# Extrapolated provisional Living Wage Benchmarks

## for locations in India

## A. Introduction and background

In line with Fairtrade's vision on the living wage, the Textile Standard requires payment of living wages in the textile supply chains within a time frame of 6 years. Living wage benchmarks approved by FI need to be used to close the gap between real wages and benchmarks. While the implementing companies require it to assess the gap and plan the increase, brands need them to assess the price implications and feasibility. FI approves only credible benchmarks and currently, only the benchmarks calculated using 'Anker Methodology'<sup>1</sup> are approved.

Anker methodology uses primary data for major components like food and housing and extrapolated data for other costs which are post-checked. Onsite data collection, analysis, adjustment, and validation, is a time and resource-intensive process. Benchmarks are location specific and only three are available for India as of now. On the other hand, companies implementing the standard under the German PPP project are located in several locations and don't have the benchmarks for implementation. This paper is an effort to come up with proxy/interim benchmarks through extrapolation. The paper discusses the calculation of proxy benchmarks using one Anker benchmarks and Govt. minimum wages for locations as per the Terms of Reference issued by FI.

## **B. Objectives**

- Calculation of provisional benchmarks through extrapolation: for eleven locations in the states of Tamilnadu (rural), Maharastra (urban and rural), Gujarat (urban & rural), Madhya Pradesh (Indore-Industrial), Uttar Pradesh and West Bengal (urban & rural) using factor between LW Benchmark for Tirupur Urban & Govt. minimum wages.
- 2. Stress testing: cross-checking the accuracy, safe limits and limitations of the extrapolated benchmarks using other benchmarks and data.

## C. Methodology

Living wage is the remuneration received for a standard workweek 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, health care, transport, clothing, and other essential needs, including provision for unexpected events<sup>2</sup>.

Extrapolation is a mathematical way of projecting unknown data using a known set of data. Accuracy of the projected data depends on the strength of the correlation between a known set of data. Sufficient set of data is required to prove a correlation. As only one relevant Anker

<sup>&</sup>lt;sup>1</sup> <u>https://www.fairtrade.net/issue/living-wage</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.globallivingwage.org/about/anker-methodology/</u>

benchmark is available for the country, establishing a strong correlation is not possible. Anker benchmarks and Govt. minimum wage of other countries is not used as costs of living and calculation of minimum wage are different in different countries. To overcome this hurdle, a credible data set where correlation can be assumed was explored and Govt. minimum wage was selected. Calculation of the minimum wage was found having a fairly similar methodology as that of Anker benchmarks. Stakeholder opinion was also taken about the suitability of this data.

As extrapolation is an estimation or projection beyond the observed data range, there is an inherent risk of accuracy and uncertainty. Extrapolated benchmarks are compared to other benchmarks and data to check the accuracy. Limited other living wage benchmarks include benchmark of Wageindicator foundation, 'Fairshare' project, Asia Floor Wage. Other data include recommendation of the Govt. of India-expert committee on minimum wages, trade union demands and Min. salary recommendations for central Govt. workers in India.

#### 1. Variables used and their components:

#### GLWC Living wage benchmark-Tirupur Urban:

The GLWC Tirupur Urban benchmark is selected for the extrapolation as currently, it is the only one representing formal employment in the textile industry in India. The other one - Badohi benchmark is for the carpet weaving home workers in rural Uttar Pradesh and is not selected for extrapolation. Major components of the benchmark include – Food cost (WHO), Housing (Govt. standards), Other essential needs (as per Govt. sample survey), family size (Govt. census data), a margin of 5%<sup>3</sup> (savings) and taxes and deductions (as per local rates). GLWC LW benchmark was first calculated in 2016 and last updated for inflation in Aug 2019<sup>4</sup>

#### Govt. Minimum wage India:

The Minimum Wages Act 1948 sets the minimum wages that must be paid to skilled and unskilled labours. Though this law is legally non-binding, it is statutory as payment of wages below the minimum wage rate amounts to forced labour. It is normally calculated and published for different occupations, skill levels and geographical areas (cities, smaller towns and village areas) by the State Governments in India.

Govt. Minimum wage is considered as the credible variable for extrapolation in this study as it has a defined, stakeholder approved methodology based on costs of living. It is also regularly updated for the inflation in the form of Variable Dearness Allowance (VDA). The weakness of the Govt. minimum wage is that it is slightly vulnerable to political influence and is not revised regularly in very few states. The norms for calculation of Govt. minimum wage were established based on the recommendation of 15<sup>th</sup> Session of the Indian Labour Conference (ILC) in 1957 and updated later<sup>5</sup>. Major components include

- Food cost: 2700 calories per person (as per Dr Wallace Aykroyd), 65 grams of protein and around 45-60 grams of fat.
- Housing: rent of the minimum area as specified by Govt. Industrial Housing Scheme

<sup>&</sup>lt;sup>3</sup> https://www.globallivingwage.org/about/anker-methodology/

<sup>&</sup>lt;sup>4</sup> <u>https://www.globallivingwage.org/wp-content/uploads/2018/05/Update-Report\_Tiruppur-India\_2019.pdf</u>

<sup>&</sup>lt;sup>5</sup> <u>http://labourbureau.gov.in/MW2k6%20Section-1.htm</u>

- Clothing: 18 yards per person per year, 72 yards per family per year.
- Miscellaneous expenditure: 25% of the minimum wage should be the cost of fuel and miscellaneous items of expenditure like Children's education, required medical expenses, recreation in festivals/ceremonies and provision for old age and marriage.
- Family size: Three. A spouse and two children below the age of 14 per worker. With the husband assigned 1 unit, wife, 0.8 unit and two children, 0.6 units each, the minimum wage needs to address 3 consumption units.
- The number of working members: One. Income from women and children are ignored.
- Inflation: is linked to consumer prices index (CPI) and revised after every six months or 50-point rise in the CPI, whichever is earlier.

Components	GLWC – Bench mar	k-Tirupur Urban	Govt. Minimum Wage	– India	
	Method	Quantification	Method	Quantification	
Food	WHO recommendation	For an actual family size	2700 calories per person	For 3 adults	
Housing	Govt -T N. Housing		Govt Industrial Housing Scheme & extrapolated	Around 10% of food & clothing.	
Clothing Healthcare Education	Healthcare Extrapolated from		Extrapolated from - food, clothing, rent &	25%	
Others	checked	10%	fuel		
Savings	Unexpected events	5%	No separate provision	NA	
Inflation	Actual	Actual - Based on CPI	Actual-based on CPI- consumer price index	Revised once or twice a year	
Family size	Actual - Census data	Adults 2 Children 1.7	Fixed	Adults-1.8 children 1.2	
No of working members	Actual - Census data	1.58	Fixed	1	
Statutory deductions	PF & ESI	Approx. 13.8%	No provision	NA	

#### Table 1. Summary of the attributes - GLWC benchmark and Govt. minimum wage, India

The state of Tamilnadu has two minimum wages for the CMT industry - the 'Hosiery' and the 'Tailoring' industry wages based on the registrations of the textile units. Hosiery Industry minimum wages are lower than that of 'Tailoring' industry. However, the tailoring industry wages are selected for this extrapolation study for the reasons below.

- 'Tailoring industry' minimum wages were set by the Govt. initially for all the export-oriented CMT units. Some companies disputed this claiming that they are registered as hosiery units and got relief from the court to pay hosiery wages. However, as per the local sources, suppliers working for major brands are still paying the 'tailoring industry' wages.
- Wages agreed in the sectoral collective bargaining agreement between the Tirupur Exporters Association (TEA) and the local trade unions are higher than 'hosiery' wages and are closer to the 'Tailoring' wages.

