



August 2016



Living wages in Indonesia

Prepared by WageIndicator Foundation, Amsterdam

WageIndicator Foundation - www.wageindicator.org

WageIndicator started in 2001 to contribute to a more transparent labour market for workers and employers by publishing easily accessible information on a website. It collects, compares and shares labour market information through online and face-to-face surveys and desk research. It publishes the collected information on national websites, thereby serving as an online library for wage information, labour law, and career advice, both for workers/employees and employers. The WageIndicator websites and related communication activities reach out to millions of people on a monthly basis.

The WageIndicator concept is owned by the independent, non-profit WageIndicator Foundation, established in 2003. Its Supervisory Board is chaired by the University of Amsterdam/Amsterdam Institute of Advanced labour Studies. The Foundation is assisted by world-renowned universities, trade unions and employers' organisations. It currently operates national websites in 92 countries. Its staff consists of some 100 specialists around the world. The Foundation has offices in Amsterdam (HQ), Ahmedabad, Bratislava, Buenos Aires, Cape Town, Dar es Salaam, and Islamabad.
office@wageindicator.org

Special thanks to contributors

Many people contributed to this report.

Nadia Pralitasari in Jakarta: Overall project management

Data management: Martin Guzi, Tomas Kabina

Special thanks for funding

CNV International - The Netherlands

© WageIndicator Foundation, 2016

Address: P O Box 94025, 1090 GA Amsterdam, The Netherlands

Visiting address: Roetersstraat 25-35, 1018WB Amsterdam, The Netherlands.

Email office@wageindicator.org.

Bibliographic Information:

Guzi M., Kabina. K, Tijdens KG, (2016). Living Wages in Indonesia. Amsterdam, WageIndicator Foundation

Contents

1.	
1. Why this Living Wage report	4
2. Living Wages in Indonesia	5
2.2 Cost of Living / Living wages	5
2.3 Food, transport and housing	6
2.4 The Indonesian family living wage	6
2.5 The Indonesian food basket	6
3. WageIndicator and living wages	10
3.1 Living wage	10
3.2 The difference between minimum wage and living wage	10
3.3 The WageIndicator online and offline Cost of Living survey	10
3.4 WageIndicator calculations result in comparable living wages	11
3.5 Living wages for different household types and families	12
3.6 Lower – and upper bound living wages	12
3.7 Assumptions	13
3.8 Data quality and consistency of estimates	13
4. Experience: The Cost of Living data collection	14
4.1 Experience with the Cost of Living app	14
4.4 Lessons learned	14
5. Annex Region list Indonesia	15

1. Why this Living Wage report

Minimum wages and living wages are under discussion. CNV International and WageIndicator Foundation developed a concept and app to get more grip on living wages. In this report we show what research on cost of living can bring us.

The data collection for cost of living in Indonesia took place between June and August 2016. The data collection took place in 8 regions.

The cost of living data collected point to an important finding: the minimum wage is not enough to fulfill the daily needs in some of the regions where our research took place.

2. Living Wages in Indonesia

2.1 The field work

The WageIndicator living wage estimates are based on information about 9200 prices collected in June and August in 8 regions in Indonesia.

2.2 Cost of Living / Living wages

WageIndicator calculates cost of living / living wages for three household types. These are the 1) one-person household, 2) the standard family of two adults and two children (referred to as family 2+2) and 3) the typical family.

- 1) The one-person household is a simple concept. It calculates for one adult.
- 2) The standard family (2+2) calculates for two adults and two children. It ignores the fertility rate in a country, however it accounts for employment conditions.
- 3) The typical family takes in account fertility rate in a country and employment conditions.

The Indonesian family (whether you take the 2+2 family or the typical) living wage is always estimated for an equivalent of a full-time worker, which is why it is corrected for the number of workers in family. The number of workers in the average family equals one plus the average adult labor force participation rate, adjusted for the *unemployment* rate. For Indonesia we assume that one adult works fulltime, the other part time (together 1.72 workers per family). Large families plus a high unemployment rate make the estimated fulltime monthly living wage for the family therefore higher.

