



August 2016

 **WageIndicator.org**

**Living wages
in Lagos State
Nigeria**

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 through 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 and includes a representative from the Dutch Confederation of Trade Unions (FNV) and three independent members. 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.

Face to Face surveys in **Lagos City**: Manager Morayo Adebayo, team of interviewers Nom Habu, Ogochukwu Odum, Opeoluwa Osinubi, Olufemi Shodiya, Damilola Wright;

Face to Face surveys in **Lagos City**: Manager Ramota Adebayo, team of interviewers Sunday Abatan, Olu Adebayo, Badmus Bolaji, Ekong Faith, David Itunu, Lucy James, Taiwo Seun, David Wale;

Face to face surveys in **Lagos State**: Manager Dr. Franca Attoh, University of Lagos, team of interviewers/ students Elizabeth Ajadi, Emmanuel Fapetu, Shola Gbadamosi, Tope Omogbemi;

Overall project management and data management: Martin Guzi, Anne Hardt, Tomas Kabina, Paulien Osse, Kea Tijdens

Special thanks to

RVO - 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 Nigeria – Lagos State. Amsterdam, WageIndicator Foundation

Contents

1. Why this Living Wage report	1
2. Living Wages in Lagos State	2
2.2 Cost of Living/ Living wages	3
2.3 The Nigerian individual and family living wage	3
2.4 Food, transportation and housing	4
2.5 The Nigerian food basket	5
2.6 Wages in Context	6
2.7 Reported costs for a family 2+2	7
2.8 Conclusions	8
3. WageIndicator and living wages	9
3.1 The living wage	9
3.2 The difference between minimum wage and living wage	9
3.3 The WageIndicator online and offline Cost of Living survey	9
3.4 WageIndicator calculations result in comparable living wages	10
3.5 Living wages for different household types and families	11
3.6 Lower – and upper bound living wages	12
3.7 Assumptions	12
3.8 Data quality and consistency of estimates	12
4. Experience: The Cost of Living data collection	14
4.1 Training	14
4.2 Experience with the Cost of Living app	14
4.3 Type of people were interviewed	14
4.4 Were interviewees ready to talk?	15
4.5. Letter for the interviewer	15
4.6 Opinions about prices	15
4.7 List and presentation of items in the Cost of Living app	15
4.8 Managers' view	15
4.9 How did WageIndicator find the managers?	16
4.10 Lessons learned	16
5. Bibliography	17
Annex	18
Letter used by interviewers	18

1. Why this Living Wage report

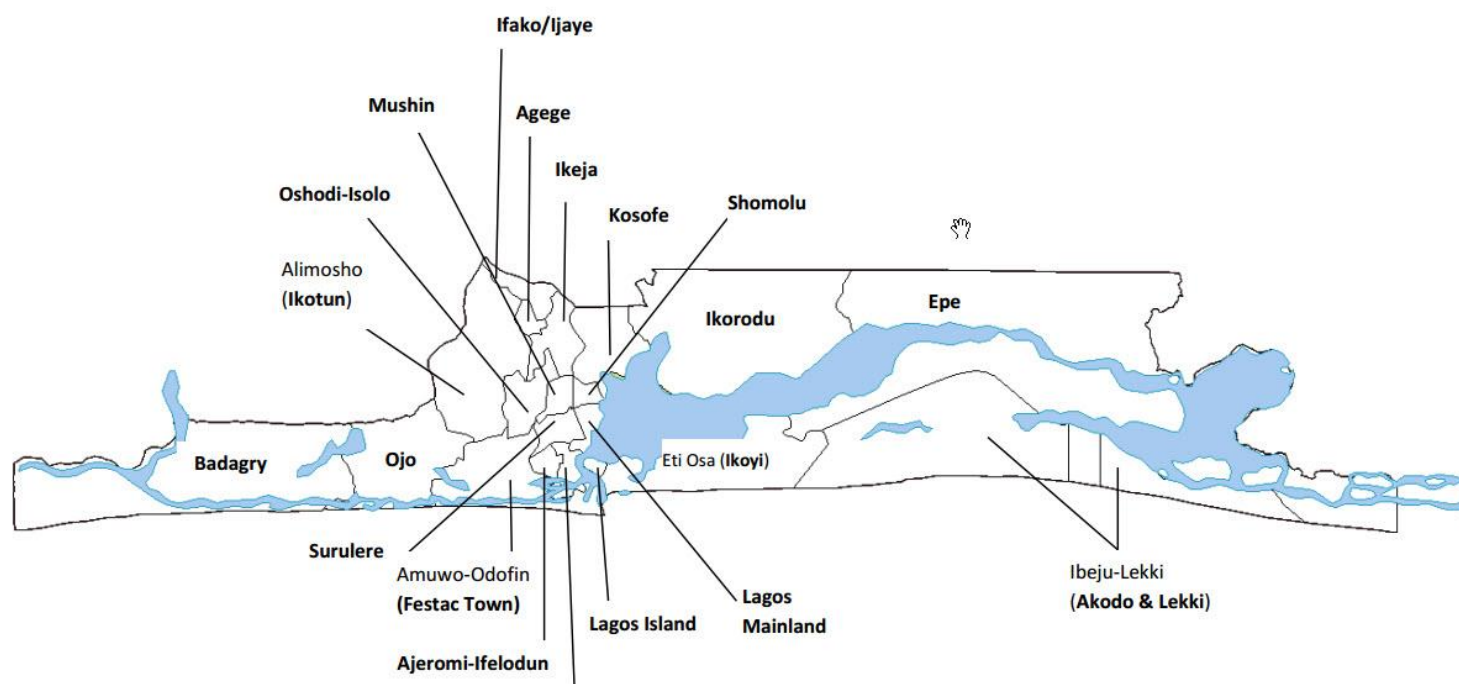
Minimum wage rates are under discussion in Nigeria. Since 2011, the minimum wage remained unchanged at Nigerian Naira (NGN) 18,000. In April 2016, the Nigerian Labour Congress and the Trade Union Congress (TUC), the two confederal labour organisations in the country, proposed NGN 56,000 as the new national minimum wage to the Federal Government.¹ Will this be a living wage?