Where available, a matching Govt. minimum wage for 'tailoring' or 'readymade garment' industry is selected for the extrapolation. In the case of skills, wages for the 'unskilled' category is used as

a classification of skill levels by different states is not consistent. Urban and rural areas are considered where separate minimum wages are published for them.

#### 2. Formula used:

$$lw(x) = \frac{lw(y)}{mw(y)} X mw(x)$$
$$mw(y)$$

Where

lw(x) = Living wage in the new location X, lw(y) = Living wage in a location Y (Tirupur as per Anker methodology), mw(y) = Current Minimum Wage in location in location Y (Tirupur)mw(x) = Current Minimum Wage in new location X.

## **D.** Calculations

#### 1. Living wage benchmark (Anker's) - Tirupur Urban

The net living wage (take-home pay for workers) for Tirupur in the original study was INR11,918 and the gross living wage (taking into account mandatory deductions for provident fund and health insurance benefits), was INR13,725 per month in August 2016. The benchmark was updated for inflation in April 2018 and August 2019. Details are in table 2.

Original study date - Aug-16, Updated for inflation – Apr-2018, Aug 2019	August 16	April 18	August 19
Net LW per month	11,918	12,733	13,858
Taxes / Mandatory Deductions per month	1,807	1,937	1,985
Gross LW per month	13,725	14,670	15,570

Table 2. The living wage for Tirupur urban in the original study and the updates (INR)

#### 2. Govt. minimum wage in major states for the textile sector:

Govt. minimum wages were collected through a desktop study and were cross-checked with local units and professionals. Wages varied with the sector (e.g. tailoring, readymade garments, hosiery, handloom), locations (urban and rural areas) and skill levels (unskilled, semi-skilled, skilled).

							Govt. I	minimum v	vage-INR P	er Month						
No	Location	Sector	Effective		Unskilled		9	iemi-skille	d		Skilled		н	ighly skill	ed	Remarks
NU	Location	Sector	date	Zone 1	Zone2	Zone 3	Zone 1	Zone2	Zone 3	Zone 1	Zone2	Zone 3	Zone 1	Zone2	Zone 3	Remarks
1	Gujarat	Readymade Gai			8,070.40	-	8,486.40	8,278.40	-	.,	8,486.40	-	-	-		
		Hosiery	01-10-2019	8,278.40	8,070.40	-	8,486.40	8,278.40	-	8,720.40	8,486.40		-	-		
		Tailoring	01-10-2019	8,278.40	8,070.40	-	8,486.40	8,278.40	-	8,720.40	8,486.40		-	-		
2	Madhyapradesh	Handloom	01.10.2019	-	-	7,950.00	-	-	8,807.00	-	-	10,185.00	-	-	11,484.00	Govt. has not defined minimum ages for Garments, Tailoring and Hosiery. Handloom is taken.
3	Uttarpradesh	Tailoring	01-10-2019.	-	-	8,278.94	-	-	9,046.83	-	-	10,201.09	-	-	-	Common for all Zones
		Hosiery		-	-	8,278.94	-	-	9,046.83	-	-	10,201.09	-	-	-	Common for all Zones
4	West Bengal	Tailoring	01-07-2019	7,776.00	7,202.00		8,553.00	7,920.00		9,409.00	8,713.00	-	-	-	-	West Bengal classified Zones into A and B. Here it is taken as Zone I And Zone
Г		Hosiery	01-07-2019	8,005.00	7,245.00	-	8,806.00	7,968.00		9,687.00	8,765.00	-	-	-	-	
		Readymade Gar	01-07-2019	8,005.00	7,245.00	-	8,806.00	7,968.00		9,687.00	8,765.00		10,655.00	9,644.00	-	
5	Tamilnadu	Tailoring	01-04-2019	8,609.40	8,481.40	8,353.40	8,822.40	8,694.40	8,566.40	8,992.40	8,864.40	8,736.40	9,142.40	8,992.40	8,864.40	Tirupur -Zone 1
Г		Hosiery	01-04-2019	5,168.40	5,168.40	5,168.40	5,258.40	5,258.40	5,258.40	5,708.40	5,708.40	5,708.40	7,508.40	7,508.40	7,508.40	Common for all Zones
6	Karnataka	Tailoring	01-04-2019	9,085.74	8,944.04	8,802.34	9,340.80	9,199.10	9,057.20	9,595.21	9,450.91	9,306.61	9,912.86	9,767.26	9,621.66	
		Readymade Gai	01-04-2019	9,085.74	8,944.04	8,802.34	9,340.80	9,199.10	9,057.20	9,595.21	9,450.91	9,306.61	9,912.86	9,767.26	9,621.66	
7	Maharashtra	Readymade Gai	01-01-2019	11,257.00	11,057.00	10,457.00	11,757.00	11,557.00	10,957.00	12,457.00	12,257.00	11,657.00	-	-	-	

