*See Note at end of table.*	
Book 5: Child Information			
Each child, age 0–14 (usually answered by the mother if the child was less than 11 year) IFLS1: administered to only 2 children of household head	DLA	Child education history	Redesigned in IFLS4 to be more like DL
	MAA	Child acute morbidity	Same as previous waves
	PSA	Child self-treatment	Same as previous waves
	RJA	Child outpatient visits	Some redesign, as in RJ
	FMA	Food intake frequencies	Redesign of what was in RJA in IFLS3
	RNA	Child inpatient visits	Some redesign, as in RN
	BAA	Parental information	Same as IFLS3
	CP	*See Note at end of table.*	
Book Proxy: Adult Information by Proxy			
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		
Not used in IFLS1	CP	*See Note at end of table.*	

Continued on the next page.

Respondent	*Module*		*Remarks*
Book US1: Health Assessment			
Each household member	US	Measures of physical health	Includes some new measurements in IFLS4
Book US2: Health Observation/Evaluation			
Each household member	US	Health worker's evaluation on respondents' physical health	Includes some new measurements in IFLS4
Book EK: Cognitive Assessment			
Each household member age 7–24	EK	Skills in abstract reasoning and in numeracy	Same as IFLS3. EK1 given to same persons who took it in 2000, and they took EK2 as well. EK2 given to all who took it in IFLS3.

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. Much of this information was incorporated in the data during the Look Ups process, described in the *Overview* Appendix 5

Table 2.8 IFLS4 Household Survey Completion Times, by Questionnaire Book

	Book	Median completion time (minute)	% Books Completed in One Visit	# Books Completed
K	Control Book	29	99.86	13536
1	Household expenditures, health facility knowledge	39	99.27	13056
2	Household economy	32	99.31	13056
3A	Adult information	41	96.71	29971
3B	Adult information	42	96.65	29971
4	Ever-married woman information	34	97.87	10886
5	Child information	25	98.88	13652
3P	Proxy Book for Adults	36	96.22	1533
US1	Health assesment-US1	24	80.07	13057
US2	Health assesment-US2	22	77.60	13056
EK	Cognitive assesment 7-14 year old	10	100.00	11205
EK	Cognitive assesment 15-24 year old	10	100.00	11828

IFLS4 Household Survey Completion Times, by Respondent Type and Questionnaire Part

	Median completion time (minute)
Respondent type	
Married women, age 15-49	187
Unmarried women, age 15-49	102
Women, age 50+	130
Married men	126
Unmarried men	93
Children, age 11-14	26
Questionnaire part:	
Book 3A for panel respondents	40
Book 3A for new respondents	42
Book 3B for panel respondents	34
Book 3B for new respondents	25

Table 3.1 CFS Interviews Completed in IFLS1, IFLS2, IFLS3, and IFLS4, by Respondent and Facility Types

	IFLS1		IFLS2		IFLS3		IFLS4	
	Average per EA	**Total**	**Average per EA**	**Total**	**Average per EA**	**Total**	**Average per EA**	**Total**
Respondent type:								
Community leaders (book 1)	1	312	1	313	1	311	1	313
Women's group head (book PKK)	1	312	1	310	1	311	1	313
Community records (book 2)	1	312	1	312	1	311	1	313
Village head or women's group head (book SAR)	NA	NA	1	313	1	321	1.0	313
Traditional law expert (book Adat)	NA	NA	0.88	277	NA	NA	NA	340
Community activist (book PM)	NA	NA	0.97	303	1	304	NA	NA
Social Safety Net (book JPS)	NA	NA	NA	NA	1	303	NA	NA
Community Informant (book INF)	NA	NA	NA	NA	NA	NA	2	632
Facility type:								
Government health center, subcenter	3.1	993	2.9	919	3.0	945	3.0	952
Private doctor, clinic	1.7	549	NA	NA	2.2	699	1.7	530
Private nurse, midwife, paramedic	2.8	892	NA	NA	3.8	1205	3.4	1065
Any private practitioner	NA	NA	5.7	1832	5.9	1904	5.1	1595
Traditional practitioner	2	624	NA	NA	NA	NA	2.0	629
Community health post (posyandu)	2.8	899	1.9	619	2.0	630	2.0	632
Community health post for the elderly (posyandu lansia)	NA	NA	NA	NA	NA	NA	1.0	307
Elementary school	1.8	944	3	964	3.0	961	3.1	966
Junior high school	2.8	900	2.9	945	3.0	951	3.1	961
Senior high school	3	584	1.9	618	1.9	618	2.0	634
Prices								
Market	NA	NA	NA	NA	NA	NA	1.0	320
Store (Warung/Toko)	NA	NA	NA	NA	NA	NA	2.1	643
Informant	NA	NA	NA	NA	NA	NA	1.0	322
Mini-CFS Interview	NA	NA	NA	NA	5.3	1661	5.3	3323