In June 2016, the Netherlands Enterprise Agency (RVO.nl) asked the WageIndicator Foundation to work out an estimate for living wages in Nigeria, focus Lagos State.

¹ Premium Times (April 27, 2016). LC, TUC demand N56,000 as new national minimum wage. Abuja, Premium Times Services Limited.

2. Living Wages in Lagos State

Figure 1 Map of Lagos State



2.1 The field work

Lagos State is the smallest of the 36 Nigerian states. It is densely populated and situated in the south-western part of Nigeria. It borders Benin in the west. Lagos is the most important city in Lagos State, with an estimated population of 16 million. Lagos is a combination of ports, lagoons and islands.

In Lagos State we collected data in the Badagry area, close to the border with Benin, in Ikorodu (north of the lagoon) and Lekki (more to the east of the lagoon). In Lagos State, we excluded Eko Atlantic, Epe and Ikeja from data collection, no added value compared to the other city/regions was expected.

Lagos city consists of a set of cities/regions: Ajeromi/Ifelodun, Ikoyi, Kosofe, Lagos Island, Lagos Mainland, Oshodi/Isolo, Shomolu. Data collection took place in all of them except for Agege, Akodo and Mushin as no added value was expected.

The initial plan to conduct 30 interviews in Badagry, 30 in Ikorodu and 30 in the Lagos dock area was extended by interviews in all relevant areas as described above. The main reason for this was that through understanding the cost of living in all areas - including the richest such as Ikoyi and Lekki and the poorest such as Ikorodo - criticism concerning a bias in data collection in favour of poorer or richer areas is effectively countered.

The WageIndicator living wage estimates are based on information about almost 8,200 prices collected in July 2016 in Lagos State (7,750 responses on food items, 320 on housing, and 120 on transport costs). 17 interviewers and 3 managers were involved. Interviewers collected data from informal and formal markets and by interviewing a minimum of 120 inhabitants/commuters in the different regions of Lagos State.

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. A more detailed description can be found in 3.5.

- 1) The one-person household is a simple concept. It calculates costs/ wages for one adult.
- 2) The standard family (2+2) calculates estimates 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 into account the fertility rate and employment conditions in a country. It is composed of two adults and the number of children is approximated through a county's fertility rate.

When we talk about the Nigerian family (whether you take the 2+2 family or the typical) living wage, the wage is always a monthly *fulltime* estimation. Therefore, it should be corrected by the actual number of workers in a family. The number of workers in the average family equals one plus the average adult labor force participation rate, adjusted for the unemployment rate.

The living wage calculation for a family follows specific country conditions determined by the World Bank database (see Table 1). The average number of workers per family in Nigeria is set at 1.63. Large families plus a high unemployment rate increase the estimated fulltime monthly living wage for the family. Calculations for the typical family include 5.8 children, the average in Nigeria according to the national fertility rate.

