GLOBAL GARMENT WORKERS COUNT:

ESTIMATING THE SIZE & COMPOSITION OF THE GLOBAL GARMENT WORKFORCE

A JUST TRANSITION BASELINE TOOL FOR CIVIL SOCIETY & POLICYMAKERS

KATALYST INITIATIVE

BUILDING BLOCKS FOR GOVERNING GLOBAL VALUE CHAINS
WORKING PAPER 4

ABOUT THE SERIES: BUILDING BLOCKS FOR GOVERNING GLOBAL VALUE CHAINS

This series aims to assist policymakers, trade unions, NGOs, investors, funders and anyone else interested in designing the new forms of governance needed to improve protection of human rights and the environment in transnational supply chains. Using the global garment industry as a test case, we hope to help 'catalyse' new, multi-disciplinary strategies to make 21st century supply chains fairer and more sustainable.

Our work helps to replace anecdotes and guesswork about the power and financial dynamics in industries like garments with: 1) an evidence base, and 2) guidance on what the evidence means for policy development. In doing so, we aim to help policymakers and civil society to identify where to focus limited governance resources in order to achieve the maximum benefits for garment workers and the environment.

Working Paper 1: Sizing Up the Garment Industry: Large Brands, Supply Chain Labour Market Share and Lessons for Governance Design

Based on original research, we look at how many garment brands would need to change their behaviour to reach a 'critical mass' for widespread improvements in human rights and environmental protections. We then explore how governance and regulatory efforts aimed at brands could be designed to benefit the largest number of workers.

Working Paper 2: Garment Industry Structure: Observations, