

# **E**nergy, Poverty, and Gender

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Impacts of Rural Electrification on Poverty  
and Gender in Indonesia

Volume 2: Quantitative Survey  
Methodology, Design, and Frequency  
Results

Gérard Madon  
MARGE, France

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# Preface

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This final report presents the results for Indonesia of a broader Energy, Poverty, and Gender (EnPoGen) study conducted in Indonesia and Sri Lanka. MARGE (*Marchéage et gestion de l'environnement*), an energy and environment consulting firm based in Labastide-Murat, France, had overall responsibility for the study. MARGE joined forces with IHS (*Insan Hitawasana Sejahtera*), a social science research and consulting company based in Jakarta, Indonesia.

The report was prepared by Gérard Madon (MARGE), energy economist and team leader for Indonesia, with contributions from Mayling Oey-Gardiner and Peter Gardiner (IHS), social scientists, who coordinated the field work, and Robert van der Plas (MARGE), renewable energy specialist. The IHS team also included Lies Marcoes-Natsir and Mira Indiwara P. R., social scientists.

The report includes two volumes:

- ❑ Volume 1: Main Report
- ❑ Volume 2: Quantitative Survey Methodology, Design and Frequency Results



# Exchange Rate

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Indonesian rupiah (Rp.) 1 = U.S. dollar (US\$) 0.0001  
US\$1 = Rp. 10,000



# Acronyms, Abbreviations, and Units of Measure

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ASTAE	Asia Alternative Energy Program
BPPT	Agency for the Assessment and Application of Technology ( <i>Badan Pengkajian dan Penerapan Teknologi</i> )
BPS	Indonesian Central Statistics Board
CFL	Compact fluorescent lamp
cm	Centimeter
DGEED	Directorate General of Electricity and Energy Development
EnPoGen	Energy, poverty, and gender
FGD	Focus group discussion
HDS	Hybrid diesel-solar
HH	Household
HHH	Head of household
IBEKA	People Centred Business and Economic Institute, NGO
IBEKA	People Centered Business and Economic Institute, an NGO
IHS	<i>Insan Hitawasana Sejahtera</i> , a social science research and consulting company in Jakarta
II	In-depth interview
KUD	Village cooperative unit ( <i>koperasi unit desa</i> )
lm	Lumen
NGO	Nongovernmental organization
PLN	State Electricity Corporation ( <i>Perusahaan Listrik Negara</i> )
RBS	Rural business services
SHS	Solar home system
SUSENAS	Socioeconomic survey
VCR	Videocassette recorder
W	Watt

# 1

## Survey Methodology and Design

The quantitative survey focused on the same locations and energy systems that were covered in the qualitative Phase I. The overall goal is to provide a methodology that would permit quantitative analysis of variations in patterns of energy use as well as attitudes toward electrification. This will be used to complement the qualitative information collected during Phase I. Table 1 shows the sample design by location and type of system that was worked out during initial planning. It provided for a total of 1,300 electrified households (800 with access to State Electricity Corporation, 300 to Solar Home System, and 200 to microhydro) along with 400 unelectrified households and 100 small-business users, for a total sample of 1,800 respondents. Locations were selected to agree with those covered during the qualitative work in Phase I as well as to bring in other categories of users (where relevant) and nonusers in these areas.

Separate questionnaires were designed for electrified households (HHs), unelectrified households, and small businesses using electricity and were reproduced in both Indonesian and English. Questionnaire design was based on the findings of Phase I, which included a list of key topics to be investigated during the quantitative survey. The other study carried out under this project (in Sri Lanka) was taken into account to provide a degree of cross-national comparability.

The fieldwork was carried out under a subcontract with the Indonesian Central Statistics Board (BPS). This was a mutually beneficial arrangement because it took advantage of BPS's access to qualified interviewers within the regions plus its general knowledge and expertise in survey implementation—including past experience with surveys on electrification. And in a cooperative arrangement, all of this could be done without sacrificing basic overall control of the questionnaire and field procedures by those responsible for the study (MARGE and IHS).

For electrified and unelectrified households, random quota sampling was used. As a first stage, a complete household listing was carried out classifying all households in each village according to their electrification status and, where relevant, the type of electrification being used. This formed the basis for drawing systematic random samples of households within strata up to the quotas specified in the design.

The listing operation, however, produced a number of cases in which quotas could not be met from the existing villages. In these cases organizers made decisions as to whether to reduce the number of cases in a particular category or to ask interviewers to go to adjacent villages to find enough additional households to fill the quota for the particular respondent category. The final sample by location and type of system is shown in table 2, and by sex of head of household (HHH) in table 3. Differences from the initial design in table 1 are documented after table 3 and are also briefly discussed on a case-by-case basis in the following.

**Table 1: Initial Sample Design by Location and Type of Electrification**

Province	District	Subdistrict	Village	PLN (grid)			Non-PLN			Total
				New customers	Older customers	Small business	SHS	Microhydro	Non-electrified	
West Java	Tasikmalaya	Singaparna	Sukarame	80	100	0	0	0	30	210
			Sukamenak	45	100	20	0	0	30	195
			Tamansari	0	0	40	0	0	20	60
			Kawalu	0	0	40	0	0	20	60
<b>Subtotal</b>				<b>125</b>	<b>200</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>525</b>
Banten	Lebak	Cileles	Prabugantungan	50	100	0	50	100	50	350
			Cipadang	75	100	0	100	0	50	325
<b>Subtotal</b>				<b>125</b>	<b>200</b>	<b>0</b>	<b>150</b>	<b>100</b>	<b>100</b>	<b>675</b>
South Sulawesi	Mamuju	Budong-Budong	Salugatta	0	0	0	75	0	50	125
			Potana-Kayang	0	0	0	75	0	50	125
<b>Subtotal</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>100</b>	<b>250</b>
South Sulawesi	Makale	Rindang Allo	Ta'ba	125	0	0	0	75	75	275
			Sanggalangi	25	0	0	0	25	25	75
<b>Subtotal</b>				<b>150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>350</b>
<b>Grand total</b>				<b>400</b>	<b>400</b>	<b>100</b>	<b>300</b>	<b>200</b>	<b>400</b>	<b>1,800</b>

*Note:* “New customers” refers to those using PLN (State Electricity Corporation) electricity for less than two years; “older customers” refers to those using PLN electricity for two years or more. SHS stands for solar home system.

**Table 2: Final Sample Structure by Location and Type of Electrification**

Province	District	Subdistrict	Village	PLN (grid)			Non-PLN				Total	
				New customers	Older customers	Small business	SHS	Micro-hydro	Hybrid	Non-electrified		
West Java	Tasikmalaya	Singaparna	Sukarame	80	100	0	0	0	0	29	209	
			Sukamenak	11	100	20	0	0	0	9	140	
			Padasuka	34	0	0	0	0	0	22	56	
		Tamansari	Sukahurip	0	0	40	0	0	0	0	40	
			Taman Jaya	0	0	0	0	0	0	20	20	
			Kawalu	Ciliamajang	0	0	40	0	0	0	0	40
		Leuwiliang		0	0	0	0	0	0	4	4	
				Gunung Tandala	0	0	0	0	0	0	16	16
<b>Subtotal</b>				<b>125</b>	<b>200</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>525</b>	
Banten	Lebak	Cileles	Prabugantungan	70	100	0	30	100	0	50	350	
			Cipadang	171	100	0	4	0	0	50	325	
<b>Subtotal</b>				<b>241</b>	<b>200</b>	<b>0</b>	<b>34</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>675</b>	
South Sulawesi	Mamuju	Budong-Budong	Salugatta	0	0	0	30	0	0	0	30	
			Potana-Kayang	0	0	0	28	0	0	0	28	
			Salopangkang 1	0	0	0	0	0	0	80	80	
			Tappilina	0	0	0	0	0	92	20	112	
	<b>Subtotal</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>92</b>	<b>100</b>	<b>250</b>
	Makale	Rindang Allo	Ta'ba	96	0	0	0	71	0	35	202	
			Ponglu	0	0	0	0	0	0	25	25	
			Batu Busa	29	0	0	0	2	0	15	46	
Sanggalangi		Bokin	6	0	0	0	27	25	58			
		Tallangsura	19	0	0	0	0	0	19			
<b>Subtotal</b>				<b>150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>350</b>	
<b>Grand total</b>				<b>516</b>	<b>400</b>	<b>100</b>	<b>92</b>	<b>200</b>	<b>92</b>	<b>400</b>	<b>1,800</b>	

*Note:* “New customers” refers to those using PLN electricity for less than two years; “older customers” refers to those using PLN electricity for two years or more. SHS stands for solar home system.

**Table 3: Final Sample Structure by Sex of Head of Household**

Province	District	Subdistrict	Village	Electrified households			Unelectrified households			Total				
				Female	Male	Total	Female	Male	Total	Female	Male	Total		
West Java	Tasikmalaya	Singaparna	Sukarame	31	149	180	1	28	29	32	177	209		
			Sukamenak	8	103	111	1	8	9	9	111	120		
			Padasuka	8	26	34	2	20	22	10	46	56		
		Tamansari	Taman Jaya				1	19	20	1	19	20		
			Kawalu	Leuwiliang					4	4		4	4	
				Gunung				3	13	16	3	13	16	
<b>Subtotal</b>				<b>47</b>	<b>278</b>	<b>325</b>	<b>8</b>	<b>92</b>	<b>100</b>	<b>55</b>	<b>370</b>	<b>425</b>		
Banten	Lebak	Cileles	Prabugantunga	37	263	300	8	42	50	45	305	350		
			Cipadang	30	245	275	8	42	50	38	287	325		
<b>Subtotal</b>				<b>67</b>	<b>508</b>	<b>575</b>	<b>16</b>	<b>84</b>	<b>100</b>	<b>83</b>	<b>592</b>	<b>675</b>		
South Sulawesi	Mamuju	Budong-	Salugatta	1	29	30				1	29	30		
			Potana-Kayang		28	28					28	28		
			Salopangkang 1				4	76	80	4	76	80		
		Tappilina		2	90	92	2	18	20	4	108	112		
			<b>Subtotal</b>			<b>3</b>	<b>147</b>	<b>150</b>	<b>6</b>	<b>94</b>	<b>100</b>	<b>9</b>	<b>241</b>	<b>250</b>
			Makale	Rindang Allo	Ta'ba	23	144	167	5	30	35	28	174	202
Ponglu						5	20	25	5	20	25			
Batu Busa	1	30			31	1	14	15	2	44	46			
Sanggalangi	Bokin	4	29	33	2	23	25	6	52	58				
	Tallangsura	1	18	19				1	18	19				
<b>Subtotal</b>				<b>29</b>	<b>221</b>	<b>250</b>	<b>13</b>	<b>87</b>	<b>100</b>	<b>42</b>	<b>308</b>	<b>350</b>		
<b>Grand total</b>				<b>146</b>	<b>1,154</b>	<b>1,300</b>	<b>43</b>	<b>357</b>	<b>400</b>	<b>189</b>	<b>1,511</b>	<b>1,700</b>		

## **Tasikmalaya**

- a. The original sample design identified the village of Sukamaju (Tamansari subdistrict) as a location for small business and unelectrified household interviews. This name was found not to exist and was substituted in the field by Sukahurip village in the same subdistrict.
- b. Only 11 recent (new) State Electricity Corporation (PLN) customers could be found in Sukamenak village (Singaparna subdistrict) and 34 recent customers were added from the adjacent village of Padasuka in the same subdistrict to reach the required quota.
- c. Only 38 unelectrified households could be found in Sukarame and Sukamenak villages (Singaparna subdistrict). Because there were no unelectrified households in Sukahurip village (Tamansari subdistrict) and Cilamajang village (Kawalu subdistrict), both located along main roads in a generally more periurban environment, interviewers added 22 unelectrified households from nearby Padasuka village (Singaparna subdistrict) and 20 unelectrified households from the adjacent villages of Leuwiliang and Gunung Tandala (Kawalu subdistrict) to reach the required quotas.

## **Lebak**

- a. Although the area covered was one with substantial past solar home system (SHS) use (in the early 1990s), many if not most of these systems had fallen into disuse<sup>1</sup> since the arrival of grid electrification. Field-workers noted declines in SHS usage during Phase I, but the full extent was not known until full village listings were made for the survey. The result was that only 30 SHS users could be found in the village of Prabugantungan and 4 SHS users in Cipadang. Rather than trying to find additional SHS users elsewhere in the area (an almost impossible task), it was decided to substitute households that had recently become PLN (grid) users. This was done with 20 households in Prabugantungan and 71 in Cipadang to fulfill the overall quota of 675 respondents for this region.

## **Mamuju**

- a. The original design was to take 150 households that were users of the Altari SHS systems and another 100 unelectrified households from two villages (Salugatta and Potana-Kayang), both in Budong-Budong subdistrict. As in Lebak, this expectation proved to be too optimistic in practice, because only a total of 58 SHS users (30 in Salugatta and 28 in Pontana-Kayang) could be found in the field. Here, the quota was made up by adding customers of the total hybrid diesel-solar system in Tappilina village (formerly Salopangkang 3) in the same subdistrict. This system and village originally had been left out of the survey design because of fears of difficult interviewer access.<sup>2</sup> However, at the time of fieldwork, access was possible.
- b. A postpreparation decision was made not to draw the sample of unelectrified households from the designated SHS villages, but rather from a nearby village (Salopangkang 1) that was totally unelectrified. As table 2 notes, 80 unelectrified households were taken from this

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<sup>1</sup> Original sample estimates were based on past information about the numbers of systems that had been installed in these villages.

<sup>2</sup> Road access is often problematic and the area can become completely isolated when high water (from rain or tides) inundates the road. This problem was found during the qualitative work carried out during Phase I.

village. The remainder in the quota was made up of unelectrified households in the adjacent village of Tappilina, the same one from which the sample of hybrid system users was drawn.

### **Makale**

- a. Only 71 microhydro users were found in Ta'ba village (Rindang Allo subdistrict), compared to 75 in the original design. To fulfill the quota, 2 households were added to the original sample of 25 microhydro customers in Bokin village (Sanggalangi subdistrict) and 2 other households were taken from the village of Batu Buasa, which also had a few households as part of the Rindang Allo system.
- b. Only 96 PLN customers could be found in Ta'ba village and only 6 in Bokin village, compared to 125 and 25, respectively, in the original design. Recent customers were added from adjacent villages to fill this gap—29 from the village of Batu Busa (near Ta'ba in Rindang Allo subdistrict) and 19 from Tallangsura (near Bokin in Sanggalangi subdistrict).
- c. Only 35 unelectrified households were found in Ta'ba. As in other cases, the quota was made up by adding unelectrified households in adjacent villages; in this case 15 households were from Batu Busa village and 25 from Ponglu village, both in the subdistrict of Rindang Allo.

These changes need to be kept in mind in the results analysis. However, it should be stressed that a considerable amount of care was taken to ensure that substitutions were broadly representative of cultural and socioeconomic conditions in these areas. It should also be remembered that the overall purpose of this study was to look at energy, poverty, and gender linkages in the form of a series of case studies of electrified and unelectrified households and, among electrified households, according to a range of energy options. To this extent at least, even with the modifications, it seems fairly safe to say that the basic integrity of the study was fully maintained.

The sample of small-business users originally was meant to coincide with small enterprises covered under the Rural Business Services (RBS) program, which is one of the components included in the World Bank Rural Electrification II (RE-II) Loan. However, during Phase I it was found that, at least in Tasikmalaya, many of these businesses that were listed as program recipients by PLN did not even know they were part of the program. As a result, it was decided to simply make this component a small-business survey—to look at patterns of use and attitudes toward electrification irrespective of the businesses' formal participation under RBS. Samples were allocated to three villages in Lebak and Tasikmalaya, all of which are known to be local centers for shops and other small businesses. Selection was carried out via a summary listing of establishments and quota sampling along the main road within each of the villages selected for this component of the survey.

## 2

# Questionnaire and Frequency Results for Electrified Households

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The overall goal of the quantitative survey is to provide a design that will permit quantitative analysis of variations in patterns of energy use, as well as attitudes toward electrification. This is used to complement the qualitative information collected during Phase 1. Separate questionnaires were designed for electrified households, unelectrified households, and small businesses using electricity. The questionnaire for electrified households aims to know the benefits of electricity at the household level, patterns of electricity use, gender aspects associated with quality of life improvement from electricity use, and perception on quality of electricity service according to the type of electricity supply system.

## 2.1 QUESTIONNAIRE FOR ELECTRIFIED HOUSEHOLDS

### PENGGUNA (USER)

#### **SURVEI ENERGI, KEMISKINAN DAN JENDER (SURVEY OF ENERGY, POVERTY, AND GENDER) 2001**

#### **KETERANGAN POKOK RUMAH TANGGA DAN ANGGOTA RUMAH TANGGA (BASIC INFORMATION ON HOUSEHOLD AND ITS MEMBERS)**

1. PENGENALAN TEMPAT (IDENTIFICATION OF LOCATION)			
01	Propinsi ( <i>Province</i> )		
02	Kabupaten/Kotamadya* ( <i>District/Municipality</i> )		
03	Kecamatan ( <i>Subdistrict</i> )		
04	Desa ( <i>Village</i> )		
05	Daerah ( <i>Area</i> )	<i>Urban—1</i>	<i>Rural—2</i>
06	Nomor sampel rumah tangga terpilih ( <i>Sample code for selected household</i> )		
07	Nama kepala rumah tangga ( <i>Name of head of household</i> )		
08	Jumlah anggota rumah tangga ( <i>Number of household's members</i> )		

**2. KETERANGAN PEWAWANCARA (INTERVIEWER INFORMATION)**

01	Nama pewawancara: <i>(Name of interviewer)</i>	04	Nama pemeriksa: <i>(Name of editor)</i>
02	Tanggal survei: <i>(Survey date)</i>	05	Tanggal pemeriksaan: <i>(Date checked/edited)</i>
03	Tanda tangan pewawancara: <i>(Signature of interviewer)</i>	06	Tanda tangan pemeriksa: <i>(Signature of editor)</i>

### 3. KETERANGAN ANGGOTA RUMAH TANGGA

No.	Nama anggota rumah tangga (Termasuk anggota rumah tangga yang sedang bepergian dan orang lain yang tinggal serumah)	Hubungan dengan KRT (kode)	Jenis Kelamin Lk—1 Pr—2	Usia (tahun)	Status perkawinan (kode)	Partisipasi Sekolah (kode)	Tingkat pendidikan terakhir yang ditamatkan (kode)	Kegiatan terbanyak yg dilakukan seminggu yll (kode)	Apakah pernah mencari nafkah paling sedikit 1 jam selama seminggu yll? Ya—1 Tidak—2	Apakah mempunyai pekerjaan tapi sementara tidak bekerja selama seminggu yang lalu? Ya—1 Tidak—2	Lapangan pekerjaan utama (Tuliskan secara lengkap) (kode)	Status pekerjaan utama (kode)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
01												
02												
03												
04												
05												
06												
07												
08												
09												
10												

<i>Kode kolom 3</i>	<i>Kode kolom 6</i>	<i>Kode kolom 7</i>	<i>Kode kolom 8</i>	<i>Kode kolom 9</i>	<i>Kode kolom 12</i>	<i>Kode kolom 13</i>
<i>Hubungan dengan KRT</i>	<i>Status Perkawinan</i>	<i>Partisipasi Sekolah</i>	<i>Pendidikan Terakhir</i>	<i>Kegiatan terbanyak</i>	<i>Lapangan Pekerjaan Utama</i>	<i>Status Pekerjaan Utama</i>
KRT	1 Tidak menikah	1 Tidak/belum pernah sekolah	1 Tidak/belum sekolah	1 Bekerja	1 Pertanian	1 Berusaha sendiri
Isteri/Suami	2 Menikah	2 Masih sekolah	2 Tidak Tamat SD	2 Sekolah	2 Industri	2 Berusaha dibantu pekerja/ buruh tidak tetap
Anak	3 Janda/duda cerai	3 Tidak sekolah lagi	3 SD	3 Mencari Pekerjaan	3 Perdagangan	3 Berusaha dibantu buruh pekerja tetap
Menantu	4 Berpisah	4	4 SLTP	4 Mengurus RT	4 Jasa-jasa	4 Buruh/karyawan
Cucu	5 Janda/duda mati	5	5 SLTA	5 Lainnya	5 Lainnya	5 Pekerja tak dibayar
Ortu/mertua	6		6 Universitas		6 Tak terjawab	
Kerabat Lain	7					
Lainnya	8					

**3. INFORMATION ON INDIVIDUAL HOUSEHOLD MEMBERS**

No.	Name of household members (including those who are currently away and others currently staying in this household)	Relation to HHH <b>(code)</b>	Sex  M—1 F—2	Age  <b>(years)</b>	Marital status  <b>(code)</b>	School attendanc e  <b>(code)</b>	Educatio n attainmen t  <b>(code)</b>	Main activity during previous week  <b>(code)</b>	Did you work at least 1 hour last week?  Yes—1 No—2	Do you have a job but were temporarily not working last week?  Yes—1 No—2	Main industry  <b>(code)</b>	Employme nt status during last week  <b>(code)</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
01												
02												
03												
04												
05												
06												
07												
08												
09												
10												

<i>Code for column 3</i>		<i>Code for column 6</i>		<i>Code for column 7</i>		<i>Code for column 8</i>		<i>Code for column 9</i>		<i>Code for column 12</i>		<i>Code for column 13</i>	
<i>Relation to HHH</i>		<i>Marital status</i>		<i>School attendance</i>		<i>Education attainment</i>		<i>Main activities</i>		<i>Main industry</i>		<i>Employment status</i>	
HHH	1	Single	1	No schooling	1	Didn't complete primary school	1	Work	1	Agriculture	1	Self-employed	1
Spouse	2	Married	2	Still in school	2	Primary school	2	Looking for work	2	Manufacturing	2	Self-employed with help from family members/part-time help	2
Child	3	Divorced	3	No longer in school	3	Junior high school	3	Housekeeping	3	Trade	3	Employer	3
In-law	4	Separated	4			Senior high school	4	Other	4	Service	4	Employee/civil servant/blue-collar	4
Grandchild	5	Widowed	5					Academy/university	5	Other	5	Unpaid family worker	5
Parent/parent-in-law	6									Not state	6		
Other relative	7												
Other	8												

#### 4. KHUSUS PENGGUNA LISTRIK (ONLY FOR ELECTRICITY USER)

##### 4.1. JENIS LISTRIK (TYPE OF ELECTRICITY)

1. Jenis listrik yang digunakan sekarang (*Type of electricity used*)  
(Isikan kode yang sesuai) (*Fill with proper code*)

Jenis listrik ( <i>Type of electricity</i> ) Ya (Yes) 1                      Tidak (No) 2 (jika kolom a Ya, isi kolom b, c, d) (if Yes to column a, fill columns b, c, d)	Tahun masuk desa ini ( <i>Year electricity came to the village</i> )	Tahun pasang ( <i>Year start using</i> )	Jika kolom b ≠ kolom c, alasan tidak pasang bersamaan dengan masuknya listrik di desa ini ( <i>If column b ≠ column c explain why</i> ) (code)
(a)	(b)	(c)	(d)
PLN			
Listrik Tenaga Surya ( <i>Solar home system</i> )			
Listrik Tenaga Air ( <i>Hydro</i> )			
Listrik Tenaga Diesel ( <i>Diesel</i> )			
Lainnya ( <i>Other</i> ) _____			

**Kode untuk kolom d (Code for column d)**

Tidak punya uang ( <i>No money</i> )	1	Jaringan sudah penuh ( <i>No network</i> )	4
Tidak ada tiang ( <i>No poles</i> )	2	Tidak butuh listrik ( <i>No need for electricity</i> )	5
Jarak jauh dari instalansi ( <i>Far from grid</i> )	3	Lainnya ( <i>Other</i> ) _____	6

2. Jika No. 1 menggunakan lebih dari satu jenis listrik, jenis listrik apa yang paling banyak digunakan?  
(*If more than one type of electricity is used, what type do you use the most?*)

PLN	1	Listrik Tenaga Diesel ( <i>Diesel</i> )	4
Listrik Tenaga Surya ( <i>Solar home system</i> )	2	Lainnya ( <i>Other</i> ) _____	5
Listrik Tenaga Air ( <i>Hydro</i> )	3		

3. Apakah pernah menggunakan jenis listrik lain dan tidak digunakan lagi sekarang?  
(*Have you ever used another type of electricity?*)

Ya (Yes) 1                      Tidak (No) 2 → No. 6

4. Jika Ya, jenis listrik apa yang pernah digunakan? (*If Yes, what type of electricity did you use?*)  
(Ya = 1, Tidak = 2) (*Yes = 1, No = 2*)

PLN	Listrik Tenaga Diesel ( <i>Diesel</i> )
Listrik Tenaga Surya ( <i>Solar home system</i> )	Lainnya ( <i>Other</i> ) _____
Listrik Tenaga Air ( <i>Microhydro plan</i> )	

5. Kenapa beralih dari jenis listrik yang lama? (*Ya = 1, Tidak = 2*)  
(*Why did you change the type of electricity?*) (*Yes = 1, No = 2*)

Daya kurang mencukupi ( <i>Limited power</i> )	Tegangan naik turun ( <i>Unstable voltage</i> )
Pelayanan kurang memuaskan ( <i>Poor service</i> )	Pemeliharaan listriknnya susah ( <i>Maintenance too difficult</i> )

Lebih mahal (*More expensive*)

Lainnya (*Other*) \_\_\_\_\_

6. Siapa yang mempunyai gagasan pertama kali untuk memasang listrik di rumah Anda?  
(*Whose idea was it to apply for electricity?*)

Suami (*Husband*) 1      Anggota RT lainnya (*Other HH member*) 3  
Istri (*Wife*) 2      Tetangga/teman (*Other non-HH member*) 4

7. Siapakah yang mengajukan permohonan ke pengelola listrik? (*Who actually applied?*)

Suami (*Husband*) 1      Anggota RT lainnya (*Other HH member*) 3  
Istri (*Wife*) 2      Tetangga/teman (*Other non-HH member*) 4

8. Apakah ada kesulitan pada saat mengajukan permohonan pemasangan listrik?  
(*Any problems when you applied?*)

Ya (*Yes*) 1      Tidak (*No*) 2 → No. 10

9. Jika Ya, kesulitan apa yang Anda alami? (*If Yes to No. 8, what were those problems?*)

Tidak ada sambungan listrik (*No connection*) 1  
Aturan kurang jelas (*Unclear rules*) 2  
Informasi tidak jelas (*Poor information*) 3  
Petugas mempersulit (*Uncooperative staff*) 4  
Birokrasi berbelit (*Bureaucratic*) 5  
Lainnya (*Other*) \_\_\_\_\_ 6

10. Apakah punya meteran sendiri? (*Do you have your own meter?*)

Ya (*Yes*) 1      Tidak (*No*) 2 → No. 13

11. Jumlah meteran dan besarnya daya untuk masing-masing meteran? (*Number of meters and the capacity of each?*)

Meter	1	2	3	>3
Watt				

12. Bagaimana ketepatan pembacaan meteran? (*How accurately do they read the meter?*)

Tepat (*Accurately*) 1      Tidak tepat (*Not accurately*) 2      Tidak tahu (*Don't know*) 3

13. Jika tidak punya meteran sendiri bagaimana cara memperoleh listrik?  
(*If you don't have your own meter, how do you get electricity?*)

Nyantol pada tetangga sebelah rumah (*Hook up from nearby neighbor*) 1  
Nyantol pada tetangga lain sekampung (*Hook up from other HH in village*) 2  
Nyantol pada kabel PLN (*Hook up from PLN's cable*) 3

#### 4.2. BIAYA LISTRIK (*ELECTRICITY COST*)

14. Cara pembayaran listrik (*Method of payment*):

Sendiri (*Self*) 1      Di tagih oleh petugas (*Collected by official*) 3  
Menyuruh orang lain (*Collector*) 2

15. Menurut Anda bagaimana cara pembayaran tersebut? (*How is the method of payment?*)

Memuaskan (*Satisfactory*) 1      Tidak memuaskan (*Unsatisfactory*) 2

16. Biaya yang dikeluarkan untuk membayar listrik 3 bulan terakhir? (*What were the expenses for electricity during the past three months?*)

Item	Ya = 1, Tidak = 2 ( <i>Yes = 1, No = 2</i> )	Besarnya biaya ( <i>Amount</i> )		
		I	II	III

Langganan ( <i>Monthly fees</i> )		Rp.	Rp.	Rp.
Transport ( <i>Transportation</i> )		Rp.	Rp.	Rp.
Menyuruh orang lain ( <i>Collection fee</i> )		Rp.	Rp.	Rp.
Lainnya ( <i>Other</i> ) _____		Rp.	Rp.	Rp.
Total		Rp.	Rp.	Rp.

17. Apakah pembayaran listrik selalu tepat waktu? (*Do you always pay your electricity fees on time?*)

Ya (*Yes*) 1 → No. 19                      Tidak (*No*) 2

18. Jika tidak, kenapa? (*Ya = 1, Tidak = 2*)

(*If No, why?*) (*Yes = 1, No = 2*)

Tidak punya uang (*No money*)

Tidak sempat (*No time*)

Sistem pembayaran menyulitkan (*Complicated system of payment*)

Tempat membayar terlalu jauh (*Place of payment is too far*)

Lainnya (*Other*) \_\_\_\_\_

19. Siapakah yang bertanggung jawab mengeluarkan uang untuk membayar tagihan listrik?

(*Who is financially responsible for paying the electricity bill?*)

Kepala RT (*Head of household*) 1

Perempuan, anggota RT (*Other female household member*) 2

Laki-laki, anggota RT (*Other male household member*) 3

Bersama-sama (*Together*) 4

20. Bagaimana besarnya tagihan listrik? (*What do you think about your electricity bill?*)

Sangat mahal (*Very expensive*) 1                      Biasa (*Reasonable*) 3

Mahal (*Expensive*) 2                      Murah (*Cheap*) 4

21. Jika tarif listrik dinaikkan, apakah masih bersedia membayarnya?

(*If the electricity rate is increased, are you still willing to pay?*)

Ya (*Yes*) 1                      Tidak (*No*) 2

#### **4.3. PEMELIHARAAN LISTRIK (MAINTENANCE OF ELECTRICITY)**

22. Apakah mengalami kesulitan dalam pemeliharaan atau perbaikan sistem listrik (bohlam, sekering, dsb)?

(*Any difficulties in maintaining or repairing your electricity system [bulb, fuse for electric circuit, etc.?]*)

Ya (*Yes*) 1                      Tidak (*No*) 2 → No. 24

23. Jika Ya, apa saja kesulitan yang dialami? (*Ya = 1, Tidak = 2*)

(*If Yes, what kind of difficulties?*) (*Yes = 1, No = 2*)

Biaya pemeliharaan tinggi (*High maintenance cost*)

Susah mencari suku cadang (*Difficult to find spare parts*)

Pengetahuan kurang ( <i>Lack of knowledge about electricity</i> )	Petugas tidak profesional ( <i>Unprofessional official</i> )
Perawatan rumit ( <i>Complicated maintenance</i> )	Lainnya ( <i>Other</i> ) _____
24. Siapakah yang bertanggung jawab dalam pemeliharaan atau perbaikan listrik? ( <i>Who is responsible for maintenance or repair of the electricity system?</i> )	
Suami ( <i>Husband</i> )      1	Anggota RT lainnya ( <i>Other HH member</i> )      3
Istri ( <i>Wife</i> )      2	Petugas ( <i>Official</i> )      5
Tetangga/teman ( <i>Other non-HH member</i> )      4	
25. Apakah listrik di rumah sering mati? ( <i>Does electricity often go off?</i> )	
Ya ( <i>Yes</i> )    1      Tidak ( <i>No</i> )    2	
26. Apakah tegangan listrik sering turun naik (fluktuasi)? ( <i>Does the voltage often fluctuate?</i> )	
Ya ( <i>Yes</i> )    1      Tidak ( <i>No</i> )    2	
27. Pernahkah Anda menyampaikan keluhan ke pengelola listrik? ( <i>Have you ever filed a complaint with the provider?</i> )	
Ya ( <i>Yes</i> )    1      Tidak ( <i>No</i> )    2 → No. 29	
28. Jika Ya, Bagaimana tanggapan pengelola listrik? ( <i>If Yes, what has been the response?</i> )	
Cepat ( <i>Fast</i> )    1      Biasa ( <i>Reasonable</i> )    2      Lambat ( <i>Slow</i> )    3	
29. Apakah Anda sudah merasa cukup dengan daya yang telah ada? ( <i>Do you feel the electric capacity is enough?</i> )	
Ya ( <i>Yes</i> )    1 → No. 34      Tidak ( <i>No</i> )    2      Tidak tahu ( <i>Don't know</i> )    3	
30. Jika tidak, Apakah ingin tambah daya lagi? ( <i>If No, do you want more?</i> )	
Ya ( <i>Yes</i> )    1      Tidak ( <i>No</i> )    2 → No. 34	
31. Jika Ya, untuk apa anda perlu tambahan listrik? (Ya = 1, Tidak = 2) ( <i>If Yes, for which purpose do you need more electricity?</i> ) (Yes = 1, No = 2)	
Aktifitas sosial ( <i>Social activities</i> )	Belajar/membaca ( <i>Study/reading</i> )
Aktifitas rumah tangga ( <i>Household activities</i> )	Lainnya, sebutkan ( <i>Other, specify</i> ) _____
Aktifitas ekonomi ( <i>Economic activities</i> )	
32. Pernahkah anda mengajukan permohonan untuk penambahan daya? ( <i>Have you ever applied for additional electric capacity?</i> )	
Ya ( <i>Yes</i> )    1 → No. 34      Tidak ( <i>No</i> )    2	
33. Jika tidak mengapa? ( <i>If No, why?</i> )	
Belum punya uang ( <i>No money</i> )	1
Kapasitas listrik tidak tersedia ( <i>Electric capacity is not available</i> )	2
Lainnya ( <i>Other</i> ) _____	3
<b>4.4. DAMPAK PEMANFAATAN LISTRIK (IMPACTS OF USING ELECTRICITY)</b>	
<b>4.4.1. PERUBAHAN UTAMA (MAJOR CHANGES)</b>	
34. Tiga perubahan terpenting yang dirasakan sejak adanya listrik? ( <i>What have been three major changes in your way of life since you got electricity?</i> ) (Urutkan dari 1 sampai 3) ( <i>Rank 1 to 3</i> )	

Punya uang lebih (*Have more money*)

Merasa hidup dalam dunia modern (*Makes me feel that I live in a modern world*)

Merasa bisa berhubungan dengan dunia modern (*Links me with the rest of the world*)

Memiliki waktu lebih untuk hiburan (*More time for entertainment*)

Kehidupan dalam rumah lebih nyaman (*More convenient home life*)

Pekerjaan rumah tangga lebih mudah (*Housework has become easier*)

Tidak ada resiko kebakaran akibat lampu minyak (*No risks of fire caused by kerosene lamp*)

Meningkatkan nilai jual tanah dan rumah (*Increases the value of my property [land, house]*)

Peningkatan pelayanan sosial (*Improvements in social services*)

Lebih aman di malam hari (*Safer at night*)

35. Biaya pemakaian listrik jika dibandingkan pemakaian energi non listrik:

(*Comparison between electricity and nonelectricity costs*)

Lebih murah (*Cheaper*) 1

Lebih mahal (*More expensive*) 2 → No. 37

Sama saja (*The same*) 3 → No. 37

36. Jika lebih murah, kelebihan uang digunakan untuk apa? (Ya = 1, Tidak = 2)

(*If cheaper, how do you spend the savings?*) (Yes = 1, No = 2)

Makanan (*Food*)

Kesehatan (*Health*)

Pakaian (*Clothing*)

Hiburan/rekreasi (*Entertainment/recreation*)

Pendidikan (*Education*)

Lainnya (*Other*) \_\_\_\_\_

#### 4.4.2. AKTIFITAS SEHARI-HARI (*DAILY ACTIVITIES*)

		Laki-laki dewasa ( <i>Adult male</i> )	Perempuan dewasa ( <i>Adult female</i> )	Anak-anak ( <i>Children</i> )
37. Dibandingkan sebelum mendapatkan aliran listrik, bagaimana waktu dalam sehari? ( <i>Compared to before you had electricity, is there any change in the length of the day?</i> )				
Lebih pendek ( <i>Shorter</i> ) 1 → No. 40	Lebih panjang ( <i>Longer</i> ) 3			
Sama saja ( <i>The same</i> ) 2 → No. 40				
38. Jika lebih panjang, digunakan untuk apa tambahan waktu tersebut? (Ya = 1, Tidak = 2) ( <i>If longer, what do you mainly use the additional time for?</i> ) (Yes = 1, No = 2)				
Di pagi hari ( <i>In the daytime</i> )	Mempersiapkan makanan ( <i>Preparing food</i> )			
	Membersihkan rumah ( <i>Cleaning house</i> )			
	Mengerjakan pekerjaan rumah tangga lainnya (menyetrika, menjahit ) ( <i>Doing other housework [ironing, sewing, etc.]</i> )			

	Membaca ( <i>Reading</i> )			
	Mendengarkan radio ( <i>Listening to the radio</i> )			
	Menonton TV ( <i>Watching TV</i> )			
	Bermain dengan anak-anak ( <i>Spending time with my children</i> )			
	Usaha kecil-kecilan ( <i>Doing a small business</i> )			
	Mengolah hasil tanaman ( <i>Doing agricultural product processing activities</i> )			
	Mengurus ternak ( <i>Doing animal breeding activities</i> )			
Di malam hari ( <i>In the evening</i> )	Menyiapkan makanan untuk besok ( <i>Preparing food for tomorrow</i> )			
	Membersihkan rumah ( <i>Cleaning house</i> )			
	Mengerjakan pekerjaan rumah tangga lainnya (menyetrika, menjahit ) ( <i>Doing other housework [ironing, sewing, etc.]</i> )			
	Membaca ( <i>Reading</i> )			
	Mendengarkan radio ( <i>Listening to the radio</i> )			
	Menonton TV ( <i>Watching TV</i> )			
	Bermain dengan anak-anak ( <i>Spending time with my children</i> )			
	Bicara/ngobrol dengan keluarga/sanak famili ( <i>Talking with family/relatives</i> )			
	Bicara/ngobrol dengan teman/tetangga ( <i>Talking with friends/neighbors</i> )			
	Usaha kecil-kecilan ( <i>Doing a small business</i> )			
	Mengolah hasil tanaman ( <i>Doing agricultural product processing activities</i> )			
	Mengurus ternak ( <i>Doing animal breeding activities</i> )			
	Membuat pekerjaan rumah ( <i>Doing homework</i> )			
	Bermain ( <i>Playing games</i> )			
Keluar mencari hiburan ( <i>Going out for entertainment</i> )				
Keluar untuk aktifitas lain ( <i>Going out for other activities</i> )  Jika Ya, apa aktifitasnya?  ( <i>If Yes, what type of activities?</i> )				

39. Jika waktu terasa lebih panjang, maka kegiatan yang diprioritaskan?  
(*What would you say this additional time has brought to you and your family?*)  
(Urutkan dari 1 sampai 3) (*Rank 1 to 3*)

Pekerjaan RT (memasak, menyetrika, menjahit, dll)  
(*More time for housework [cooking, cleaning, ironing, sewing, etc.]*)

Hiburan (*More time for entertainment*)

Pendidikan anak-anak (*More time for youth education*)

Usaha kecil-kecilan (*More time for small businesses*)

Kegiatan luar (*More time for outside activities*)

Kegiatan pertanian/peternakan  
(*More time for agriculture product processing or animal breeding activities*)

Lainnya (*Other*) \_\_\_\_\_

**KHUSUS RESPONDEN YANG MEMILIKI TV (*ONLY FOR RESPONDENTS WITH TV*)**

40. Apakah Anda memiliki TV? (*Do you have a television?*)

Ya (*Yes*) 1 Tidak (*No*) 2 → No. 45

41. Jika Ya, Berapa jam rata-rata Anda menonton TV dalam sehari? (Jam/hari)  
(*If Yes, how many hours do you watch TV on average per day? [Hours/day]*)

\_\_\_\_\_

42. Program TV apa yang biasa Anda tonton?

(*Which TV programs do you regularly watch?*)

(Urutkan dari 1 sampai 3) (*Rank 1 to 3*)

Ramalan cuaca (*Weather forecasting*)

Berita (*News*)

Olah raga (*Sports*)

Musik dan film (*Music and films*)

Opera sabun/telenovela (*Soap operas*)

Debat politik (*Political debates*)

Program anak-anak (*Children's programs*)

Info teknis (*Technical information and popularization programs*)

43. Pendapat anda tentang menonton TV (Ya = 1, Tidak = 2):

(*Your opinion about watching TV*) (Yes = 1, No = 2)

Menghibur dan dapat melupakan masalah sehari-hari  
(*Is entertaining and helps to forgot day-to-day problems*)

Salah satu cara mendapatkan informasi agar kehidupan lebih baik  
(*Is a way to get information to improve one's life*)

Lainnya, sebutkan (*Other, specify*) \_\_\_\_\_

44. Menurut anda, apakah siaran TV memberikan kepada wanita? (Ya = 1, Tidak = 2)  
(*What do you think that TV broadcasts provide for women?*) (Yes = 1, No = 2)

Hiburan (*Entertainment*)

Informasi yang berguna untuk memperbaiki kehidupannya (*Useful information to improve their life*)

Lainnya, sebutkan (*Other, specify*) \_\_\_\_\_

#### 4.4.3. PENGHEMATAN (*RETRENCHMENT*)

45. Kapan anda mendapatkan listrik? (*When did you get electricity?*)

< 1 tahun lalu (< 1 year) 1                      2-7 tahun lalu (2-7 years) 3  
< 2 tahun lalu (< 2 years) 2                      > 7 tahun lalu (> 7 years) 4

46. Masih ingatkah pengeluaran untuk energi sebelum mendapatkan listrik?  
(*Do you still remember your expenditure for buying energy before you got electricity?*)

Ya (Yes) 1      Tidak (No) 2 → No. 48

47. Jika masih, isilah tabel berikut. (*If Yes, fill in the table below.*)

Jenis energi ( <i>Type of energy</i> )	Rata-rata pengeluaran (Rp per bulan) ( <i>Average expenditures [Rp per month]</i> )		Berapa kali beli energi per bulan ( <i>Frequency of purchases per month</i> )	
	Sebelum ada listrik ( <i>Before electricity</i> )	Saat ini ( <i>Now</i> )	Sebelum ada listrik ( <i>Before electricity</i> )	Saat ini ( <i>Now</i> )
Minyak tanah untuk penerangan ( <i>Kerosene for lighting</i> )				
Baterai ( <i>Small batteries</i> )				
Aki untuk TV ( <i>Car battery for TV</i> )				

#### 4.4.4. KESEHATAN DAN PENDIDIKAN (*HEALTH AND EDUCATION*)

48. Pernahkah anda mendengar atau mengalami kecelakaan/penyakit akibat penggunaan lampu minyak atau gas?  
(*Have you ever experienced or heard about any accident caused by the use of kerosene and/or gas lamps?*)

Ya (Yes) 1  
Tidak (No) 2 → No. 51  
Tidak Tahu (*Don't know*) 3 → No. 51

49. Jika Ya, berapa kali kecelakaan yang terjadi? (*If yes, how many times did accidents happen?*)

Sekali (*Once*) 1                      Tiga kali (*Three times*) 3  
Dua kali (*Twice*) 2                      Lebih dari tiga kali (*More than three times*) 4

50. Penyakit atau kecelakaan apa saja yang pernah diderita oleh Anda atau keluarga akibat penggunaan lampu minyak/gas?  
(*Did your family experience any disease or injury from using kerosene lamps?*)

(Ya = 1, Tidak = 2) (Yes = 1, No = 2)

Mata (*Eye infection*)Paru-paru (*Lungs*)Sesak nafas (*Breathing problem*)Batuk (*Coughing*)Kebakaran (*Burns*)Lainnya (*Other*) \_\_\_\_\_

51. Menurut Anda apakah listrik ... (isi dengan kode yang sesuai)

*(Do you feel that electricity ... [fill with proper code])***Kode (Code):** Ya, sangat nyata (*Yes, significantly*) 1Ya, sedikit berubah (*Yes, a little*) 2Tidak (*No*) 3Tidak tahu (*Don't know*) 4Telah meningkatkan pelayanan kesehatan di wilayah Anda?  
*(Has improved health services in your area?)*Telah memberikan kontribusi untuk pendidikan anak Anda?  
*(Has contributed to your child's education?)*Telah meningkatkan pelayanan pendidikan di wilayah Anda?  
*(Has improved education services in your area?)***4.5. PEMAKAIAN LISTRIK (ELECTRICITY USE)****Pemanfaatan listrik di rumah tangga (Electricity usage)****Penerangan (Lighting)**

Lampu (Lamps)	Watt	Jenis lampu (Type of lamp)	Jam nyala/hari (Hours used per day)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Kode untuk jenis lampu (Code for type of lamp)**Bohlam (*bulb*) 1Neon (*Neon*) 2Lampu jari (*Fluorescent*) 3

Item	Ya ( <i>Yes</i> ) 1 Tidak ( <i>No</i> ) 2 (2)	Watt (3)	Jika kolom 2 berkode 2, energi pengganti apa yang digunakan? ( <i>If column 2 is coded 2, what type of alternative energy do you use?</i> )	Biaya energi pengganti per bulan ( <i>Monthly alternative energy costs</i> )
<b>Meringankan pekerjaan rumah tangga</b> <i>(Make house-work easier)</i>	Memasak ( <i>Cooking</i> )		_____	Rp.
	Seterika ( <i>Ironing</i> )		_____	Rp.
	Mencuci ( <i>Laundry</i> )		_____	Rp.

	Menjahit ( <i>Sewing</i> )			_____	Rp.
	Pompa air ( <i>Water pump</i> )			_____	Rp.
	Lainnya (peralatan masak, makan) ( <i>Other [microwave, blender, juicer, dispenser]</i> )			_____	Rp.
<b>Fasilitas RT lainnya</b>  ( <i>Other household facilities</i> )	Kipas angin ( <i>Fan</i> )				
	Kulkas ( <i>Fridge</i> )				
	AC				
<b>Hiburan</b>  ( <i>Entertainment</i> )	TV			_____	Rp.
	Radio cassette			_____	Rp.
	VCD (video compact disc player)			_____	Rp.
	Play station			_____	Rp.
	Lainnya ( <i>Other</i> )			_____	Rp.
<b>Business</b>	Industri rumah tangga (jahit, makanan, kue, es mambo, sewa VCD, salon, dll)  ( <i>Home business [sewing, food, cakes, ice, Video compact disc player rental, salon, etc.]</i> )			_____	Rp.
	Warung ( <i>Small shop</i> )			_____	Rp.
	Peternakan ( <i>Animal husbandry</i> )			_____	Rp.
	Lainnya ( <i>Other</i> )			_____	Rp.

52. Di rumah Anda, siapakah yang mengurus listrik?

(*In your house, who takes care of anything that relates to electricity?*)

Laki-laki dewasa (*Male adult*) 1

Perempuan dewasa (*Female adult*) 2

Anak (*Children*) 3

53. Siapakah dalam keluarga anda yang lebih sadar untuk hemat listrik?

(*Who in your family is more conscious and takes measures to avoid wasting electricity?*)

Kepala RT ( <i>Head of household</i> )	1
Perempuan, anggota RT ( <i>Other adult female household member</i> )	2
Laki-laki, anggota RT ( <i>Other adult male household member</i> )	3
Semua ( <i>Everybody</i> )	4
Anak ( <i>Children</i> )	5

54. Menurut keluarga Anda, penghematan pemakaian listrik akan ...  
(*Does your family think that saving electricity will ...*)

Mengurangi tagihan listrik ( <i>Reduce the electricity bill</i> )	1
Tidak mempengaruhi tagihan karena konsumsinya sudah rendah ( <i>Have no effect on the bill because our consumption is so low</i> )	2
Tidak mempengaruhi tagihan karena kita membayar dalam tariff yang tetap ( <i>Have no effect on the bill because we pay a fixed rate</i> )	3
Tidak tahu ( <i>Don't know</i> )	4

**5. PERSEPSI TENTANG LISTRIK KHUSUS UNTUK RESPONDEN YANG TINGGAL DI DESA YANG TELAH ADA LISTRIK  
(PERCEPTION OF ELECTRICITY—ONLY FOR ELECTRIFIED VILLAGES)**

55. Prioritas kebutuhan hidup (*Prioritizing life needs—number according to priority*)

- Makan (*Food*)
- Rumah (*House*)
- Pakaian (*Clothing*)
- Pendidikan (*Education*)
- Listrik (*Electricity*)
- Kesehatan (*Health*)
- Rekreasi (*Recreation*)
- Kendaraan bermotor (motor, mobil, dll) (*Vehicle [motor, car, etc.]*)
- Naik Haji (*Going on the haji*)
- Sawah, ladang, kebun dsb (*Wet rice field, unirrigated agricultural field, garden*)

56. Apakah harga tanah di desa ini menjadi naik dengan adanya listrik? (*Do you think that electricity has increased land prices in this village?*)

Ya (*Yes*) 1      Tidak (*No*) 2 → No. 58      Tidak tahu (*Don't know*) 3 → No. 58

57. Jika Ya, seberapa besar perubahan harganya (Rp./unit)? (*If Yes, how much did the price change [Rp./unit]?*)

- a. Perubahan Harga (price change):
- |                           |                         |
|---------------------------|-------------------------|
| Sebelum ( <i>Before</i> ) | Sekarang ( <i>Now</i> ) |
| Rp. _____ / _____         | Rp. _____ / _____       |
- b. Tidak tahu (*Don't know*)

58. Apakah harga rumah menjadi naik dengan adanya listrik? (*Do you think that electricity has increased house prices in this village?*)

Ya (*Yes*) 1      Tidak (*No*) 2 → No. 60      Tidak tahu (*Don't know*) 3 → No. 60

59. Jika Ya, seberapa besar perubahan harganya (Rp./unit)? (*If Yes, how much did the price change [Rp./unit]?*)

a. Perubahan Harga (price change):

Sebelum (*Before*)

Sekarang (*Now*)

Rp. \_\_\_\_\_ / \_\_\_\_\_ Rp. \_\_\_\_\_ / \_\_\_\_\_

b. Tidak tahu (*Don't know*)

60. Apakah ada perubahan di desa ini setelah ada listrik? (*Are there any changes in the village that you can link to access to electricity?*)

Tidak tahu (*Don't know*) 1

Ya, sangat berubah (*Yes, very much*) 2

Ya, sedikit berubah (*Yes, a little*) 3

Tidak (*No*) 4

Desa menjadi lebih terpelihara (*The village is better maintained*)

Lebih banyak penggunaan batu bata dan beton untuk pembangunan rumah  
(*There is more use of bricks and concrete in house construction*)

Lebih banyak toko (*There are more shops*)

Lebih banyak usaha kecil (*There are more of other kinds of small businesses*)

Ada pendatang baru (*There are newcomers*)

Migrasi ke kota jadi berkurang (*There is less youth migration to cities*)

Meningkatkan kehidupan sosial di des (*Social life in the village is improved*)

Desa aman di malam hari (*It is safer at night in the village*)

Pelayanan baru/kegiatan komersial sekarang tersedia di desa  
(*New services or commercial activities are now available in the village*)

Pendirian organisasi masyarakat untuk melayani keperluan umum  
(*A public service community organization has been established*)

Listrik sekarang tersedia di tempat ibadah desa  
(*Electricity is now available in religious buildings*)

Listrik sekarang tersedia di klinik desa  
(*Electricity is now available in the village health center*)

Listrik sekarang tersedia di sekolah di desa  
(*Electricity is now available in the village school*)

61. Menurut Anda, listrik meningkatkan ketegangan di desa? (*Do you think that electricity has increased tensions in the village?*)

Ya (*Yes*) 1      Tidak (*No*) 2      Tidak tahu (*Don't know*) 3

62. Apa pendapat anda tentang dampak listrik terhadap status sosial?

(*How does your household feel about the impact of electricity on social status?*)

Listrik dapat meningkatkan status sosial (*Electricity increases social status*) 1

Listrik dapat menurunkan status sosial (*Electricity decreases social status*) 2

Listrik tidak berpengaruh terhadap status sosial (*Electricity does not affect social status*) 3

63. Menurut anda apakah skim pemasangan jaringan listrik adil?

(*Do you think that the grid/connection scheme is fair?*)

Ya (*Yes*) 1      Tidak (*No*) 2      Tidak tahu (*Don't know*) 3

**6. KETERANGAN RUMAH TANGGA (HOUSEHOLD INFORMATION)****6.1. KEUANGAN RUMAH TANGGA (HOUSEHOLD FINANCE)**64. Pendapatan rumah tangga sebulan yang lalu (*Household incomes last month*)

Sumber pendapatan/penghasilan ( <i>Sources of income</i> )	Nilai ( <i>Rp.</i> )
a. Hasil pertanian ( <i>Agricultural yields</i> )	
b. Aktifitas lainnya ( <i>Other activities</i> )	
c. Upah dan gaji ( <i>Wages and salaries</i> )	
d. Bunga ( <i>Interest</i> )	
e. Lainnya ( <i>Other</i> )	
<b>Total</b>	

65. Besarnya pengeluaran rumah tangga sebulan yang lalu (*Household expenditures last month*)

Jenis pengeluaran ( <i>Types of expenditures</i> )	Nilai ( <i>Rp.</i> )
a. Makanan ( <i>Food</i> )	
b. Pakaian ( <i>Clothing</i> )	
c. Perumahan ( <i>Housing</i> )	
d. Pendidikan ( <i>Schooling</i> )	
e. Kesehatan ( <i>Health</i> )	
f. Transportasi ( <i>Transportation</i> )	
g. Sumbangan ( <i>Contributions</i> )	
h. Upacara/pesta ( <i>Ceremonies/feasts</i> )	
i. Lainnya ( <i>Other</i> )	
<b>Total</b>	

66. Apakah memperoleh pinjaman selama 6 bulan terakhir? (*Any loans during the last six months?*)Ya (*Yes*) 1      Tidak (*No*) 2 → **No. 69**67. Jika Ya, berapa nilainya? (*If Yes, what is the amount of loan?*)

Rp. \_\_\_\_\_

68. Darimana pinjaman tersebut diperoleh? (*The source of loan?*)(Ya = 1, Tidak = 2) (*Yes = 1, No = 2*)a. Kerabat (*Relative*)d. LSM (*Nongovernmental organization, NGO*)b. Tetangga (*Neighbor*)e. Pekerja (*Employer*)c. Bank/koperasi (*Bank/cooperative*)f. Lainnya (*Other, specify*) \_\_\_\_\_

## 6.2. PERUMAHAN DAN PEMUKIMAN (*HOUSING*)

69. Status rumah yang ditempati ( <i>House ownership</i> ):			
Milik sendiri ( <i>Own house</i> )	1	Bebas Sewa ( <i>Rent free</i> )	4
Sewa/kontrak ( <i>Rent/contract</i> )	2	Lainnya ( <i>Other</i> )	5
Dinas ( <i>Employer</i> )	3		
70. Tahun mulai menempati rumah ini ( <i>First year in this house</i> ):			
Jarak rumah dari jalan utama/poros ( <i>Distance from house to main road</i> ):			Km
71. Luas lantai ( <i>Floor area</i> ): _____ m <sup>2</sup>			
72. Jumlah ruangan tempat tinggal ( <i>Number of rooms</i> ):			
73. Jenis dinding terluas ( <i>Main wall construction materials</i> ):			
Tembok ( <i>Brick</i> )	1	Bambu ( <i>Bamboo</i> )	3
Kayu ( <i>Wood</i> )	2	Lainnya ( <i>Other</i> )	4
74. Jenis atap terluas ( <i>Main roofing materials</i> ):			
Beton ( <i>Concrete</i> )	1	Ijuk ( <i>Sugar palm fiber</i> )	5
Kayu ( <i>Wood</i> )	2	Daun-daunan ( <i>Leaves</i> )	6
Genteng ( <i>Tiles</i> )	3	Lainnya ( <i>Other</i> )	7
Seng/asbes ( <i>Zinc/asbestos</i> )	4		
75. Jenis lantai terluas ( <i>Main flooring materials</i> ):			
Marmar/keramik teraso ( <i>Marble/ceramic</i> )	1	Kayu ( <i>Wood</i> )	4
Ubin ( <i>Tiles</i> )	2	Bambu ( <i>Bamboo</i> )	5
Semen/bata ( <i>Cement/bricks</i> )	3	Tanah ( <i>Earth</i> )	6
		Lainnya ( <i>Others</i> )	7
76. Sumber air minum ( <i>Main source for drinking water</i> ):			
Ledeng ( <i>Piped</i> )	1	Mata air tak terlindung ( <i>Unprotected spring</i> )	6
Pompa ( <i>Pump</i> )	2	Air Sungai ( <i>River</i> )	7
Sumur terlindung ( <i>Protected well</i> )	3	Air hujan ( <i>Rainwater</i> )	8
Sumur tak terlindung ( <i>Unprotected well</i> )	4	Lainnya ( <i>Other</i> )	9
Mata air terlindung ( <i>Protected spring</i> )	5		
77. Barang-barang yang dikuasai rumah tangga ini ( <i>Possession of durable goods</i> ): (Ya = 1, Tidak = 2) ( <i>Yes = 1, No = 2</i> )			
a. Lemari pajang/buffet ( <i>side table</i> )		f. Telepon ( <i>Telephone</i> )	
b. Kompor ( <i>Stove</i> )		g. Sepeda/perahu ( <i>Bicycle/boat</i> )	
c. Radio/tape		h. Sepeda motor/perahu ( <i>Motorcycle/speedboat</i> )	
d. TV		i. Mobil/kapal ( <i>Car/ship</i> )	
e. Lemari es ( <i>Refrigerator</i> )			

## 6.3. LAIN-LAIN (*OTHER*)

	Laki-laki dewasa ( <i>Adult male</i> )	Perempuan dewasa ( <i>Adult female</i> )	Anak-anak ( <i>Children</i> )
78. Jam berapa biasanya bangun pagi? ( <i>At what time do you usually wake up in the morning?</i> )			
79. Jam berapa biasanya pergi tidur malam? ( <i>At what time do you usually go to bed at night?</i> )			