#### Table 3. Govt. minimum wage for selected locations

Table 4. Govt. Minimum wages selected for extrapolation – cells in yellow

No	Location	Sector	Effective	Unskilled			
No	LOCATION	Sector	date	Zone I*	Zone II**	Zone III	
1	Gujarat	Readymade Garments	01-10-2019	8,278.40	8,070.40	-	
2	Madhyapradesh	Handloom	01.10.2019	-	-	7,950.00	
3	Uttarpradesh	Tailoring		-	-	8,278.94	
4	West Bengal	Readymade Garments	01-07-2019	8,005.00	7,245.00	-	
5	Tamilnadu	Tailoring	01-04-2019	8,609.40	8,481.40	8,353.40	
6	Karnataka	Readymade Garments	01-04-2019	9,085.74	8,944.04	8,802.34	
7	Maharastra-urban	Readymade Garments	01-01-2019	11257.00	11057.00	10457.00	

\*Zone I - normally the metropolitan cities or cities with Municipal corporations. Zone II - smaller towns and Zone III - rural areas.

#### 3. Factor – Tirupur Urban living wage benchmark to Govt. minimum wage Tirupur:

The Govt. minimum wage ('tailoring industry'-Tirupur-Urban- unskilled workers of CMT sector) to available GLWC living wage benchmarks from the first publication till 2019. The average of the factors is 1.76. Details of the factor calculation can be found in table 5.

#### Table 5. Factor calculation for extrapolation

	Factor Calculation for extrapolation									
Year	Govt. Min. Wage-Tailoring Industry -Zone I, Tirupur, Unskilled workers (INR)					VC-LW Bencl		Factor to net LW	Factor to Gross LW	Reference
	Basic	VDA	Total	Eff. Date		Tirupur Urban (INR) Net Gross Eff. Date (Ne		(Net LWB/GMM)		Reference
				1st April 2016 to						
2016	5256	2701	7957	31st March 2017	11918	13725	Aug-16	1.50	1.72	Annex 1, 2 & 6
				1st April 2018 to						
2018	5256	3105	8361	31st March 2019	12733	14670	Apr-18	1.52	1.75	Annex 1 & 3 & 7
				1st April 2019 to						
2019	5256	3353	8609	31st March 2020	13858	15570	Aug-19	1.61	1.81	Annex 1 & 4
				1st April 2020 to						
2020	5256	3819	9075	31st March 2021						Annex 1, 5 & 8
						Average factor			1.76	

Extrapolated gross living wage benchmarks against Govt. minimum wages are in table 6.