The amount of mandatory contributions and income tax deductions is estimated based on 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 provided by the World Bank International Comparison Program.

Table 1 Country specific information

Fertility rate	5.8
Workers per family	1.63
Gross to net income ratio	1.1
USD PPP rate 2014	99.40

Source: Own rendering based on World Bank database

2.3 The Nigerian individual and family living wage

Estimated living wages within the sub-regions and for the three different household types are presented in Table 2. These can directly be compared to gross monthly wages. Based on our research, the living wage in Lagos State lies within the range of NGN 21,500 and NGN 32,900 for a single person per month. This amount of money should be sufficient to cover food expenses, cost of accommodation, transportation expenses but also some unexpected expenses.

Table 2 Living wage estimates for three household types, per month in NGN

Region	Individual		Family 2+2		Typical family	
	Low	High	Low	High	Low	High
Lagos average	21500	32900	36500	56300	58500	87900
Badagry	21400	31000	39100	54300	63700	87100
Ikorodu	18200	25600	31500	43200	49800	67300
Ajeromi/Ifelodun	17300	28000	29400	49100	45700	78900
Ikoyi	25100	37200	40600	60400	60900	92100
Kosofe	18600	26600	29400	41700	43100	61400
Lagos Island	19900	32700	31000	49300	44900	70500
Lagos Mainland	20600	40200	33400	58100	50300	80300
Oshodi/Isolo	22000	30300	36200	48600	55000	73200
Shomolu	24400	39000	37000	58500	52600	83500
Lekki	32700	45300	47000	66300	63200	92900

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

2.4 Food, transportation and housing

WageIndicator defines living wage as the monthly amount of money sufficient to cover food expenses, cost of accommodation and transportation expenses plus another 10 percent for essentials. Taxes are included. (see more in section 3.4). Table 3 shows the variation in food and housing costs in different regions:

Table 3 Food and housing costs, per month in NGN

Region	Food cost		Housing for ind.		Housing for family		Transport cost	
	Low	High	Low	High	Low	High	Low	High
Lagos average	7800	11200	6000	8000	10000	15000	3500	7000
Badagry	8700	11600	5000	6000	9380	10700	3500	7000
Ikorodu	6500	8560	5000	5600	9380	10000	3500	7000
Ajeromi/Ifelodun	5810	10600	5000	5600	9380	10000	3500	7000
Ikoyi	7230	11300	10000	12500	18800	22300	3500	7000
Kosofe	4870	6990	7000	8000	13100	14300	3500	7000
Lagos Island	4950	7530	8000	12500	15000	22300	3500	7000
Lagos Mainland	6000	7890	7500	18300	14100	32700	3500	7000
Oshodi/Isolo	6690	8720	8000	9330	15000	16700	3500	7000
Shomolu	5520	8900	11100	16300	20800	29200	3500	7000
Lekki	5760	9450	17800	21000	33300	37500	3500	7000

Note: Transportation cost is estimated between 3500 (low value) and 7000 (high value).

2.5 The Nigerian 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. Information about food consumption is provided by the Food and Agricultural Organization (FAO) in the food balance sheet for each country. Food prices are collected by WageIndicator through its Cost of Living survey.