In the Indonesian case the typical family has an average number of 2.5 children derived from the national *fertility rate*.

Estimated living wages within the sub-regions and for the three different household types are presented in Table 1. These are directly comparable to gross monthly wages. Based on our research, the living wage in Indonesia is estimated within the range of IDR1,297,100 and IDR1,682,100 for a single person per month. This income should be sufficient to cover food expenses, cost of accommodation, transportation expenses, plus some unexpected expenses.

Regions are divided into categories. 1 Metropolitan; 2 large city; 3 small city. As for Indonesia there is no data from rural areas (category 4).

Table 1 Living wage estimates for three household types, per month (in 1,000sof IDR)

		Individual		Family 2+2		Typical family	
	Region	Low	High	Low	High	Low	High
	Indonesian average	1489.1	2203.4	1840	2712.8	1963.9	2872.1
2	Banten	1297.1	1682.1	1655.2	2222.6	1773.2	2378.3
1	Jakarta	1664.5	2438.6	2004.4	2934.6	2136.6	3114.2
1	Western Java	1280.9	1658.9	1567.5	2099.2	1671.4	2234.9
1	Eastern Java	1088.2	1624.7	1390.7	2033.7	1488.5	2162.1
3	Riau islands	1559.5	1935.9	1795.6	2394.3	1903.5	2545.3
2	Eastern Lesser Sunda islands	1669.7	2158.6	1756.2	2424	1841.7	2548.1
2	Riau	1474.8	2034	1710.6	2482.8	1814.5	2636.2
1	Southern Sumatra	2208.2	2722.1	2319.8	2983.8	2435.6	3131.3

Source All estimates are based on prices collected in July – August 2016. Figures are presented in IDR - national currency and express the monthly costs.

2.3 Food, transport and housing

WageIndicator defines living wage as the amount of money sufficient to cover food expenses, cost of accommodation, transportation expenses, plus 10 percent on a monthly basis, tax included. (see more in section 3.4). Table 2 shows the variation in food and housing costs in different regions:

Table 2 Food and housing costs, per month (in 1,000s of IDR)

Region	Foodcost		Housing for ind.		Housing for family		Transport cost	
	Low	High	Low	High	Low	High	Low	High
Indonesian average	340.1	437.5	750	1129.4	975	1600	104	200
Banten	324.2	427.7	612	721.2	783.4	961.5	104	200
Jakarta	363	493.5	867.7	1262	1110.7	1682.7	104	200
Western Java	285.7	373	637.5	757.2	816	1009.6	104	200
Eastern Java	268.6	352.8	500	750	640	1000	104	200
Riau islands	296.5	414.9	850	937.5	1088	1250	104	200
Eastern Lesser Sunda islands	234.9	341.1	1000	1189.9	1280	1586.5	104	200
Riau	285.3	421.5	793.3	1009.6	1015.5	1346.2	104	200
Southern Sumatra	318.1	405.3	1348.7	1577.5	1726.3	2103.4	104	200

Note Transportation cost is estimated between 104,000 (low value) and 200,000 (high value).

2.4 The Indonesian family living wage

WageIndicator calculates living wages for several household types. The calculation of the living wage for a family follows specific country conditions derived from the World Bank database (see Table 3). The typical family is composed of two adults and the number of children is approximated by the Indonesian fertility rate. The number of workers in average family is equal to one plus the average adult labor force participation rate adjusted for the Indonesian unemployment rate. The amount of mandatory contributions and income tax deduction is estimated from the wage database compiled by WageIndicator. The gross to net income ratio is calculated as the ratio of gross and net income in the lowest quartile of the wage distribution. Finally, the Purchasing Power Parity (PPP) is taken from the World Bank International Comparison Program.

Table 3 Country specific information

Fertility rate	2.5
Workers per family	1.72
Gross to net income ratio	1.1
USD PPP rate 2016	4194.4

Source Own rendering based on World Bank database

2.5 The Indonesian food basket

Table 4 shows the estimated food cost per month for an adult person together with the composition of the food basket and the price of food items. The information about food consumption is provided by the Food and Agricultural Organization (FAO) in the food balance sheet for the country. The food prices are collected by WageIndicator through its Cost of Living survey.