No	Location	Govt. Minimum wage	Factor	Gross living wage
1	Gujarat – Urban	8,278.40	1.76	14569.98
2	Gujarat – Rural	8,070.40	1.76	14203.90
3	Madhya Pradesh-Industrial	7,950.00	1.76	13992.00
4	Uttarpradesh – all	8,278.94	1.76	14570.93
5	West Bengal – Urban	8,005.00	1.76	14088.80
6	West Bengal – Rural	7,245.00	1.76	12751.20
7	Tamilnadu – Rural	8,353.40	1.76	14701.98
8	Karnataka – Urban	9,085.74	1.76	15990.90
9	Karnataka – rural	8,944.04	1.76	15741.51
10	Maharastra – Urban	11257.00	1.76	19812.32
11	Maharastra – Rural	10457.00	1.76	18404.32

Table 6. Extrapolated gross living wage for selected locations

Some locations have additional minor taxes and deductions. These are added to the extrapolated benchmarks and details are in table 7.

Location	Extrapolated Gross LWB	Professional tax	Welfare fund	Total deductions	Final Gross LWB
Gujarat – Urban	14569.98	200	6	206	14775.98
Gujarat – Rural	14203.90	200	6	206	14409.90
Madhya pradesh-Industrial	13992.00	0	10	10	14002.00
Uttarpradesh – all	14570.93	0	0	0	14570.93
West Bengal – Urban	14088.80	110	0	113	14201.8
West Bengal – Rural	12751.20	110	0	113	12864.2
Tamilnadu – Rural	14701.98	0	0	10	14711.98
Karnataka – Urban	15990.90	0	20	20	16010.90
Karnataka – rural	15741.51	0	20	20	15761.51
Maharastra – Urban	19812.32	208.33	6	214.33	20026.65
Maharastra-rural	18404.32	208.33	6	214.33	18618.65

Table 7. Extrapolated final gross living wage benchmarks (LWB) with location-specific taxes

The deductions for taxes and welfare fund are only in some locations.

#### E. Stress tests:

#### 1. Comparison with the latest Govt. recommendations:

Govt. of India, Ministry of Labour and Employment had constituted an expert committee on 17<sup>th</sup> January 2017, to review and recommend the methodology for fixation of National Minimum Wage (NMW). The report using scientific approach has updated the methodological framework of fixation of minimum wages, recommended National minimum wage regions based on a composite index and region-specific national minimum wages. It also recommended additional house rent allowance (city compensatory allowance), averaging up to INR 55 per day i.e., INR 1,430 per month for urban workers over and above the NMW<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> <u>https://pib.gov.in/newsite/PrintRelease.aspx?relid=188610</u>

For comparison purpose, these recommended minimum wages were adjusted for inflation (2018-19-3.4%). House rent allowance, mandatory deductions and savings @5% were added to arrive at an approximate estimate of the living wage. The calculations are in table 7.

	Region I	Region II	Region III	Region IV	Region V
	Assam, Bihar,	Andhra Pradesh,	Gujarat, Karnata	Delhi,	Arunachal Pradesh,
	Jharkhand,	Telangana,	ka, Kerala,	Goa, Haryana,	Manipur,
	Madhya, Pradesh,	Chhattisgarh,Rajasthan	Maharashtra, and	Himachal Pradesh,	Meghalaya,
States	Odisha, Uttar	, Jammu & Kashmir,	Tamil Nadu	and Punjab	Nagaland,
	Pradesh and West	and Uttarakhand			Sikkim, Mizoram and
	Bengal				Tripura
Reccomonded wages Per day	342	380	414	447	386
Wages Per month (July18)	8892	9880	10764	11622	10036
Inflation 18-19 @3.4%	311.22	345.8	376.74	406.77	351.26
House rent allowanceurban-	1430	1430	1430	1430	1430
Sub Total	10633.22	11655.8	12570.74	13458.77	11817.26
Savings@5%	11164.881	13431.6	14377.48	15295.54	13598.52
social security deductions 12.	1631.54	1962.77	2101	2235.16	1987.1
Grand total	12796.421	15394.37	16478.48	17530.7	15585.62

Table 8. Living wage estimates from Govt. expert committee reco
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Interpretation: Extrapolated benchmarks are slightly higher at the lower level by 0.5% and significantly higher at the upper level by 14.23%. This could be due to averaging of the wages for a group of states.

#### 2. Comparison with the private LW estimations – wageindicator foundation

**WageIndicator** is a non-profit organization, established in The Netherlands with a mission to bring more labour market transparency for the benefit of all employers, employees and workers worldwide<sup>8</sup>. A summary of expenditure and income needs for three common family household compositions (Sep.2019) can be found in table 9<sup>9</sup>

	Typical family (from-to)	Standard family (from-to)	Single-adult (from-to)
Food expenses	7120-9120	6470-8290	1620-2070
Housing expenses	9000-13500	9000-13500	4000-6480
Transport expenses	1000-2000	1000-2000	500-1000
Health care expenses	1000-2000	1000-2000	250-500
Education expenses	2000-3000	2000-3000	0
Other expenses	1010-1480	975-1440	320-505
Total Expenditure	21130-31100	20445-30230	6690-10555
Net Living Wage	14087-20733	11358-16794	6690-10555
Gross Living Wage	15500-22800	12500-18500	7360-11600

Table 9. Expenditure and Living Wage calculation (monthly rates in INR)

<sup>&</sup>lt;sup>7</sup> <u>https://labour.gov.in/sites/default/files/Commitee on Determination of Methodology.pdf</u>

<sup>&</sup>lt;sup>8</sup> https://wageindicator.org/Wageindicatorfoundation

<sup>&</sup>lt;sup>9</sup> https://wageindicator.org/salary/living-wage/india-living-wage-series-september-2019

Data is for September 2019, **Typical family**: 2 parents, 2.4 children and 1.5 working members. **Standard family**: 2 parents, 2 children and 1.8 working members.

Interpretation: The wageindicator benchmark range -12500-18500 per month per standard family is closer to that of Tirupur LWB. The range is close to the extrapolated benchmark of 12864 – 20026. The extrapolated benchmarks are higher by 2.9% and 8.2% at the lower and higher levels respectively. Details can be found in table 9.

#### 3. Comparison with private LW estimations: The living wage benchmark of 'Fair Share'

'Fair Share' is a Continental Clothing living wage project in Tirupur-Urban, India. As per the project, Continental Clothing first defined the living wage benchmark specifically concerning the factory workforce. The methodology for calculation is based on this definition, primary research, consultations with a local NGO, factory management and the workers. The net benchmark in Dec.2015 was INR12,116 per month and the gross was INR14,048<sup>10</sup>. For comparison in this paper, the net LW benchmark is updated for inflation (2016-19, total 11.5%), which is INR 13,509. The Gross LW benchmark adding deductions of 12.75% is INR 15,483.

Interpretation: Extrapolated benchmark for Tamilnadu-rural (INR14,711) is 5.24% lower than that of Fairshare adjusted for inflation.

#### 4. Comparison with other data

- The trade unions have demanded a minimum wage of INR 20,000 per month<sup>11</sup> (2019).
- The Seventh pay commission for central Govt. employees has recommended a minimum salary of INR 18,000 (effective 1<sup>st</sup> Jan 2016) per month for central Govt. workers.<sup>12</sup>
- The Asia floor wage for India is INR 23,588 <sup>13</sup>

<sup>&</sup>lt;sup>10</sup> <u>https://www.continentalclothing.com/about/fairshare</u>

<sup>&</sup>lt;sup>11</sup> https://www.ituc-csi.org/workers-rights-in-India-2019

<sup>&</sup>lt;sup>12</sup> http://prsindia.org/hi/theprsblog/7th-pay-commissions-review-central-government-salaries?page=9

<sup>&</sup>lt;sup>13</sup> <u>https://asia.floorwage.org/what</u>

## F. Discussion and conclusions

Extrapolated benchmarks are coherent with the limited local benchmarks and other data available for the country. There is a correlation in the range and the mean values. However, due to limited availability of location-specific values, they could not be correlated for individual locations. Summary of the comparison of local benchmark/data to the extrapolated benchmarks can be found in table 9.

	Comparison of extrapolated benchmarks to other benchmarks and data						
Limits - other			Values - other	Extrapolated	Difference		
benchmarks/data	Sources	Locations	Benchmarks/data	benchmarks	(%)		
Lower values	Wageindicator	All India	12500	12864	2.91		
	Govt. committee	All India	12796.42	12864	0.53		
Upper values	Wageindicator	All India	18500	20026	8.25		
	Govt. committee	All India	17530.7	20026	14.23		
	Trade Union demand	All India	20000	20026	0.13		
	Central Govt. Salary	All India	18000	20026	11.26		
	Mean values		16554.52	17638.67	6.55		
	Differences in lower values - other benchmarks & data to extrapolated wages						
	Differences in upper values - other benchmarks & data to extrapolated wages 8.						
Individual values	Fairshare project	Tirupur-rural	15232	14711.98	-3.41		
	Asia Floor Wage (AFW)	All India	23588	20026	-15.10		

Table 9.	Summary	of the	compariso	n – range

#### Table 10. Summary of comparison - location-specific

Comparison-extrapolated benchmarks to benchmarks derived from Govt. min wage recom.			
	Extrapolated	Benchmarks derived from Govt.	
Location	benchmarks (INR)	committee recom. (INR)	% Differences
Gujarat – Urban	14775.984	16478.48	-11.52204821
Gujarat – Rural	14409.904	16478.48	-14.3552379
Madhya pradesh-Industrial	14002	12796.42	8.610055706
Uttarpradesh – all	14570.9344	12796.42	12.17845302
West Bengal – Urban	14201.8	12796.42	9.895787858
West Bengal – Rural	12864.2	12796.42	0.526888574
Tamilnadu – Rural	14711.984	16478.48	-12.00719087
Karnataka - Urban	16010.9024	16478.48	-2.92037006
Karnataka – rural	15761.5104	16478.48	-4.54886354
Maharastra – Urban	20026.65	16478.48	17.71724178
Maharastra – Rural	18618.65	16478.48	11.49476466

- On average, the lower and upper values of the extrapolated benchmarks are higher than that of other data/benchmarks by 1.7% and 8.7% respectively. Mean of the extrapolated benchmarks is 6.55% higher than that of other data. This could be due to the comparison of location-specific values to national averages/higher limits.
- In the case of location-specific benchmarks, only data derived from Govt. minimum wage recommendation is available for comparison. The extrapolated benchmarks are close to

(within 5%) the data derived from Govt. min. wage recommendations of Karnataka-urban and rural and West Bengal rural. It is significantly lower (10-15%) in case of Gujarath urban, rural and Tamilnadu Rural and significantly higher (8.6-17.7%) in case of Maharastra, Madhyapradesh and Uttarpradesh.

- The variations in the location-specific data are ±15%. Given the fact that both sets of data are not from real calculations but derived from a different set of data, there seems to be a fair correlation between the two sets of data. The variations could be due to averaging of govt. minimum wage recommendations for the states.
- Asia floor wage (AFW) is an exception which is higher than the upper value by 15%. Since AFW is more of a campaign living wage benchmark calculated for slightly higher family size and lower working members. Most of the benchmarks in India including are lower than that of AFW. Anker's Tirupur urban benchmark is lower by 51.5%.

The range, as well as location-specific extrapolated benchmarks, exhibit a fair correlation with the available data on wages within the country. The methodology may be used for calculating interim benchmarks for the immediate requirements for the locations in this study. While the range is on a higher side by around 8%, location-specific benchmarks vary to the tune  $\pm 15\%$ . Further correlation and statistical analysis may be done to improve the methodology and accuracy of the extrapolated benchmarks for the specific locations.

Need for benchmarks will increase with growth in certification. Extrapolation requires reliable data with good correlation to living wage benchmarks. As credible data for different locations is limited, to prove correlation, it may be a difficult approach. Building internal competence and capacity for primary data collection can be one of the sustainable alternative solutions.