Table 4 Food costs per month in NGN 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
Coffee and products	33.1	49.3	0.2	0.0	5100.0	7600.0
Tea (including mate)	0.0	0.0	0.0	0.0	1000.0	2400.0
Potatoes and products	112.8	134.2	9.5	7.1	395.0	470.0
Beer	386.1	386.1	25.7	12.6	500.0	500.0
Pulses, Other and products	965.5	1143.1	20.8	69.5	1550.0	1835.0
Bananas	0.0	0.0	0.0	0.0	200.0	346.7
Fruits, Other	55.3	60.3	33.5	13.4	55.0	60.0
Grapefruit and products			0.0	0.0		
Olives (including preserved)	209.6	303.4	3.7	15.0	1900.0	2750.0
Butter, Ghee	32.4	38.9	1.1	7.9	1000.0	1200.0
Sweet potatoes	91.5	183.0	30.5	29.2	100.0	200.0
Seeds and kernels	0.0	0.0	0.0	0.0	425.0	500.0
Lemons, Limes and products	0.0	0.0	0.0	0.0	200.0	400.0
Meat (pigmeat, poultry, bovine)	573.6	742.3	22.5	35.5	850.0	1100.0
Tomatoes and products	200.5	334.2	22.3	4.7	300.0	500.0
Wine	12.1	13.8	0.4	0.0	933.3	1066.7
Oranges, Mandarines	0.0	0.0	0.0	0.0	166.7	200.0
Honey	0.0	0.0	0.0	0.0	1000.0	1100.0
Plantains	425.7	532.1	35.5	31.6	400.0	500.0
Peas	0.0	0.0	0.0	0.0	1000.0	1200.0
Cassava and products	805.9	1611.8	268.6	216.3	100.0	200.0
Cream	0.0	0.0	0.0	0.0	750.0	1200.0
Groundnuts (Shelled Eq)	225.8	383.9	18.8	61.6	400.0	680.0
Vegetables, Other	606.1	1378.8	101.0	26.1	200.0	455.0
Onions	73.0	146.0	16.2	4.7	150.0	300.0
Oils (soyabean, olive, palm, other)	284.5	355.6	29.6	258.2	320.0	400.0
Sunflower Seed Oil	0.0	0.0	0.0	0.0	480.0	600.0
Sweeteners, Other			1.3	3.9		
Citrus, Other			42.6	11.1		
Pineapples and products	66.6	111.0	16.7	4.7	133.3	222.2
Spices, Other	8.4	16.9	2.8	9.5	100.0	200.0
Roots, Other			17.3	15.0		
Rice (Milled Equivalent)	566.4	644.5	65.1	240.8	290.0	330.0
Wheat, barley and cereals	1671.8	2394.4	159.6	456.3	349.1	500.0
Eggs (10 pieces)	6.2	7.0	7.8	9.5	267.0	300.0
Maize and products	302.7	484.3	67.3	213.9	150.0	240.0
Milk - Excluding Butter	296.2	350.1	18.0	10.3	550.0	650.0
Sugar (Raw Equivalent)	190.8	222.6	21.2	72.6	300.0	350.0

Beans	0.0	0.0	0.0	0.0	250.0	300.0
Soyabeans	29.2	32.4	5.4	21.3	180.0	200.0
Fish products	882.5	1323.7	36.8	20.5	800.0	1200.0
Apples and products	2.2	3.9	0.2	0.0	333.3	600.0
Total	7827.7	11151.7		2100.0		

Source: Own rendering based on FAO and COL

Note: Food cost is estimated per month for an adult person in NGN/ the national currency. Consumption in grammes and food calorie (kcal) per day per person is provided by the FAO. Food prices (per standard unit, i.e. per kilo or per liter) are estimated through the WageIndicator Cost of Living database. For some food items the WageIndicator Cost of Living survey does not have enough responses to provide 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

WageIndicator contextualises the results of the field research on cost of living/ living wages through its Wages in Context-concept. The concept allows to share and compare living wages with other regular incomes, across countries and regions. In Tables 5 and 6 we compare the national poverty line, the current minimum wage and the lower bound estimates of the living wages for an individual, 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 NGN

National poverty line (330 per day)	9900
Current minimum wage	18000
Minimum wage proposal done in 2016 by two Confederations of Trade Unions in Nigeria	56000

Table 6 Living wages - individual, family, typical family - lower/higher bound, monthly in NGN

Lagos State - living wage individual - lower bound - (WageIndicator)	21500
Lagos State - living wage individual - higher bound - (WageIndicator)	32900
Lagos State - living wage standard family 2+2 - lower bound - (WageIndicator)	36500
Lagos State - living wage standard family 2+2 - higher bound - (WageIndicator)	56300
Lagos State - living wage typical family - lower bound - (WageIndicator)	58500
Lagos State - living wage typical family - higher bound - (WageIndicator)	87900

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 wages paid, and living wages for individuals and families. See <http://www.wageindicator.org/main/salary/wages-in-context>

2.7 Reported costs for a family 2+2

To validate the living wage estimates, the Cost of living survey directly asks interviewees what the expected minimum monthly costs for a household with 2 adults and 2 children on food, housing, education, health and others are (see Table 7). The comparison of reported costs with estimated costs in Table 8 confirms a high overlap between estimated and subjectively reported living costs.

