

The Nepal 2023 World Bank Enterprise Survey Implementation Report

I. Introduction

This document provides information on the World Bank Enterprise Surveys (WBES) implemented in Nepal between May 2023 and August 2023. The WBES collect both objective data based on firms' day-to-day experiences, and perceptions of enterprises regarding the business environment in which they operate. The WBES currently cover over 195,000 firms in 155 countries with a total of more than 300 surveys since 2006. The WBES are also used to build a panel of enterprise data that will make it possible to track changes in the business environment over time.¹

This report describes the sampling design of the survey, the data set structure as well as additional information that may be useful when using the data, such as information on survey non-response and the appropriate use of the sampling weights.

II. Sampling Structure

The WBES use stratified random sampling, where the population of establishments is first separated into non-overlapping groups, called strata, and then respondents are selected through simple random sampling from each stratum. The detailed methodology is provided in the Sampling Note.² Stratified random sampling has several advantages over simple random sampling. In particular, it:

- produces unbiased estimates of the whole population or universe of inference, as well as at the levels of stratification
- ensures representativeness by including observations in all of those categories
- produces more precise estimates for a given sample size or budget allocation, and
- may reduce implementation costs by splitting the population into convenient subdivisions.

The WBES typically use three levels of stratification: industry classification, establishment size, and subnational region (used in combination). Starting in 2022, the WBES bases the industry classification on ISIC Rev. 4 (with earlier surveys using ISIC Rev. 3.1).³ For regional coverage within a country, the WBES has national coverage.

¹ A "panel interview" refers to an interview with a business that was also interviewed in the previous WBES.

² The Sampling Note is available at:

https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Sampling_Note-Consolidated-2-16-22.pdf. For further methodological background see, Richard L. Scheaffer; Mendenhall, W.; Lyman, R., "Elementary Survey Sampling", Fifth Edition, 1996.

³ The WBES universe includes: all manufacturing (ISIC 4.0 codes 10-32), services (ISIC 4.0 codes 33, 41-43, 45-47, 49-56, 58, 61, 62, 69-75, 79, 95). Details on sectoral coverage and the WBES universe of inference can be found in the *Enterprise Surveys Manual and Guide* (p. 4).

II.1 Stratification Categories

The Nepal 2023 WBES uses the following stratification categories:

- **Industry: 4 categories:**
 - Manufacturing
 - Within services: Retail, Hotels, and Other Services
- **Size: 3 categories:** Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 or more employees)
- **Region: 3 categories:** Central, West, East

All the establishments active in the manufacturing sector were stratified in the same category, namely ‘Manufacturing’. According to the most recent available National Economic Census in Nepal (dating 2018), the manufacturing sector covers 27% of the whole WBES universe in terms of number of establishments.

The strata for the services sector were selected by contribution to the total number of establishments, using the inputs from the National Economic Census. The sectors stratified separately represent 47% of the total number of establishments in the services sector (36% retail and 11% hotels), and 34% of the whole WBES universe.

Region strata of the Nepal 2023 WBES were selected based on administrative divisions, with some territories grouped together to achieve the minimum required precision of estimates at the level of each stratification region. More specifically, based on the distribution of establishments as reported in the Nepal Economic Survey 2018 and to ensure the representation of enterprises from all 7 administrative provinces of Nepal, 16 cities from all 3 geographic macro-regions (Central, West, East) were selected to perform the block enumeration that generated the listing used as sampling frame for the survey. West Nepal included the cities of Birendranagar, Butwal, Dhangadhi, Nepalgunj, and Pokhara; Central Nepal included Banepa, Bhaktapur, Bharatpur, Birgunj, Hetauda, Kathmandu, Lalitpur, and Simara; East Nepal included Bhadrapur, Biratnagar, and Itahari.