Source IFLS1, IFLS2, IFLS3, and IFLS4

Table 3.2 CFS Interviews in IFLS4 by Province and Facility Type

Province	Gov't Health Centers	Private Practitioners	Traditional Practice	Community Health Post	Community Health Post for Elderly	Elementary School	Jr High School	Sr High School
North Sumatra	80	135	49	49	18	81	81	54
West Sumatra	42	70	28	28	17	42	42	28
South Sumatra	39	66	30	30	19	45	42	27
Lampung	30	55	22	22	9	32	33	22
DKI Jakarta	120	198	79	80	20	120	120	80
West Java	156	262	100	104	66	156	156	103
Central Java	110	184	73	74	42	111	108	74
DI Yogyakarta	65	111	44	44	41	66	68	44
East Java	133	221	90	87	39	135	132	84
Bali	42	70	25	28	10	42	42	27
West Nusa Tenggara	48	80	32	32	6	48	48	32
South Sulawesi	39	65	26	26	10	39	39	26
South Kalimantan	48	78	31	32	10	48	48	32
Total	952	1595	629	636	307	965	959	633

Source: IFLS4

Table 3.2 CFS Interviews in IFLS4 by Province and Facility Type

Province	Gov't Health Centers	Private Practitioners	Traditional Practice	Community Health Post	Community Health Post for Elderly	Elementary School	Jr High School	Sr High School
North Sumatra	80	135	49	49	18	81	81	54
West Sumatra	42	70	28	28	17	42	42	28
South Sumatra	39	66	30	30	19	45	42	27
Lampung	30	55	22	22	9	32	33	22
DKI Jakarta	120	198	79	80	20	120	120	80
West Java	156	262	100	104	66	156	156	103
Central Java	110	184	73	74	42	111	108	74
DI Yogyakarta	65	111	44	44	41	66	68	44
East Java	133	221	90	87	39	135	132	84
Bali	42	70	25	28	10	42	42	27
West Nusa Tenggara	48	80	32	32	6	48	48	32
South Sulawesi	39	65	26	26	10	39	39	26
South Kalimantan	48	78	31	32	10	48	48	32
Total	952	1595	629	636	307	965	959	633

Source: IFLS4

Table 3.3 Facility Cross-Wave Interviews, by Facility Type

Facility Type	IFLS1 Facilities Interviewed	IFLS2					IFLS3					IFLS4					Facilities Interviewed in IFLS1, IFLS2, IFLS3, and IFLS4
		IFLS1 Facilities Reinterviewed		New Facilities in IFLS2	IFLS1 Facilities Reinterviewed		IFLS2 Facilities Reinterviewed	Facilities ever Interviewed in IFLS1 or IFLS2	New Facilities in IFLS3	IFLS1 Facilities Reinterviewed		IFLS2 Facilities Reinterviewed	IFLS3 Facilities Reinterviewed	Facilities ever Interviewed in IFLS1 IFLS2 or IFLS3	New Facilities in IFLS4	Total IFLS4 Facilities Interviewed	
		%	N		%	N				%	N						
Government health centers	993	66.6	662	259	63.1	627	634	732	211	52.4	520	514	555	662	290	952	397
Private clinics and practitioners	1,439	40.4	582	1,249	32.8	472	712	859	1,045	16.1	232	352	452	582	1,013	1,595	123
Elementary school	944	64.8	612	351	53.4	504	555	641	319	40.0	378	402	402	518	448	966	268
Junior high school	900	55.3	498	447	50.3	453	537	647	304	40.8	367	434	475	602	357	959	235
Senior high school	584	44.2	258	360	33	193	217	284	334	27.4	160	169	177	274	359	633	75