Table 7 Reported minimum monthly expenses in NGN for a family 2+2

Region	Food		Housing		Education		Health		Other	
	Low	High	Low	High	Low	High	Low	High	Low	High
Lagos average	30000	35500	10000	15000	3000	5000	5000	7000	6000	10000
Badagry	20000	30000	7000	8000	5000	7250	2250	4500	5000	5500
Ikorodu	25000	30000	10000	10000	1500	2000	4000	5000	6000	8000
Ajeromi/Ifelodun	22000	45000	9000	10000	2700	4000	3000	3500	4000	6000
Ikoyi	30000	46500	30000	33333	2000	2500	10000	11000	10000	15000
Kosofe	30000	35000	12500	15000	1000	1500	4000	6000	5000	10000
Lagos Island	36000	45000	8250	15000	1000	4000	6000	9000	8000	9000
Lagos Mainland	25000	30000	12500	18000	2000	10000	5000	6000	10000	12000
Oshodi/Isolo	25000	35000	15000	21500	2000	15000	7500	8000	6000	10000
Shomolu	35000	39500	20833	25000	2000	32500	4000	5000	5000	7000
Lekki	40000	60000	35000	42000	2000	4000	10000	10000	10000	10000

Table 8 Reported and estimated costs per month in NGN for a family 2+2

Region	Reported costs		Estimated costs	
	Low	High	Low	High
Lagos average	54000	72500	54120	83380
Badagry	39250	55250	58080	80520
Ikorodu	46500	55000	48400	66264
Ajeromi/Ifelodun	40700	68500	45364	75240
Ikoyi	80000	108333	62612	92070
Kosofe	51500	67500	45628	64196
Lagos Island	59250	82000	46508	74118
Lagos Mainland	54500	76000	51700	88506
Oshodi/Isolo	55500	89500	54736	74338
Shomolu	66833	109000	51458	84260
Lekki	97000	126000	70774	100430

Note: Reported monthly costs include the sum of reported expenses on food, housing, education, health and others. Estimated costs include food, housing, transport and the 10 percent cushion for unexpected expenses, such as health and education.

Based on subjective evaluations it follows that a family of 4 (2+2) requires at least NGN 54,000-72,500 for living. These are net expenses which can be transformed into living wages through accounting for the number of workers in the family and the gross to net income ratio. Reported living costs approximating actual costs show that living wage estimations are built on solid methodology that delivers a reasonable estimate of a decent living wage for workers in the region.

2.8 Conclusions

When comparing living wage levels resulting from our field work in Lagos State with the minimum wage levels presently under review in the country, it becomes clear that the current minimum wage is not enough to cover the costs for one person, let apart the standard or typical family in Nigeria. The trade union proposal for a new minimum wage (NGN 56,000) and the higher bound of the 2+2 family and the suggested minimum wage and the lower bound living wage estimate for a typical family are relatively close.

Table 9 Reported wages under current minimum wage regulations in Lagos State in NGN

Region	Individual		Family 2+2		Typical family	
	Low	High	Low	High	Low	High
Lagos average	21500	32900	36500	56300	58500	87900

For a more detailed analysis of the relationship between living wages and minimum wages at local level, see the presentation of research results in Table 1.

3. WageIndicator and living wages

3.1 The living wage

The living wage has been recognized by the International Labor Organization (ILO) as a basic human right in 1919 (ILO, 2008). Today the ILO endorses living wage within the wider concept of Decent Work that aims at work in conditions of freedom, equity, security and human dignity. In 1948, the United Nations Universal Declaration of Human Rights accentuated again that workers need to earn at least a living wage. An exact and universal definition of living wage, however, has never been established. Each campaign defines the concept differently.² The Global Living Wage Coalition understands 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'*.³

The methodology to calculate living wages adopted by WageIndicator is broadly consistent with the previous living wage campaigns reviewed in Anker (2011). Differences are e.g. the use of monthly instead of weekly values. The calculation is country and region specific and includes 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 during 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 defined by law and, thus, both a worker's right and an employer's obligation. Minimum wages are meant to fix pay levels for a relatively long period. By contrast, living wages are not prescribed by law and, therefore, cannot be enforced. 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, minimum and living wages are quite different in nature. Yet, they may amount to approximately the same monthly pay in practice. In countries where minimum wage levels have not been revised for many years the existing level may be close to the poverty line. Generally speaking, WageIndicator research shows that minimum wage levels in countries around the world are mostly below living wage levels. However, in richer countries the minimum wage level may be even higher than the living wage level calculated by WageIndicator.

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. 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

² See Anker, R. (2011). Estimating a living wage: A methodological review. Geneva, ILO.

³ Anker, R. and Anker, M. (2016). Measuring living wages around the world: Manual for measurement. London, Edward Elgar Publishing.

of living wages for 100 countries is presented in Guzi (2014). The data can be compared to the one from Numbeo.com, the only other source with price data collected in a similar way. This approach demonstrates that it is possible to use prices collected through web-surveys for living wage calculations.

That price data is collected through the WageIndicator's Cost of Living survey also means that it is internet-based. Since October 2013, WageIndicator operates the permanent survey including 75 items to collect the prices for food, 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. Web visitors are invited to complete the survey for a selection of items or for the entire list. They are also asked to identify their region and city to allow for regionally adapted and comparable living wages.