Table 4. Food cost per month (in 1,000s of IDR) for an adult person, composition of food basket and food prices (per standard unit).

Food group	Food costs		Gram per day	Kcal per day	Price per item	
	Low	High			Low	High
Milk - Excluding Butter	11530.3	13304.1	29.565	14.750	13000	15000
Rice (Milled Equivalent)	76379.1	84865.7	282.886	1017.782	9000	10000
Pulses	63.8	76.6	0.213	0.776	10000	12000
Peas	0	0	0	0	12000	20000
Lemons	0	0	0	0	12000	18000
Honey	0	0	0	0	65000	95000
Potatoes and products	2412.0	3216.0	8.933	6.211	9000	12000
Roots	580.7	829.5	2.765	3.882	7000	10000
Plantains	0	0	0	0	10000	15000
Onions	2756.5	4134.8	7.657	3.105	12000	18000
Cream	63.8	127.6	0.213	0.000	10000	20000
Citrus	0	0	0	0	12000	15000
Sugar (Raw Equivalent)	10413.6	11281.4	28.927	101.701	12000	13000
Oranges	7620.5	9826.6	16.378	3.882	15510	20000
Butter	382.9	478.6	1.063	6.987	12000	15000
Grapefruit and products	0	0	0	0	15000	20000
Sunflowerseed Oil	0	0	0	0	10000	15000
Soyabeans	727.2	1078.4	2.765	10.092	8766	13000
Seeds and kernels	0	0	0	0.776	15000	25000
Olives (including preserved)	0	0	0	0	32000	40000
Tomatoes and products	1552.5	2360.9	7.870	1.553	6576	10000
Vegetables	13629.6	22715.9	75.720	24.843	6000	10000
Cassava and products	12149.2	15186.5	101.243	104.030	4000	5000
Sweet potatoes	2265.2	2718.3	15.101	14.750	5000	6000
Apples and products	1263.4	1722.8	1.914	0.776	22000	30000
Maize and products	21695.0	26034.0	72.317	178.558	10000	12000
Fish products	43492.1	54365.1	60.406	45.804	24000	30000
Wheat	19576.5	30117.7	50.196	131.978	13000	20000
Spices	561.5	561.5	2.340	7.763	8000	8000
Wine	0	0	0	0	66667	93333
Pineapples and products	2246.1	2737.4	9.359	2.329	8000	9750
Yams	0	0	0	0	4500	6000
Tea (including mate)	306.3	510.5	0.851	0.000	12000	20000
Fruits	23354.0	29192.5	64.872	27.172	12000	15000
Beans	848.7	1340.0	2.978	10.092	9500	15000
Groundnuts (Shelled Eq)	25957.4	36052.0	48.069	80.739	18000	25000
Bananas	14229.4	21344.0	47.431	30.277	10000	15000
Oils (soyabean	6380.9	7657.1	21.270	188.651	10000	12000
Meat (pigmeat	33053.0	47218.5	31.479	57.449	35000	50000
Eggs (10 pieces)	335.0	402.0	8.933	13.198	12500	15000
Sweeteners	807.2	912.5	2.340	8.540	11500	13000
Beer	2871.4	4020.0	1.914	0.776	50000	70000
Coffee and products	625.3	1116.7	1.489	0.776	14000	25000

Total	340129.7	437504.9		2100.0		
-------	----------	----------	--	--------	--	--

Source Own rendering based on FAO and COL

Note: Food cost is estimated per month for an adult person in IDR/ the national currency. Consumption in grams per day and food calorie (kcal) per day for a person is provided by the FAO. Food prices (per standard unit, i.e. per kilo or per liter) are estimated from the WageIndicator Cost of Living database. For some food items the WageIndicator Cost of Living survey does not have enough responses to provide for a qualified estimate, which is why some cells are left blank. Food costs are scaled to provide 2100 kcal per person per day.

2.6 Wages in Context

Summing up, WageIndicator presents the results of its field research on cost of living / living wages in context. Wages in Context is a concept that allows to share and compare living wages with other regular incomes, across countries and regions. In the tables 5 and 6 we compare the national poverty line, the current minimum wage and the lower bound estimates of the living wages for a standard family and a typical family, calculated on the basis of the WageIndicator Cost of Living data collection.

Table 5 National poverty line and minimum wages, monthly in IDR

National poverty line	356,378 (city) and 333,034 (rural)
Worldbank poverty line	1,240,300
Banten – Minimum wage	1,784,000
Jakarta – Minimum wage	3,100,000
Western Java – Minimum wage	2,250,000
Eastern Java – Minimum wage	1,283,000
Riau islands – Minimum wage	2,178,710
Eastern Lesser Sunda islands – Minimum wage	1,425,000
Riau – Minimum wage	2,095,000
Southern Sumatra – Minimum wage	2,206,000

Table 6 Minimum wage and living wages compared for standard family and typical family - lower/higher bound, monthly (in 1,000s of IDR)

	Region	Minimum wage per month	Living wage family 2+2		Living wage typical family	
			Low	High	Low	High
	Indonesian average		1840	2713	1964	2872
2	Banten	1784	1655	2223	1773	2378
1	Jakarta	3100	2004	2935	2137	3114
1	Western Java	2250	1567	2099	1671	2235
1	Eastern Java	1283	1391	2034	1489	2162

3	Riau islands	2179	1796	2394	1904	2545
2	Eastern Lesser Sunda islands	1425	1756	2424	1848	2548
2	Riau	2095	1711	2489	1815	2636
1	Southern Sumatra	2206	2320	2984	2436	3131

Note: Wages in Context does not end here. It not only presents local levels of income and expenditure in a national framework, it is harmonized to provide for international comparison too. On the WageIndicator page a world map offers access to Wages in Context information per country. This database includes national poverty lines for individuals and families, minimum wage information, minimum and maximum paid wages, and living wages for individuals and families. See <http://www.wageindicator.org/main/salary/wages-in-context>

2.8 Conclusion

Comparing the minimum wage with the lower bound typical family wage, one sees that the minimum wage for Jakarta, Western Java, Riau islands and Riau should be sufficient.

The minimum wage for Banten, Eastern Java, Eastern lesser Sunda Islands however seems to be too low compared to the typical family living wage level.

For the category regions 1 (metropolitan) and 2 (big city) we can see a pattern, as for category 3 (small city) it is in the case of Indonesia more difficult. Life on an islands can be unpredictable expensive.

3. WageIndicator and living wages

3.1 Living wage

The living wage has been recognized in 1919 by the International Labor Organization (ILO) as a basic human right (ILO, 2008). Nowadays the ILO endorses living wage within the wider concept of Decent Work that aims for work in conditions of freedom, equity, security and human dignity. In 1948 the United Nations Universal Declaration of Human Rights again made the point that workers need to earn a living wage (at least). The exact definition of living wage however has never been established and each campaign defines living wage differently (see Anker, 2011). The Global Living Wage Coalition understands a living wage as the *'remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, healthcare, transport, clothing, and other essential needs, including provision for unexpected events'* (Anker and Anker, 2016).

The methodology to calculate living wages adopted by WageIndicator is broadly consistent with the previous living wage campaigns reviewed in Anker (2011). The calculation is country and region specific and assumes national food consumption patterns, variation in prices, characteristics of a typical family and labour market conditions. WageIndicator publishes all information about living wages on its websites, and invites stakeholders to comment through its interactive web platform as well as by means of workshops in covered countries. The concept of the living wage is dynamically evolving and several approaches may be discerned in the public discourse.

3.2 The difference between minimum wage and living wage

The statutory minimum wages are laid down in the law and therefore both a worker's right and employer's obligation. Moreover, minimum wages are meant to fix pay levels for a relatively long period of time. By contrast living wages are not prescribed by the law and can therefore not be enforced. Moreover, living wages change with the price levels of commodities and services that a person (or family) needs to 'buy' in order to lead a decent life. So clearly, minimum and living wages are quite different in nature. Yet they may in practice amount to approx. the same monthly pay. In countries where minimum wage levels have not been revised for many years the existing level may be close to the poverty line. But in some richer countries the minimum wage level may be even higher than the living wage level calculated by the WageIndicator. Yet, generally speaking, WageIndicator research shows that the minimum wage levels in countries around the world are somewhat below the living wage levels.

3.3 The WageIndicator online and offline Cost of Living survey

The calculation of living wages requires considerable information from various national data sources or international databases. Furthermore, it is necessary that obtained information is updated to guarantee the validity of estimates. The estimation of living wage is therefore challenging, to say the least. The first attempt to provide globally comparable estimates of living wages for 100 countries is presented in Guzi (2014). We can compare this data with from Numbeo.com, the only other source with price data collected in a similar way. This approach demonstrates that is possible to use prices collected through web-surveys in the living wage calculations.

The price data is collected through the Cost of Living survey. As it is Internet based, it reaches out to large numbers of people, facilitates data collection on a global scale, and ensures that the data is up-to-date because data is collected continuously. Since October 2013 WageIndicator operates a permanent survey of 75 items to collect the prices of food, for housing and transportation, as well as a few other items deemed indispensable for living a decent life, such as the cost of basic education and health care. The Cost of Living survey is posted on all national WageIndicator websites in the national languages. Web visitors are invited to complete the survey for a selection of items or for the entire list of items. They are also asked to identify their region and city to allow for regionally adapted living wages.

In addition to its voluntary online data collection, WageIndicator organizes offline Cost of Living surveys by trained interviewers or by ordinary people reporting the prices for a set of commodities in their neighborhood. This data collection is done with an app, tailor made for mobile devices. The app is available for 90 countries in English and in the national languages (<https://costofliving.wageindicator.org>). The App facilitates data collection through laptop, tablet, and smartphone. It is operational in both online and offline modes.

3.4 WageIndicator calculations result in comparable living wages

The WageIndicator Cost of Living survey collects the actual prices of all items necessary to calculate the living wage. The calculations are based on the monthly cost of living for a predefined food basket, for housing, for transportation and also for unexpected expenses.

The composition of food basket reflects the actual food consumption in a country. Food costs is scaled to provide for 2,100 food calories per person per day (applies to children as well). This amount is suggested by World Bank (see Haughton and Khandker, 2009) and other living wage campaigns work with similar assumption. The Asia Floor Wage campaign assumes 9,000 calories/day for a family of two adults and two children, which equals 2,250 calories/person/day. Anker and Anker (2013, 2014) assume 2261 calories/person/day in the rural South Africa and 2,364 calories/person/day in Southern Malawi.

The cost of housing is differentiated by the size of family. For a one-member household the monthly rental rate for a 1-bedroom apartment outside urban centres is assumed. The housing cost for a family with children is derived from the rental rate for a 3-bedroom apartment outside urban centres. The housing cost includes utility and other housing costs (e.g. cost of electricity, water, garbage collection, property tax etc.).

Transportation is an important cost for households because most people commute to work or travel for their daily activities (e.g. shopping). It is assumed that families cannot afford to own a motorbike or car on the living wage and therefore rely on public transportation. Hence living wage includes the price of a regular monthly pass as the estimate of transport cost for an adult. The living wage for a family includes the price of two regular monthly public transportation passes. Children are assumed to travel for free with their parents. Public transport service is commonly available in most urban areas. It is reasonable to assume that transportation costs in regions without public transportation are not cheaper. The average price of regular monthly urban pass is therefore used as the general yardstick in a country, as the (lower bound) estimate of transportation costs.

Finally the living wage also includes spending on non-specified discretionary purchases. In particular, the living wage must allow for unforeseen events such as illness, accidents or unemployment. Similar provisions for unexpected events are found in other research. Anker and Anker (2013) include a 10 percent margin and the living wage proposed in the Vancouver initiative assumes two weeks of income from labor as the provision for unexpected events on a yearly basis (i.e. approximately 4% of the yearly household

expenditure). In keeping with this practice add a margin of 10 percent to the final estimate of the living wage, i.e. on top of the food, housing, and transportation expenditures, reflecting the household's need to prepare for such incidental expenditures.

The living wage should guarantee that the net take-home pay covers total living costs. For this reason, the living wage estimate is adjusted for income taxes and all mandatory deductions which apply to low incomes in a country. In this way the living wage becomes comparable to the gross monthly wage or statutory minimum wage.

3.5 Living wages for different household types and families

The WageIndicator approach identifies different household and family types for which living wages are calculated. This is not just a reflection of the diversity found in the life-work situations around the globe, it is also a response to the differing needs for living wage information as expressed by stakeholders/end users of this information. Therefore WageIndicator differentiates between:

- 1) *the one-person household* living wage which estimates the amount of money for a working adult individual without children. This unit provides a baseline estimate and permits a direct comparison with minimum wages and real wages, which are defined at the individual level, too.
- 2) *the typical household* living wage estimates the amount of money to support a typical family with children in a given country. It accounts for (at least some of) the variation in household composition across the globe. The assumed number of children is derived from the national fertility rate (provided by World Bank). This living wage is always estimated for an equivalent of a full-time worker so it should be corrected by the number of workers in family. Here we follow the recommendations for estimating the living wage by Anker and Anker (2016) to adjust for the differences in the employment rates between countries. The number of workers in the average family equals one plus the average adult labor force participation rate, adjusted for the unemployment rate. In countries with a higher participation rate and lower unemployment rate, it is more likely that a second adult family member works too, which results in a lower living wage.
- 3) *the 2-adults 2-children standard household* living wage estimates the amount of money to support a family of two adults and two children. Using this standard unit has several advantages. First it provides a global comparison of living wages, focusing on price variation while keeping the family composition constant. Second this standard method is adopted by several living wage campaigns (e.g. Asia Floor Wage, New Zealand, The Global Living Wage Coalition¹) to makes the results directly comparable. Third, the family with two children is the minimum average sized family required to ensure population replacement. A living wage should at least be sufficient to support such a household. The living wage is adjusted for the number of workers in the family, as explained under 2).

3.6 Lower – and upper bound living wages

WageIndicator publishes living wages as a range between the lower bound of 25th percentile and the upper bound of the 50th percentile of calculated living wages. All are

¹ see Merk, J. (2009). *Stitching a Decent Wage across Borders: the Asia Floor Wage Proposal*. New Delhi, Asia Floor Wage campaign 2009, Asia Floor Wage Alliance;
King, P. and Waldegrave, C. (2012). *Report of an Investigation into Defining a Living Wage for New Zealand*. Aotearoa, Family Centre, Social Policy Research Unit;
Richards, T., et al. (2008). *Working for a Living Wage: Making Paid Work Meet Basic Family Needs in Vancouver and Victoria – 2008*. Vancouver, Canadian Centre for Policy Alternatives.

based on the data from the WageIndicator Cost of Living survey, to reflect the variation of prices within a country. The 50th percentile (median) is the value for which half of the respondents report higher and the other half reports lower cost of living values. The 25th percentile is the value for which 75% of respondents report higher cost of living. This means that we imply a cost-optimizing household which is seeking cheaper housing and food than the national average (or median). This WageIndicator practice of reporting the median as well as 25th percentile of living wage calculations provides for the explicit comparison of well-defined concepts within and across countries, and over time. It also provides for a more transparent measure of living wages, reflecting the variation of prices and consumer preferences. One single figure, in contrast, could lead to the misperception that prices and consumer choices do not vary. Moreover, one number only will not reflect (at least) some of the diversity in consumption and expenditure patterns which are a fact of everyday life.

3.7 Assumptions

The living wage, as outlined in this report, is based on a set of assumptions. All adults are assumed to be of economically active age and competent to manage their family budget efficiently. All household members are assumed to be in a good health.

When workers receive in-kind bonuses such as food, housing or travel allowances, these could be treated as an addition to the (living) wage received in cash. We however take the living wage as the monetary equivalent of all income, including any in-kind provisions.