Table 3.4

IFLS4 Community-Facility Survey Questionnaires

Community Questionnaires

Book 1: Community History and Characteristics			
Respondent/Source	*Module*		*Remarks*
Village head and community representatives (group interview)	LK	Basic Information	
	LSPM	Community participation sampling sheet	Not in public release
	K	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	New in IFLS4
	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	New in IFLS4
	PPS	Perception of public services and infrastructure	New in IFLS4
	GD	Governance and decentralization	New in IFLS4
	TR	Trust	New in IFLS4
	FP	Interview book check sheet	
	CP	*See Note at end of table*	

Respondent/Source	Module		Remarks
Book 2: Community Statistics			
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	*See Note at end of table*	
Book PKK: Village Women's Organization			
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	*See Note at end of table*	
Book SAR: Service Availability Roster			
Filled by interviewer based on information from IFLS3 SAR, IFLS4 household modules AR, PP and IFLS4 community-facility book 1 and book PKK.		List of health and school facilities by type serving local community	

Continued on the next page.

Book INFORMANT: Public Perception on Government Programs and Public Services			
Respondent/Source	*Module*		*Remarks*
			New book in IFLS4
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	
	SI	Social interactions	
	CP	*See Note at end of table*	
Book ADAT: Traditional law and community customs			
Usually village midwife, or else other person with main responsibility for JPS/BK			Added back in IFLS4
	LK	Sampling sheet	
	KD	General	
	AP	Marriage	
	AC	Divorce	
	BK	Birth	
	BW	Death and inheritance	
	AG	Gender	
	CK	Decision making in the household	
	BL	Living arrangement of elderly	
	DG	Land use	
	EK	Decision making in the community	
	FG	Mutual cooperation	New in IFLS4
	GO	Community organizations	New in IFLS4
	FB	Changes in tradition	
	CP	*See Note at end of table*	

Continued on the next page.

Health Facility Questionnaires

Book Puskesmas: Government Health Center			
Respondent/Source	*Module*		*Remarks*
Government Health Center director or designee	LK	Basic information	
	KR	Respondent characteristics	
	A	Information from Head of facility	
	B	Development of facility	
	C	Services available	
	D	Staff available	
	E	Equipment and supplies available	
	SDP	Other resources available (funding)	
	AKM	Health insurance for the poor	New in IFLS4
	DM	Decision making	New in IFLS3
	F	Direct observation (e.g., cleanliness)	
	G	Family planning services	
	H	Health case vignettes	Added back in IFLS4
	CP	*See Note at end of table*	
Book Private Practice: Doctors, Health clinics and other private health service providers			
Private doctors, head of clinics, nurse, midwives.	LK	Basic information	
	PB	Joint practices	
	A	General information about respondent and the provider	
	B	Practice schedule and service available	
	C	Equipment available	
	D	Stock of medicine	
	BD	Village midwives	New in IFLS2
	E	Direct observation (cleanliness, availability of rooms, etc)	
	F	Family planning services	
	H	Health case vignettes	Added back in IFLS4

	CP	*See Note at end of table*

Continued on the next page.

Book Traditional Practitioner

Respondent/Source	*Module*		*Remarks*
			Re-introduced in IFLS4
Volunteer staff member of community health service post	LK	Control sheet	
	A	General	
	B	Practice activities	
	C	Traditional midwife	
	KR	Respondent information	
	CP	*See Note at end of table*	

Book PRICES: Market

Respondent/Source	*Module*		*Remarks*
			New book in IFLS4
Sampled community markets	LK	Control sheet	
	H	Prices	
	CP	*See Note at end of table*	

Book PRICES:Shops/Stalls

Sample of shops/stalls	HG		New book in IFLS4
		Prices	
	CP	*See Note at end of table*	

Continued on the next page.

Book Prices: Informant

Respondent/Source	*Module*		*Remarks*
			New in IFLS4
Volunteer staff member of community health service post	LK	Control sheet	
	H	Prices	
	CP	*See Note at end of table*	

Book Posyandu: Community Child Health Post			
Respondent/Source	*Module*		*Remarks*
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)	New in IFLS3
	PRP	Revitalization program	New in IFLS3
	CP	*See Note at end of table*	

Book Posyandu Lancia: Community Elderly Health Post			
Respondent/Source	*Module*		*Remarks*
			New book in IFLS4
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	*See Note at end of table*	

Continued on the next page.