The Cost of Living survey is posted on all national WageIndicator websites in the national language(s). It reaches out to large numbers of people, facilitates data collection on a global scale, and ensures that the data is up-to-date as it is continuously collected.

In addition to its voluntary online data collection, WageIndicator organises offline Cost of Living surveys by trained interviewers or ordinary people reporting the prices for a set of commodities in their neighborhood. This data collection is done through an app, tailor made for mobile devices. The app is available for 90 countries in English and in the national language(s) (<https://costofliving.wageindicator.org>). The App facilitates data collection via 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 for unexpected expenses.

The composition of the food basket reflects the actual food consumption in a country. Food cost is scaled to provide for 2,100 food calories per person per day (applies to children as well). This amount is suggested by the World Bank.⁴ Other living wage campaigns work with similar assumptions: the Asia Floor Wage campaign assumes 9,000 calories/day for a family of two adults and two children, which equals 2,250 calories per person per day. Anker and Anker (2013, 2014) assume 2261 calories per person per day in rural South Africa and 2,364 calories per person per day in Southern Malawi.

Cost of housing is differentiated by the size of a family. For a 1-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 in the same areas. The housing cost includes utility and other housing costs (cost of electricity, water, garbage collection, property tax etc.).

Transportation is an important cost for households as 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 with the living wage. They, therefore, must rely on public transportation. 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 a regular monthly urban pass is, therefore, used as the general yardstick in a country; the (lower bound) estimate of transportation costs. Hence, living wage includes the price of a regular monthly pass as the estimate of transportation costs for an adult. The living wage for a family includes the price of two

⁴ Houghton, Jonathan Henry and Shahidur R. K. (2009). Handbook on Poverty and Inequality. Washington, World Bank Publications.

regular monthly public transportation passes. Children are assumed to travel for free with their parents.

Finally, the living wage includes spendings on non-specified discretionary purchases. In particular, the living wage must allow for unforeseen events such as illnesses, accidents or unemployment. Similar provisions for unexpected events are found in other research. Anker and Anker (2013) include a 10 percent margin. The living wage proposed by the Vancouver initiative assumes two weeks of income from labor as the provision for unexpected events on a yearly basis (i.e. approximately 4 percent of the yearly household expenditures). In keeping with this practice by adding a margin of 10 percent to the final estimate of the living wage in addition to food, housing, and transportation expenditures, the household's need to prepare for such incidental expenditures is reflected.

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

WageIndicator's approach identifying different household and family types for which living wages are calculated is not just a reflection of the diversity found in the life-work situations around the globe. It is a response to the differing needs for living wage information as expressed by stakeholders/ end users of this information. The different types are:

- 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 2-adults 2-children standard household* living wage (2+2) estimates the amount of money to support a family of two adults and two children. Using this standard unit has several advantages. First, it allows for 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 Coalition⁵) which makes the results directly comparable. Third, the family with 2 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. This living wage is always estimated for an equivalent of a full-time worker. It is adjusted for the number of workers in the family as explained under 3.
- 3) *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 the World Bank). The living wage should be corrected by the number of workers in a family. Here, we follow the recommendations for estimating the living wage made by Anker and Anker (2016) to adjust for the differences in 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

⁵ 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.

with a higher participation rate and lower unemployment rate, the living wage is lower as it is more likely that a second adult family member works too.

3.6 Lower – and upper bound living wages

WageIndicator publishes living wages as a range between the lower bound set as the 25th percentile and the upper bound defined as the 50th percentile of calculated living wages. 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 percent of respondents report a 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). All are based on the data from the WageIndicator Cost of Living survey to reflect the variation of prices within a country.

One single figure 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 part of everyday life. The WageIndicator practice of reporting the median as well as the 25th percentile of living wage calculations allows for a more transparent measure of living wages, reflecting the variation of prices and consumer preferences. It provides for the explicit comparison of well-defined concepts within and across countries and over time.

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 state of 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.

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.

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

3.8 Data quality and consistency of estimates

Some concerns regarding the estimates of living wages primarily relying on web-based data collection have to be addressed. 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.

Through presenting living wage estimates as a range (the median serves as the upper bound and the 25th percentile as the lower bound) the error is minimized further. As already mentioned, 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 reflect differing actual price levels for many items and services people have to spend their income

on and people's willingness or ability to pay regarding these price levels. Price levels change over (even short periods of) time, from country to country and within regions.