II.2 Universe

The universe of inference includes all formal (i.e., registered) private sector businesses (with at least 1% private ownership) and with at least five employees. In terms of sectoral criteria, all manufacturing businesses (ISIC Rev 4. codes 10-33) are eligible; for services businesses, those corresponding to the ISIC Rev 4 codes 41-43, 45-47, 49-53, 55-56, 58, 61-62, 69-75, 79, and 95 are included in the Enterprise Surveys. Cooperatives and collectives are excluded from the Enterprise Surveys. All eligible establishments must be registered with the registration agency. In the case of Nepal, this meant being registered with the Inland Revenue Department, Nepal i.e., having a PAN/VAT number. The universe table is the total number of eligible establishments, and the table is partitioned by the stratification groups (industry classification, establishment size, and subnational region) in a country.

For the Nepal 2023 WBES, the universe table, shown in Table 1 below, was obtained from the National Economic Census 2018.⁴ The aggregate tables from the census posed the following challenges: the number of registered establishments with five or more employees was not disaggregated by region of the WBES; the sub-sectors ‘Retail’ and ‘Wholesale’ were lumped together while the industry category in the WBES includes only ‘Retail’; the sectors ‘Accommodation’ and ‘Food Services’ were lumped together while only the activity ‘Hotels’ is singled out for the WBES. In order to estimate the number of registered establishments with 5 or more workers by region and of the WBES, the distribution of all the establishments by region and the distribution of all the establishments by size were employed to estimate the joint distribution. In order to estimate the number of establishments for the sectors that are singled out in the WBES (‘Retail’ and ‘Hotels’) but lumped together with other sectors in the Census, data from the block enumeration 2023 is employed (refer to the next paragraph for details on block enumeration).

II.3 Sampling Frame

The WBES requires the most complete and up-to-date Sampling Frame, the list of eligible establishments with information on industry classification, size, address and other contact information that will be used to randomly select the sample. In countries where a previous round of the WBES exists, the Sampling Frame also includes the Panel Sampling Frame, which provides information about all the establishments that participated in the previous round of the WBES in the country.

Because of the absence of reliable official or secondary sources, the Sampling Frame for the Nepal 2023 WBES was constructed from a block enumeration exercise (see counts of establishments in the frame in Table 2) and from information generated in the most recent previous Enterprise Survey performed in Nepal. More specifically, the Panel Sampling Frame was constructed using information on all the establishments that participated in the Nepal 2013 WBES. The Fresh Sampling Frame, i.e., the list of establishments that are in the WBES universe and that have not participated in the Nepal 2013 WBES was obtained via block enumeration for all the sectors. Based on the Nepal Economic Survey 2018 and to ensure representation of enterprises from all 7 provinces of Nepal, 16 cities from all 3 geographic regions covered in the WBES (East, Central and West) were selected. Western Nepal included Birendranagar, Butwal, Dhangadhi, Nepalgunj, and Pokhara; Central Nepal included Banepa, Bhaktapur, Bharatpur, Birgunj, Hetauda, Kathmandu, Lalitpur, and Simara; Eastern Nepal included Bhadrapur, Biratnagar, and Itahari. These cities were divided into large clusters based on the smallest administrative unit also known as wards. A ward is the smallest administrative unit in a city or village. A total of 334 clusters or wards were identified in the first stage of the block creation process. Then, each selected city was divided into “blocks” using Google Earth Pro. The aerial maps with ward boundaries were used for this purpose. All the densely populated wards were divided into several blocks for the ease of the listing process. However, in cases of small clusters with low density (of firms or enterprises),

⁴ Refer to Tables 1_1_1 and subsequent tables available on the Nepal CBS website: <https://cbs.gov.np/national-economic-census-2018-national-profile-2/> and <https://cbs.gov.np/wp-content/uploads/2020/09/National-Economic-Census-2018National-Profile-No.-2-Tables.xlsx>