School Questionnaire

Book School: Elementary, Junior High and Senior High Schools			
Respondent/Source	*Module*		*Remarks*
Principal or designee	LK	Basic information	
	KR	Respondent characteristics	
	A	Principal	
	B	School characteristics	
	SC	School committee	New in IFLS4
	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*	
Book Mini-CFS: Community characteristics for non-IFLS communities			
Village head and staff		Questions from books 1 and 2, modules S, A, B, C, D, H, I, J, JPS and SW	
	CP	*See Note at end of table*	

Note: All community-facility books include a book cover. 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. Much of this information was incorporated in the data during the Look Ups process, described in the *User's Guide*, Sec. 5.

Table A.1: Timeline of IFLS4 Activities, 2006-2009

Year 2006

Oct	Send programmers to LA for training in CSPro
Oct – Nov (Late fall)	Redesigning of questionnaires, codes of new kabupatens and provinces, Re-do HH IDs for IFLS 4.

Year 2007

Jan-March	Piloting
April-June	Finish questionnaire, MIS and programming (add codes to the pqx from the newest data in electronic files)
July 2-21	Pretest HH
July 30-August 15	Pretest Comfas
3-15 September	Training of trainers
22 Oct-18 Nov	Training Wave I
8-18 Nov	Café training wave I
8-18 Nov	Health training wave I
Nov 19-14 Dec	Training Wave II
4-14 Dec	Café training Wave II
4-14 Dec	Health training wave II

Year 2008

2-16 Jan	Training Comfas
Nov 2007-Mid July 2008	Fieldwork
Mid June – End of July	Look up
August	Indonesia Office Close up
August 2008-April 2009	Public use preparation at RAND

Year 2009

April	Public use data released

Table A.2

Field Staff for IFLS4 Surveys

This table lists the names of all staff who participated in field operations for the IFLS4. Persons listed under HHS supervisors served as interviewers. Persons listed under CAFÉ supervisors served as CAFÉ editors. There was no health worker supervisor.

HHS TEAMS

North Sumatera A	
Team Coordinator : Himawan Setiajid	M
HHs Supervisor: Anwar Syukri	M
Iqbal Jamil Siregar	M
Helena Lusi Silitonga	F
David Maradu M. Hutabarat	M
Handayani Bellamia Zulmi	M
Zulmaidar Zega	F
Rahmat Saleh Hasibuan	M
Hendrik Nugroho	M
Cafe Supervisor: Krisna Gerda	F
Masnari Darnisa Hutasuhut	F
Limewi Sinurat	F
Health Worker:	
Egi Pria Gunawan	M
Lilik Dewanti	F

North Sumatera B	
Team Coordinator : Himawan Setiajid	M
HHs Supervisor: Dasril Koto	M
Hendra Sipayung	M
Ade Christa Sihombing	F
Khairizal Zainuddin	M
Mariana Perangin-angin	F
Wawan Widodo	M
Pebriani Tarigan	F
Rita Florina Manurung	F
Maria Tioma S	F
Cafe Supervisor: Henry Nugroho	F
Debora Sonata Sigalingging	F
Andayani Br Perangin-angin	F
Health Worker:	
Hasyim Nasrudin	M
Tyas Arum D A	F

West Sumatera	
Team Coordinator : Rochmatulloh	M
HHs Supervisor: Anang Eva Nasoha	M
Yondra	M
Sri Imelda	F
David Ari Kusuma	M
Arifah Rahmi	F
Aditomo Budi P	M
Nova Novita	F
Cafe Supervisor: Edy Santoso	F
R.Aj. Maknunah Karim	F
Muhammad Sapril	M
Health Worker:	
Tri Kurnia	M
Beti Hartrisni	F

South Sumatera	
Team Coordinator : Yulizard	M
HHs Supervisor: Ekus Mawanto Leo Poldo G	M
Martin	M
Yetti Lisnawati Silaban	F
Anton Sahat Tua Buaton	M
Rika Restu Remiva	F
Junaidi Hendriyanto	M
Retno Widiastuti	F
Agus Sulyanto	M
Rahmad Salim	M
Sudiansyah	M
Cafe Supervisor:Yunita Prihartini	F
Dewie Hartati Handayani	F
Nyimas Oktarisa	M
Health Worker:	
M. Muchlis	M
Hidayatul Isnani	F

HHS TEAMS (continued)