The Cost of Living survey continuously collects data. 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, national experts are consulted 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 be manifested.

4. Experience: The Cost of Living data collection



In July 2016, two teams of interviewers worked in Lagos City and Lagos State, involving a total of 17 interviewers and 3 managers. Together they collected 7,750 responses on food items, 320 on housing, and 120 on transport costs. In addition, they conducted a minimum of 60 basic interviews for Lagos State and 30 interviews for Lagos city. Below we summarize their experiences.

4.1 Training

A training before starting data collection is wise. All interviewers have been trained by their managers for a maximum of 2 hours in the use of the app on a phone or tablet. The 3 managers received detailed instructions from the WageIndicator Foundation through Skype based on the Cost of Living manual.⁶

4.2 Experience with the Cost of Living app

To use an app for data collection is not yet common everywhere around the world. None of the interviewers had used a data collection app before. However, all had face-to-face data collection experience. Some students reported that interviewees were happy to report especially because the interview was done through an app. Cool!

No technical errors have been reported in relation to the app, though in one case the interviewer had to switch to pen and paper form. The Blackberry was not suitable for the job. ("I didn't want to bring my iPhone to that 'dangerous' area, I opted for my Blackberry. That didn't work out. Had to use paper and do data entry in the evening.")

4.3 Type of people were interviewed

All interviews were anonymous. However, interviewers were asked to describe the people they interviewed. They said: "Aged between 25 and 65. More women than men." "Women tend to know more about food prices, men about housing and gasoline" reported one of the interviewers. In the Lagos State region interviewers reported: "Illiteracy, poverty, poor old fashioned family houses". By contrast, in Lagos City, the variation of people interviewed was huge. Bankers, teachers, students, male and female working class members, sellers on the market, traders, and those without a job.

⁶ Dragstra, F. (2016). Handout Cost of Living Application - user guide. Amsterdam, WageIndicator Foundation. [Living wages in Nigeria, Lagos State, August 2016](#)

4.4 Were interviewees ready to talk?

In general, yes. Male interviewees were asked more often whether they could give a tip, a coke, or buy some food. At the market interviews had to be short, time is money. As one interviewer said, they only talked on "a quid pro quo basis". In Lagos State, they said: "We like the aim of the survey", when explained by Dr Franca Attoh as a research on the cost of living.

4.5. Letter for the interviewer

Only one case was reported where the interviewer had to show the letter from WageIndicator and the university about the rationale of the survey. Right after checking the letter the Interviewee was happy to talk.

4.6 Opinions about prices

Many people in the world have opinions about prices, especially those who go to the market every day. Also policy makers tend to show a lot of knowledge about prices. Yet, they are not always accurate. We asked the interviewees to report on opinions about prices.

One person who reallocated from Lagos City to the Badagry area, said Badagry was cheaper. In Ikoyi no complaints were reported. The interviewer explained: "The wages are so high, the housing so posh, all multinationals are here. And you can buy everything you want."

Some market sellers were averse from sharing price information, as "some thought that I was trying to set up shop and undercut their prices." Moreover, one of the interviewees noted: "The price in supermarket is standard, in the informal market it depends on whether you can negotiate."

4.7 List and presentation of items in the Cost of Living app

WageIndicator presents a standard list of items. The experience: "The poorer the area the less likely all items are available. And mango was out of season." One person reported that not all interviewees knew the monthly expenses on clothes or that when they are never sick, they had no idea about health care prices. Other interviewees said "to recalculate units quickly from 5 kilos to 500 grams wasn't easy". Therefore, it is wiser to have an interviewer who understands units, and is reasonably in the know.

All teams skipped items in the list if interviewees did not know the item or the price (this was the tip during the training. People cannot and do not have to know all prices or goods!).

4.8 Managers' view

The 3 groups of interviewees all had a manager. What did they say?

In their view, it helped when interviewees mastered English and Yoruba. It helped when they were from the city they conducted the interviews in. In Lagos State/Badagry unfortunately they did not all speak Egun. Some students were shocked by the lifestyle/poverty of the people.

The big-city manager: "I was on daily basis in touch with interviewees by Whatsapp, sms, phone. In the evening on Facebook". The other big-city manager: "First time they used an app. They were delighted to do this. Now they know all prices and all units!"

4.9 How did WageIndicator find the managers?

Ramota Adebayo recently worked for Mywage.org/Nigeria. Ramota is a trade union activist. We met her for the first time during a communication Forum organised by Uni Global Union in CapeTown, 2008.