Pay bonuses such as a 13th salary or any other bonuses may effectively decrease the living wage. However, as these are irregular and their amount is uncertain, we do not include those in our calculations. Living wage is based on the assumption that monthly expenses should be covered by regular monthly income from labor. Irregular or incidental income is assumed to be used for extraordinary expenses.

Overtime pay bonus is not accounted for, because the living wage should be earned during normal hours. The ILO Convention 1 (1919) states a maximum number of 48 working hours per week in all countries.

3.8 Data quality and consistency of estimates

The estimates of living wages primarily rely on the web-based data collection. Because price data is collected and respondents do not report their personal characteristics or preferences, the individual bias is minimized. Yet, all price data is always cross checked for biases and misreported figures are not used in the calculation. Moreover, living wage estimates are represented as a range. The median serves as the upper bound and the 25th percentile as the lower bound to further minimize the error. One single figure instead of a range could convey the false impression that the living wage is cast in concrete: it is not and cannot be, as living wages are a reflection of actual price levels for many items and services people have to spend their income on. These price levels change over (even short periods of) time and from country to country and regions within.

The Cost of Living survey collects data continuously. Living wage estimates are updated each quarter to keep up with changing price levels. In addition, living wage estimates are checked for consistency over time. In case of structural discrepancies, we consult national experts to detect and correct the source(s) of bias. Feedback on methodological questions and results is also obtained through factual discussions involving social partners in a country where such problems might become manifest.

4. Experience: The Cost of Living data collection

The data collection took place between June and August 2016.

The manager of the data collection Nadia Pralitasari, from the WageIndicator Jakarta office recruited 9 volunteers to assist in data collection in the 8 regions.

In total 114 surveys were completed. 65 surveys were completed with the help of the so called Cost of Living app. Volunteers in the big cities liked to use the app for data collection. The rest of the data were sent by email and even Whatsapp. One person collected price data on paper, and took pictures of the paper and sent the information to the coordinator by Whatsapp.

4.1 Experience with the Cost of Living app

The app itself is easy to use. The challenge is looking for capable/technology friendly volunteers to input the offline surveys, especially for region 3. A second challenge is to download and install the apps, as the survey coordinators have different types of phone (sometimes the instructions/layout on their phone are not exactly the same as the manual) and can't understand the English manual.

The solution is to look for more students as volunteers, but also include trade union coordinators, which works well up to now. We would also ask workers to download and install the apps during trade union trainings.

4.2 Were interviewees ready to talk?

We usually explained beforehand what and why we did the survey and ask permission and cooperation. We interviewed most of the people in informal markets, convenience stores, neighborhood vegetable/meat sellers, and supermarkets. We also did offline surveys in trade union trainings.

4.3. Opinion about prices

Many respondents complain about how high the prices and their struggle to make ends meet on a daily basis.

4.4 Lessons learned

Find internet savvy people. Spend time to train in the use of the app. Make sure the app has a manual in Bahasa.

5. Annex Region list Indonesia

Regions for Indonesia are divided into categories. 1 metropolitan; 2 large city; 3 small city. For Indonesia is no data from rural areas (category 4) were collected. The regions which are made **bold** are part of the data collection on which this report is based.

IDN Bali	2
IDN Banten	2
IDN Bengkulu	2
IDN Gorontalo	2
IDN Jakarta	1
IDN Jambi	2
IDN Western Java	1
IDN Central Java	1
IDN Eastern Java	1
IDN Western Borneo	2
IDN Southern Borneo	2
IDN Central Borneo	3
IDN Eastern Borneo	2
IDN Bangka Belitung islands	2
IDN Riau islands	3
IDN Lampung	2
IDN Moluccas	2
IDN Northern Moluccas	3
IDN Aceh	2
IDN Western Lesser Sunda islands	2
IDN Eastern Lesser Sunda islands	2
IDN Papua	3
IDN Western Papua	3
IDN Riau	2
IDN Western Sulawesi	3
IDN Southern Sulawesi	2
IDN Central Sulawesi	2
IDN Southeastern Sulawesi	3
IDN Northern Sulawesi	2
IDN Western Sumatra	2
IDN Southern Sumatra	1
IDN Northern Sumatra	1
IDN Yogyakarta	2