Lampung

Team Coordinator: Prayogo Sudarsono	M
HHs Supervisor: Mairizal S. Siatan	M
Cirama Buari	M
Fera Novita	F
Joni Kuswantoro	M
Asmawati Thohir	F
Basri	M
Winarti	F
Cafe Supervisor: Endri Susilowati	F
Marta Uli Agustin	F
Ade Apri Hendrawanto	M
Health Worker:	
Mochamad Nuryadi	M
Maya Suprihandini	F

DKI Jakarta A

Team Coordinator : Arise Gani	M
HHs Supervisor: Tunggul Budhiarto	M
Hari Prasetyo Susanto	M
Rizqi Amalia	F
Teguh Santoso	M
Titis Putri Ambarwati	F
Dahman Yuliadi	M
Sri Mulyani	F
Windarto	M
Rohmiati	F
Cafe Supervisor:Lazimah	F
Yopina Galih Pertiwi	F
Fitriah Susanti	M
Health Worker:	
Kus Subandrio	M
Hetti Nur Aida	F

DKI Jakarta B

Team Coordinator : Arise Gani	M
HHs Supervisor: Erika Nursatya	M
Laurencius	M
Andriani Tunggal Dewi	F
Yohanes Herlino D	M
Ulfah Arifianti	F
Hardiyanto	M
Nunik Pudyastini	F
Sofyan Effendi	M
Antonius Supriyanto	M
Cafe Supervisor:Aziz Kurniawan	M
Antonius Herdy H.W	M
Lintang Widyaretno	F
Health Worker:	
Andi Suryo N	M
Wahyu Indarti	F

West Java A

Team Coordinator : Mugi Gumanti	M
HHs Supervisor: Helmi Maulana	M
Ganda Satria	M
Pentadiati	F
Alkaf Yahya	M
Dwi Oktarina	F
Ulil Absor	M
Ika Oktafia	F
Cafe Supervisor:Lazimah	F
Rahmi Astuti	F
Dian Herdiansah	F
Health Worker:	
Fahroni Windarto	M
Festi Dewi Indraswati	F

HHS TEAMS (continued)

West Java B

Team coordinator : Dasriyamto	M
HHs Supervisor: Hendrik Hermawan	M
Sugiyanto	M
Lilis Dahlia Sari	F
Andi Achmad Alamsah	M
Lestari Yuliyanti	F
Ahmad Taufik	M
Nimas Resmita Kawuriati	F
Cafe Supervisor: Yuliani Isro	F
Dwi Nur Cahyo	M
Ambarwati Wilujeng	F
Health Worker:	
Ekhsan Aditomo	M
Tri Winarni	F

West Java C

Team coordinator : Mugi Gumanti	M
HHs Supervisor: Asep Hendra Hermansah	M
Saeful Hidayat Kurniawan	M
Yayah Rokayah	F
Agus Lesmana	M
Desy Analiah Ukasah	F
Irfan Ardani	M
Dedi Darmawan	M
Cafe Supervisor: Dwi Istianingsih	F
Agus Prasetyo Nogroho	M
Harni Kusuma Dewi	F
Health Worker:	
Ririn Iriani	F
Fita Susiani Muthoharah	F

West Java D

Team coordinator : Dasriyamto	M
HHs Supervisor: Maulana Malik	M
Delly Maulana	M
Nurani Fajri Nawangsih	F
R Amron Dorojatun Kusuma	M
Vera Yuliana	F
Wisnu Dwiyanto Rukanda	M
Jejen Fauzan	M
Cafe Supervisor: Sunar Indriati	F
Ismiyati	F
Fadjar Nur Saleh	M
Health Worker:	
Dwi Sunarni	F
Nurul Hidayati	F

Central Java A

Team coordinator : Endah Sri Wiyani	F
HHs Supervisor: Slamet Subadrodin	M
Ahmad Hanif	M
Meiria Sediana	F
Rangga Fauzian A	M
Dian Nugraheni	F
Rizqon Nadjib	M
Harimayastuti	F
Cafe Supervisor: Rosalia Ari Astuti	F
Deddy Asmoro Triantoro	M
Nur Ma'alifah	F
Health Worker:	
Hesti Wulandari	F
Ari Lestari	F

HHS TEAMS (continued)

Central Java B

Team coordinator : Endah Sri Wiyani	F
HHs Supervisor: Yudono Setiawan	M
Hanifan Yudistira Syaiful Islam	M
Ema Rahmawati	F
Johan Wahyudi	M
Heni Widiyawati	F
Budi Antoro	M
Diah Masyna M	F
Cafe Supervisor: Saputro	M
Suryati	F
Nanik Diarti	F
Health Worker:	
Santoso Widodo	M
Hendras Bintari	F

Central Java C

Team coordinator : Arief Gunawan	M
HHs Supervisor: Adi Sasmito	M
Rahmad Hari Santoso	M
Karina Hapsari	F
Sultoni Al Aziz	M
Eva Maryani	F
Pambudi Wibowo	M
Endah Muasyaroh	F
Cafe Supervisor: Naryanta	M
Diyah Ari Isnaini	F
Aprilia Guruh Prasetyawati	F
Health Worker:	
Adam Ruadiyawan	M
Dwi Mularsih	F

Yogyakarta A

Team coordinator : Setyo Pudjiastuti	F
HHs Supervisor: Seto Watugunung Rokhmatulloh	M
Akbar Budi Harto	M
Dian Artarini Purnomo	F
Daniar Latu Prayogi	M
Fatkah Zunarti	F
M. Agus Syarifuddin	M
Vita Ratna Utami	F
Cafe Supervisor: Rini Kondesiana	F
Rahmi Ananta Widya Kristianti	F
Fera Diani Miasari	F
Health Worker:	
Ragil Eva Agustin	F
Nur Endah S	F

Yogyakarta B

Team coordinator : Setyo Pudjiastuti	F
HHs Supervisor: Sutarman	M
Laksamana Hadi Agung P	M
Elis Emiyanti	F
Taufik Kurniawan	M
Suratini	F
Bedjo Mujoko	M
Titiana Irawati	F
Cafe Supervisor: Sigit Sugiharjo	M
Endah Mulatsari	F
Rr Retno Ayu H	F
Health Worker:	
Dwi Ana Sulistyani	F
Tri Atmi Widhiasih	F

HHS TEAMS (continued)

East Java A

Team coordinator : Arief Gunawan	M
HHs Supervisor: Angky Bayu Putranto	M
Basuki Sugeng Ariadi	M
Linda Puspita Sari Wijaya	F
Rizal Habibi	M
Ratna Isriyanti	F
Febry Perdana Kusuma	M
Astuti Wulandari	F
Cafe Supervisor: Fita Herawati	F
Luhky Nawangsari	F
Dian Tri Wahyuni	F
Health Worker:	
Destu Satya W	M
Efi Fitri W	F

East Java B

Team coordinator : Sulaiman	M
HHs Supervisor: Fadlan Habib	M
Reri Siskawan	M
Naomi Andriana	F
Wahyudi Kurniawan	M
M Nurdin Barlianto	M
Oni Suganda	M
Asngadi	M
Cafe Supervisor: Dwi Handayani	F
Endah Lestianti Rahayu	F
Aprita Aryani	F
Health Worker:	
Abdurrachman	M
Sri Moeryani	F

East Java C

Team coordinator : Sulaiman	M
HHs Supervisor: Sobis Ranu	M
Teguh Adminto	M
Erlisa Wahyu Pratiwi	F
Moh Syukri	M
Elmy Febriyanti	F
Zainal Arifin	M
Tri Winda Istanti	F
Cafe Supervisor: Agus Setiawan	M
Sofi Diantini	F
Gunawan Widhi Sasmito	M
Health Worker:	
Sigit Hadi Purwanto	M
Ersiana Intansari	F

Bali

Team coordinator : Setyo Pudjiastuti	F
HHs Supervisor: Seto Watugunung Rokhmatulloh	M
Delly Maulana	M
Yudono Setiawan	M
Nanik Diarti	F
Heni Widyowati	F
Hudiarko	M
Budiarto Eko Kusumo	M
Wahyu EDP	M
Agus Abidin	M
Dian Artarini Purnomo	F
M. Sofyan	M
Daniar Latu Prayogi	F
Slamet Haryono	M
Cafe Supervisor: Rini Kondesiana	F
Rosalia Ari Astuti	F
Suryati	F
Health Worker:	
Ag Suhartanto	F
Andriani N	F

HHS TEAMS (continued)