Dr. Franca Attoh (University Lagos) and Moraya Adebayo, a lawyer and human rights researcher, both had been recommended by the University of Leiden/African Study Centre.

4.10 Lessons learned

- Teams of female remunerators/ interviewers seem to work better than male ones (less complaints, interviewees are more willing to talk).
- The posher the area, the more difficult it is to interview people.
- Female interviewers did not report that they bought a coke or gave a tip after the interview. Men did.
- Interviewers who work in teams of 2 are wiser and faster than those who work alone. Loner interviewers are more focused on reaching their daily target.
- In general, to work with young people seems fine. To work with journalism and/or economy students seems to be the best.
- Knowledge of the language and the area is a precondition.

5. Bibliography

- Anker, R. and Anker, M. (2016). Measuring living wages around the world: Manual for measurement. London, Edward Elgar Publishing.
- Anker, R. (2011). Estimating a living wage: A methodological review. Geneva, ILO.
- Anker, R. and Anker, M. (2013). Living Wage for rural South Africa with Focus on Wine Grape Growing in Western Cape Province, Prepared for Fairtrade International.
- Anker, R. and Anker, M. (2014). Living Wage for rural Malawi with Focus on Tea Growing area of Southern Malawi, Prepared for Fairtrade International.
- Dragstra, F. (2016). Handout Cost of Living Application - user guide. Amsterdam, WageIndicator Foundation.
- Guzi, M. (2014). Estimating a Living Wage Globally. Young Public Policy Makers Case Studies "Living out of stereotypes". Bratislava, NISPACEE Press, p. 59-68.
- Guzi, M. (2015). The Purchase Power of Living Wages in Different Countries, in D. Dragstra (ed.) 15 Years of WageIndicator: Results. Conference Reader 6th Global WageIndicator Conference, Amsterdam, 27/28 August 2015. Amsterdam, WageIndicator Foundation, Chapter 22., p. 80-82.
- Guzi, M. and Kahanec, M. (2014). Wageindicator Living Wages, Methodological Note. Bratislava /Amsterdam, CELSI/ Wage Indicator Foundation.
- Guzi, M., Kabina, T., Dragstra, D., Osse, P., and Grolle, J.P. (2015). Chapter 21. FAQs about Wages in Context, in D. Dragstra (ed.) 15 Years of WageIndicator: Results. Conference Reader 6th Global WageIndicator Conference, Amsterdam, 27/28 August 2015. Amsterdam, WageIndicator Foundation, p. 69-79.
- Guzi, M., Kahanec, M., and Kabina, T. (2016) Codebook and explanatory note of the WageIndicator Cost-of-Living Survey and Living Wage calculations. Amsterdam, WageIndicator Foundation.
- Houghton, Jonathan Henry and Shahidur R. K. (2009). Handbook on Poverty and Inequality. Washington, World Bank Publications.
- International Labour Office (2008). Global Wage Report 2008/09: Minimum wages and collective bargaining – Towards policy coherence. Geneva, ILO.
- 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.
- 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.
- Premium Times (April 27, 2016) LC, TUC demand N56, 000 as new national minimum wage. Abuja, Premium Times Services Limited.
- Richards, T., Cohen, M., Klein, S. and Littman, D. (2008). Working for a Living Wage: Making Paid Work Meet Basic Family Needs in Vancouver and Victoria – 2008. Vancouver, Canadian Centre for Policy Alternatives.

Annex

Letter used by interviewers

Re: Cost of living data collection Lagos State

Dear reader,

Greetings from the Universities of Amsterdam and Lagos, WageIndicator Foundation and Mywage.org/Nigeria. These organizations are currently conducting a cost of living survey in Lagos State. They will collect data of over 100 people about cost of food, housing and transport. They will also check prices in the formal and informal markets. For the data collection they can use paper, smartphone or laptop.

WageIndicator Foundation does data collection in over 90 countries in the world. The data from Lagos State will be analyzed by the above universities. In case you like to follow the work. Please go to WagesinContext.org.

To attain this goal, we would like to request your full – anonymous – participation in this survey. The survey will not take more than 20 minutes. We would like you to present Mr, Mrs, Ms..... who is our enumerator.

Please provide him/her with full support!

Yours sincerely
Paulien Osse
Director
WageIndicator Foundation
paulien@wageindicator.org
www.wageindicator.org
Tel. 31 6 539 77 695

A large light blue circle is partially cut off by the top edge of the page. A dark blue horizontal bar spans across the middle of the page, overlapping the large circle. To the right, a smaller light blue circle is partially cut off by the right edge of the page.

 **WageIndicator.org**