the entire cluster was treated as a block. The blocks demarcated and identified were then classified into the following strata: industrial (an area characterized by a high concentration of industries), commercial (high concentration of trading houses and retail centers/market along with service-oriented enterprises like hotels, restaurants, and service centers), mixed (mix of residential and commercial entities within the same block), residential (high concentration of homes/domestic residences), and out of sample (areas deemed unsuitable for the purposes of the survey: forests, parks, agricultural fields, airports, government buildings, etc.). Apart from the aerial maps which made it easier to identify densely populated blocks, industrial blocks, and out-of-sample blocks, the information gained from local knowledge (including the information from local networks of the contractor, present in the various cities), and the data from the Nepal Economic Census of 2018 were used to triangulate the information required to classify the blocks into various strata. The economic census data had information on the total number of enterprises (vs. households) in each ward across Nepal. This helped the core team to validate and confirm whether or not a block had been correctly designated as residential, commercial, mixed, or out-of-sample. For instance, some of the wards that showed a negligible number of enterprises were correctly validated as being out of sample. Once the blocks were created, each block was given a unique code/ID and was listed. From the listed blocks, a total of 205 blocks was randomly selected for the listing exercise. In order to ensure that a sufficient number of medium and large manufacturing firms were listed, the Industrial areas and the commercial areas of each city were purposefully selected for the listing exercise to ensure that the number of enterprises listed was adequate for sampling purposes. After the blocks to be listed were finalized, the enumerators assigned to those blocks conducted the listing exercise considering the eligibility requirements for the enterprises to participate in the survey. The block enumeration resulted in a listing of 5,251 establishments.

For every WBES, necessary measures are taken to ensure the quality of the frame; although the sample frames are not immune to the typical problems found in establishment surveys (positive rates of non-eligibility, repetition, non-existent units, etc.), these are very limited in the Nepal WBES 2023 because of the short time between the block enumeration and the implementation of the survey. Given the impact that non-eligible units included in the sample universe may have on the results, eligibility adjustments may be needed when computing the appropriate sampling weights for individual observations (if and only if the weights are computed from the sampling frame that is also the universe). Table 4 reports response outcomes.

II.4 Sample Design

The WBES sample design, i.e., target number of interviews in each combination of stratification categories (cells), is generated using the two primary criteria: 1) minimize the difference from the purely proportional sample within each cell; and 2) achieve a sufficient sample size by stratification category to allow for estimates of a given level of precision.⁵ Additional information on the criteria for determining the sample size by stratification category is given in

⁵ Additional constraints are also considered in the design stage. These are generally practical and include, for example, having a sufficient number of available contacts in the sample.

the *Sampling Note*, and additional information on the sample design is given in the *Enterprise Surveys Manual and Guide*.⁶ The original survey design for the Nepal 2023 WBES is given in Table 3.

III. Data Collection

The detailed information on the WBES methodology and data collection is provided in the *Enterprise Surveys Manual and Guide*. The interviews for the Nepal 2023 WBES were conducted between May 2023 and August 2023. The interviews were conducted in Nepali. For monetary variables, the currency was Nepalese rupee.

Apart from the challenges with participation and call-backs that are standard for all surveys, the Nepal 2023 WBES faced challenges interviewing panel firms due to the fact that the previous WBES in Nepal was run in 2013. The hot and humid weather made it difficult for the interviewers to travel from one location to another. The fieldwork was put on hold for a week, allowing the team members to rest during the heat wave (during mid-June 2023, especially in the Terai region).

III.1 Questionnaire

The standard WBES questionnaire covers several topics regarding the business environment and business performance. These topics include general firm characteristics, infrastructure, sales and supplies, management practices, competition, innovation, capacity, land and permits, finance, business-government relations, exposure to bribery, labor, and performance. Information about the general structure of the questionnaire is available in the *Enterprise Surveys Manual and Guide*.

The questionnaire implemented in the Nepal 2023 WBES included additional questions tailored for the Business Ready Report covering infrastructure, trade, government regulations, finance, and labor.

III.2 Contractor

The fieldwork for the Nepal 2023 WBES was implemented by Solutions Consultant Pvt. Ltd. The selection for the implementing agency followed the standard World Bank procurement practices that are described in more detail in the *Enterprise Surveys Manual and Guide*.

III.3 Sampling and screening

Samples are drawn by the Enterprise Surveys team in batches, following the stratification and sample design. The contractor conducted a thorough screening process before scheduling the WBES interviews. Results of the screening are provided using the eligibility and status codes as listed in Table 4. In cases of unit non-response (either a refusal or an inability to obtain an interview after exhaustive attempts), the contractor proceeded with the contact that appeared next in the list

⁶ The *Enterprise Surveys Manual and Guide* is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Enterprise-Surveys-Manual-and-Guide.pdf>

drawn in the respective cell. The process of sampling and screening is described in more detail in the *Enterprise Surveys Manual and Guide*.

III.4 Survey response

In all surveys, including the WBES, some respondents choose not to participate. The Enterprise Analysis team and the contractor take all necessary measures to boost participation, through various methods of recruitment. The proper management of the screening process and sample replacement ensures that the resulting sample remains random.

The main measure of survey participation is the yield, which is the ratio of the total number of achieved interviews to the total number of contacted establishments. There are two main elements that boost yields. First is the survey participation rate, measured as the share of establishments that participated among those that can be assumed to have been eligible. The second element is the quality of the frame. If only a small fraction of the contacted establishments is actually eligible to participate in the survey, then the sampling frame is far from ideal. This quality is measured by the ratio of the total number of establishments that can be assumed to be eligible for the WBES with the total number of contacted establishments in the frame. In other words:

$$Yield = Survey\ response\ rate * Rate\ of\ quality\ of\ the\ frame$$

which can be rewritten as follows:

$$\frac{Total\ interviewed}{Total\ contacted} = \frac{Total\ interviewed}{Assumed\ eligible} * \frac{Assumed\ eligible}{Total\ contacted}$$

Table 5 provides these measures for the Nepal 2023 WBES and across its stratification levels.

III.5 Achieved Sample

Tables 6 and 7 provide count of the WBES interviews collected for each stratification cell, i.e., broken down by industry, establishment size, and region. Table 6 reports full sample, while Table 7 shows counts of only panel interviews.

III.6 Sampling Weights

Since the WBES uses stratified random sampling, individual observations should be properly weighted when making inferences about the population, since unweighted estimates are biased unless sample sizes are proportional to the size of each stratum. For each WBES, special care is given to correctly compute sampling weights. Whenever the Universe is used to draw the sample (i.e., Sampling Frame is the same as the Universe) it is imperative to accurately adjust the universe within each stratum to account for the presence of ineligible establishments (e.g., the firm discontinued businesses, or is deemed ineligible due to its business activity or having fewer than five employees). Proper treatment of panel establishments is also crucial. Details about how the WBES sampling weights are calculated are given in the *Sampling Note*.

Three versions of sampling weights are calculated, depending on the assumptions that determine eligibility of establishments to be counted towards the WBES universe. These

assumptions are called weak, medium, and strong; and are defined as given in the table below. Prevalence of each of these outcomes for the Nepal 2023 WBES is given in Table 4. All indicators and analysis conducted by the Enterprise Surveys team use the sampling weights based on the median assumption. Tables 8-10 report estimate the universe based on the respective assumption.

Assumption	Eligibility codes for inclusion in the WBES universe
Strict	1,2,3,4,16
Median	1,2,3,4,16,10,11,13
Weak	1,2,3,4,16,10,11,13,91,92,93,94,12

For descriptions of each eligibility code, see Table 4.

III.7 Item response rates

Item response rate must be differentiated from survey response rates. The latter refers to participation in the survey itself (see Section III.4) whereas the former refers to the absence of responses to specific survey questions.⁷ The WBES, as any survey, suffer from item non-response; and different strategies are used by the data collection team to address this. In particular:

- For sensitive questions, such as on corruption or tax evasion, enumerators were instructed to collect the refusal to respond (-8) as a separate response category from don't know (-9).
- Establishments with incomplete information were re-contacted to fill gaps.

Table 11 provides item response rates for several key variables, broken down across the stratification levels.

III.8 Database Structure

The WBES datafiles are organized in ways that reflect the corresponding questionnaire. The variables that are standard across countries have the first letter in their name correspond to the questionnaire section where the variable belongs in the questionnaire, i.e., *a1* denotes section A. All variables are numeric with the exception of those variables with an “x” at the end of their names. The suffix “x” denotes that the variable is alpha-numeric.

The WBES datafiles contain two establishment identifiers, *idstd* and *id*. The former is a global unique identifier of each establishment, while the latter is unique identifier within each survey. The variable *idstd* can be used to match the WBES establishment one-to-one across databases. The variables *wweak*, *wmedian*, and *wstrong* corresponding to sampling weights based on, respectively, weak, median, and strong assumptions about eligibility (see Section III.6). The variable *strata* corresponds to the stratum of each observation.⁸

Additionally, the WBES datafiles contain many standard variables. The variable *d1a2_v4* denotes the main activity of the establishment, as obtained during the WBES interview, coded in

⁷ The WBES questionnaire is organized so that there is always some entry in the database when the question was posed. An empty entry means that the question was not asked to the corresponding respondent, typically, due to skip patterns, or lack of applicability of that question in general.

⁸ Note that the sampling weights may vary within *strata* for panel establishments due to the procedure used for projecting the universe from the previous round of the survey.

the four-digit ISIC Rev. 4. Users should note that this activity may differ from the industry classification given in the Sampling Frame, *a4a*. Users are generally advised to use industry categories based on the realized information in *d1a2_v4*. Additional sampling information is contained in variables *a2* (region) and *a6a* (size). The variable *panel* identifies panel establishments, i.e., those that participated in the Nepal 2013 WBES. The combination of *a4a*, *a2*, *a6a*, and *panel* forms stratum of each establishment, which is contained in variable *strata*.

The last complete fiscal year for each establishment is contained in variables *a20m* (last month of last complete fiscal year) and *a20y* (last complete fiscal year). Notably, all the variables referring to year or month were asked following the Nepali calendar but transformed into Gregorian calendar to preserve consistency with the global WBES dataset.

Note that when an entry in the WBES database is empty, this means that the question was not asked to the corresponding respondent. This happens when the question is deemed inapplicable, due to skip patterns or other reasons. In cases when the question was posed, some entry is provided, including don't know, which is an example of item non-response.

IV. Useful Links

The users of the WBES data may find the following links useful:

- *Sampling Note* is available at:
https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Sampling_Note-Consolidated-2-16-22.pdf
- The *Enterprise Surveys Manual and Guide* is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Enterprise-Surveys-Manual-and-Guide.pdf>
- The WBES global questionnaires are available at:
<https://www.enterprisesurveys.org/en/methodology>
- The projects that are currently being implemented by the Enterprise Surveys team are available at: <https://www.enterprisesurveys.org/en/current-projects>
- The list of all WBES databases and detailed information about each is available here:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/DataDetails.xls>
- The description of the WBES indicators is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/Indicator-Description.pdf>

Fact Sheet

Source of Universe Table	The universe estimate was obtained from the Nepal National Economic Census 2018. The results from the block enumeration were used to compute the distribution of the establishments in each strata.		
Source of Sampling Frame	Block Enumeration		
Stratification sectors	Manufacturing, Retail, Hotels, and Other Services		
Stratification sizes	Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 or more)		
Stratification regions	Central, West, East		
Contractor	Solutions Consultant Pvt. Ltd.		
Fieldwork dates	May 2023 – August 2023		
Interview languages	Nepali		
Survey software	Solutions Consultant Pvt. Ltd.		
Currency for nominal variables	Nepalese rupee		
Reference fiscal year	2022		
Sample Size	Total: 582	Fresh: 380	Panel: 202
Survey response rates	Yield: 71.1% Response rate: 88.2% Frame quality: 81.8%		
Item response rates	d2: 99.7% n2a: 99.5% 11: 100% all TFP vars.: 96.7%		
Additional topics covered in the questionnaire			
Additional surveys available (if any)			

Tables

Table 1: Nepal 2023 WBES Universe

		Manufacturing	Retail	Hotels	Other services	Grand Total
Central	Small (5-19)	3498	4983	823	7361	20,079
Central	Medium (20-99)	1268	426	147	908	
Central	Large (100+)	511	82	10	62	
West	Small (5-19)	3957	4677	1890	6022	19,111
West	Medium (20-99)	925	303	285	828	
West	Large (100+)	152	59	13	0	
East	Small (5-19)	1918	2346	597	3632	9,912
East	Medium (20-99)	668	85	96	251	
East	Large (100+)	281	38	0	0	
		13,178	12,999	3,861	19,064	49,102

Source: Grand Total obtained from the Nepal Economic Census 2018; distributions by sector, size, and regions estimated using block enumeration.

Table 2: Nepal 2023 WBES Sample Frame (Fresh and Panel Combined)

		Manufacturing	Retail	Hotels	Other services	Grand Total
Central	Small (5-19)	595	446	260	1286	3,235
Central	Medium (20-99)	256	44	48	165	
Central	Large (100+)	109	7	7	12	
West	Small (5-19)	330	319	276	514	1,682
West	Medium (20-99)	92	20	41	69	
West	Large (100+)	16	3	2	0	
East	Small (5-19)	207	200	46	217	820
East	Medium (20-99)	77	8	7	21	
East	Large (100+)	34	3	0	0	
		1,716	1,050	687	2,284	5,737

Source: Panel establishments from Nepal 2013 WBES and Block Enumeration conducted in Banepa, Bhadrapur, Bhaktapur, Bharatpur, Biratnagar, Birendranagar, Birgunj, Butwal, Dhangadi, Hetauda, Itahari, Kathmandu, Lalitpur, Nepalgunj, Pokhara, and Simara in March and April 2023.

Table 3: Original Survey Design (Fresh and Panel Combined)

		Manufacturing	Retail	Hotels	Other services	Grand Total
Central	Small (5-19)	21	39	32	50	300
Central	Medium (20-99)	37	23	16	23	
Central	Large (100+)	46	3	5	5	
West	Small (5-19)	17	27	34	27	180
West	Medium (20-99)	29	7	14	14	
West	Large (100+)	9	1	1	0	
East	Small (5-19)	8	14	15	21	120
East	Medium (20-99)	30	4	3	10	
East	Large (100+)	13	2	0	0	
		210	120	120	150	600

Table 4: Response Outcomes

		Totals	Rates relative to total contacted
Overall	Contacts available in frame	5,737	
	Issued	1,819	
	Contacted	807	
Screening phase	Eligibles	596	73.9%
	Screener refusals	64	7.9%
	Assumed eligibles	660	81.8%
	Ineligible + out of target	110	13.6%
	Unobtainable	37	4.6%
Interview phase	Interview refusals	14	1.7%
(only if eligible)	Complete interviews	582	72.1%

Table 5: Survey Yield Rates

	Stratification	Yield	Survey response rate	Frame quality
Panel	Fresh	85.2%	87.6%	97.3%
	Panel	56.0%	89.4%	62.6%
Size	Small (5-19)	69.9%	90.9%	76.9%
	Medium (20-99)	75.6%	85.6%	88.4%
	Large (100+)	71.7%	86.0%	83.3%
Region	Central	61.8%	82.3%	75.1%
	West	85.8%	94.1%	91.2%
	East	86.9%	96.0%	90.5%
Sector	Manufacturing	76.8%	91.0%	84.4%
	Retail	68.2%	86.1%	79.2%
	Hotels	84.9%	91.5%	92.8%
	Other Services	61.2%	83.2%	73.5%
Overall	Nepal 2023	72.1%	88.2%	81.8%

Notes: the rates are calculated as defined in Section III.4.

Table 6: Achieved Total Sample (Fresh and Panel Combined)

		Manufacturing	Retail	Hotels	Other services	Grand Total
Central	Small (5-19)	21	40	28	41	288
Central	Medium (20-99)	39	17	19	23	
Central	Large (100+)	46	4	4	6	
West	Small (5-19)	18	26	32	25	175
West	Medium (20-99)	29	7	14	13	
West	Large (100+)	8	1	2	0	
East	Small (5-19)	7	16	16	18	119
East	Medium (20-99)	32	4	3	8	
East	Large (100+)	12	3	0	0	
		212	118	118	134	582

Table 7: Achieved Panel Sample

		Manufacturing	Retail	Hotels	Other services	Grand Total
Central	Small (5-19)	7	23	3	16	121
Central	Medium (20-99)	25	7	1	9	
Central	Large (100+)	25	0	3	2	
West	Small (5-19)	4	10	7	4	56
West	Medium (20-99)	25	1	1	0	
West	Large (100+)	4	0	0	0	
East	Small (5-19)	0	5	1	5	25
East	Medium (20-99)	7	1	0	3	
East	Large (100+)	2	1	0	0	
		99	48	16	39	202

Table 8: Weak Universe Estimates

	Manufacturing	Retail	Hotels	Other services	Grand Total
Small (5-19)	3498	4983	823	7361	20,082
Medium (20-99)	1268	427	147	908	
Large (100+)	511	82	12	62	
Small (5-19)	3957	4677	1891	6022	19,112
Medium (20-99)	925	303	285	828	
Large (100+)	152	59	13	0	
Small (5-19)	1918	2346	597	3632	9,912
Medium (20-99)	668	85	96	251	
Large (100+)	281	38	0	0	
	13,178	13,000	3,864	19,064	49,106

Table 9: Median Universe Estimates

	Manufacturing	Retail	Hotels	Other services	Grand Total
Small (5-19)	3498	4983	823	7361	20,082
Medium (20-99)	1268	427	147	908	
Large (100+)	511	82	12	62	
Small (5-19)	3957	4677	1890	6022	19,111
Medium (20-99)	925	303	285	828	
Large (100+)	152	59	13	0	
Small (5-19)	1918	2346	597	3632	9,912
Medium (20-99)	668	85	96	251	
Large (100+)	281	38	0	0	
	13,178	13,000	3,863	19,064	49,105

Table 10: Strict Universe Estimates

	Manufacturing	Retail	Hotels	Other services	Grand Total
Small (5-19)	3498	4983	823	7361	20,082
Medium (20-99)	1268	427	147	908	
Large (100+)	511	82	12	62	
Small (5-19)	3957	4677	1890	6022	19,111
Medium (20-99)	925	303	285	828	
Large (100+)	152	59	13	0	
Small (5-19)	1918	2346	597	3632	9,912
Medium (20-99)	668	85	96	251	
Large (100+)	281	38	0	0	
	13,178	13,000	3,863	19,064	49,105

Table 11: Item Response Rates

	Screeners/Interview	d2	l1	n2a	all TFP variables
Panel	Fresh	99.5%	100.0%	99.2%	96.5%
	Panel	100.0%	100.0%	100.0%	96.9%
Size	Small (5-19)	100.0%	100.0%	100.0%	100.0%
	Medium (20-99)	100.0%	100.0%	99.5%	100.0%
	Large (100+)	97.8%	100.0%	97.8%	89.7%
Region	Central	99.3%	100.0%	99.0%	93.3%
	West	100.0%	100.0%	100.0%	100.0%
	East	100.0%	100.0%	100.0%	100.0%
Sector	Manufacturing	99.5%	100.0%	99.5%	96.7%
	Retail	100.0%	100.0%	100.0%	0.0%
	Hotels	100.0%	100.0%	100.0%	0.0%
	Other Services	99.4%	100.0%	98.8%	100.0%
Overall	Nepal 2023	99.7%	100.0%	99.5%	96.7%

Notes: the rates are calculated as follows. The number of responses with informative content in the respective variable (or combination of variables in the case of TFP) is divided by the same number plus the number of responses that are "don't know" (code -9) or refusal (code -8).