West Nusa Tenggara

Team coordinator : Badri	M
HHs Supervisor: Mawan Erlangga	M
Nurmathadinata	M
Isyaturriyadhah	F
Lalu Satriadi	M
Isni Januarti	F
Budi Santosa	M
Nita Febriyanti	F
Akramudin	M
Hermansyah	M
Cafe Supervisor: Endra Dwi Mulyanto	
Agus Santosa	M
Amirul Arifin	M
Health Worker:	
Yusuf Lensa	M
Nur Endah Setowati	F

South Sulawesi

Team coordinator : Safruddin	M
HHs Supervisor: Azwar	M
Himawan Taba	M
Iman Mardatillah	F
Anjas Husein	M
Elvira	F
Irawan Amirudin	M
Ismail Ibrahim	M
Sunardi	M
Muhammad Anwar	M
Cafe Supervisor: Dian Hesti Dwiyanti	
Abdul Rasyid Ramli	M
Sukmawati	M
Health Worker:	
Rahmat Ismoyo	M
Wulandari	F

South Kalimantan

Team coordinator : Abdul Qodir	M
HHs Supervisor: Jumri	M
Darma Kasuma	M
Nisfi Hidayati	F
Alpina Pipinita	F
Camelia	F
Retno Puspita Dewi	F
Rizwar Anshari	F
Cafe Supervisor: Rini Kondesiana	F
Apin Merdesa Sari	F
Yanuarita dewi Artikarini	F
Health Worker:	
Retno Palupi	F
Sunar Winarsih	F

CFS TEAMS

North Sumatera A

Affan Wisnu H	M	Supervisor
Irmawati Rambe	F	Editor
Fahmi Hidayat	M	Enumerator
Yenny Surya Sari	F	Enumerator

North Sumatera B

Andi Asmara	M	Supervisor
Sri utami	F	Editor
Hendra Saputra	M	Enumerator
Irma Sahreni	F	Enumerator

West Sumatera

Doni Aswandi	M	Supervisor
Lismomon Nata	M	Editor
Ira Elfaroza	F	Enumerator
Lisma Herlina	F	Enumerator

South Sumatera

Muhammad Harsono	M	Supervisor
Zulpadli	M	Editor
Andi Budi Prayitno	M	Enumerator
Hanifah Zumzumi	F	Enumerator

Lampung

Tri Mulyantono	M	Supervisor
Desty Meryani, S.T	F	Editor
Anggraeni	F	Enumerator
Bruri Anita	F	Enumerator

DKI A

Risma Khairunnisa	F	Supervisor
Endah Nurani	F	Editor
Roni Bakti Widiansyah	M	Enumerator
Sutarjo	M	Enumerator

DKI B

Fajar Sumito	M	Supervisor
Devi Lestari	F	Editor
Ronny Hermoko	M	Editor
Anggiasih Sakanti	F	Enumerator
Dian Kristiana	F	Enumerator

West Java A

Yusuf Septi Bayu	M	Supervisor
Dewi Nopitasari	F	Editor
Hary Prasetyo	M	Enumerator
Indah Wulandari	F	Enumerator

West Java B

Rizal Ramadhani	M	Supervisor
Neti Nurhayati	F	Editor
Tendi Priyadi	M	Enumerator
Ria Fauziyah	F	Enumerator

West Java C

Puri Puspasari	F	Supervisor
Moh. Ramdan	M	Editor
Fifin Qurnianingsih	F	Enumerator
Triningsih	F	Enumerator
Tanti Lestari	F	Enumerator

West Java D

Muhammad Arif Yasfani	M	Supervisor
Tri Wahyuni Sukesi	F	Editor
Windi Tristyono	M	Enumerator
Nina Fadhliany Ahmadry	F	Enumerator

Central Java A

Didik Darmadi	M	Enumerator
Desti Wahyu Kurniawati	F	Editor
Dian Fitriyanto	M	Enumerator
Septina Susiyanti	F	Supervisor

Central Java B

Sunardi	M	Enumerator
Amalinda Fajari	F	Editor
Dian Sulistyo winardianty	F	Enumerator
Pinus Nesuki	F	Supervisor

Central Java C

Mohammad Sirottudin	M	Enumerator
Farida Andri Astutiningsih	F	Editor
Arief Deski Mulyanto	M	Enumerator
Endah Prihatiningsih	F	Supervisor

CFS TEAMS (continued)

Yogyakarta A

Surtini	F	Supervisor
Wini Pudyastuti	F	Editor
Nugroho Dwi Prastyo	M	Enumerator
Tanti Lestari	F	Enumerator
Alun Bayu	M	Enumerator

Yogyakarta B

M. Muzaqi Al Amin	M	Supervisor
Septrisna Famiati	F	Editor
Tumijan	M	Enumerator
Misbakhul Munawaro	F	Enumerator

East Java A

Firman Soelijanto	M	Supervisor
Rika Rindra Kusuma	F	Editor
Miftahul Ulum	M	Enumerator
Moh Yaskun	M	Enumerator

East Java B

Teguh Susilo	M	Supervisor
Triese Sulistyaningrum	F	Editor
Rivai	M	Enumerator
Ony Yunantha	M	Enumerator

East Java C

Abdus Sair	M	Supervisor
Andri Yanto Prabowo	M	Editor
Bambang Slamet Riyadi	M	Enumerator
Medita Ervianti	F	Enumerator

Bali

Dwi Wahjuni,	F	Enumerator
Dyah A. Kusumaningrum	F	Editor
Ferry Gabriel	M	Enumerator
Tulus Yuwono	M	Supervisor

West Nusa Tenggara

Abdul Qoyum	M	Supervisor
Hamdan	M	Editor
M Nursamsu	M	Enumerator
Sutarto	M	Enumerator

South Kalimantan

Bahruddin	M	Supervisor
Murdiansyah	M	Editor
Eko Prasetyo Kushadi	M	Enumerator
Mujidi	M	Enumerator

South Sulawesi

Ihsanul Amri	M	Supervisor
Fauziatul Iffah	F	Editor
Fifin Qurnianingsih	M	Enumerator
Haryanto	M	Enumerator

Table A.3
Team Description

Province	Team Code(s)	No. of HHS Interviewers	No. of EAs
Jakarta	F, G	8,8	40
West Java	H, I, J, K	6,6,6,6	52
East Java	Q, R, S	6,6,6	30
South Kalimantan	V	6	13
South Sulawesi	W	8	16
South Sumatra	D	8	15
West Nusa Tenggara	U	8	16
Central Java	L, M, N	6,6,6	37
Yogyakarta	O, P	6,6	22
Bali	T	12	14
North Sumatra	A, B	6, 8	26
West Sumatra	C	6	14
Lampung	E	6	11

Table A.4
Main Office/Tracking Information Center

Person	Position
John Strauss	Principal Investigator
Firman Witoelar	Co-Principal Investigator
Bondan Sikoki	Co-Principal Investigator, Field Director
Edy Purwanto	Field Coordinator for the Household Survey
Dani Alfah	Field Coordinator for the Household Survey
Naisruddin	Field Coordinator for the Community-Facility Survey
Junedi	Programming Coordinator for the Computer-Assisted Field Editing (CAFÉ)
Danang Prasetya	CAFÉ programmer
Real Rahaddinal	CAFÉ programmer
Lulus Kusbudihardjo	Data and tracking associate
Jevri Adriansyah	Data and tracking associate
Zainal Abidin AM	Data and tracking associate
Sukamtiningsih	Assistant to Field Director

Table A.5

Household Post-Fieldwork Staff	
Agus Setiawan	Tri Rahayu
Dian Hesti Dwiyanti	Yainur Pratomo
Dwi Handayani	Yuliani Isro
Dwi Istianingsih	Yunita prihartini
Edi Santoso	Endra Dwi Mulyanto
Fita Herawati	Fera Diani Miasari
Lazimah	Luhky Nawangsari
Lintang Widyaretno	Nanik Diarti
Naryanta	Suryati
Rini Kondesiana	Yanuarita Dewi Artikarini
Saputro	Rosalia Ari Astuti
Sunar Indriati	Harni Kusuma Dewi
Setyo Pudjiastuti	

Table A.6

COMFAS Post-Fieldwork Staff	
Dyah Ayu Kusumaningrum	Nasirudin
Tri Wahyuni Sukesi	Sukamtiningsih
Desti Wahyu Kurniawati	Jevri Adriansyah
Amalinda Fajari	Edy Kiswanto
Farida Andri Astutiningsih	Zainal Abidin AM
Triese Sulistyaningrum	Sidik Patriatmadja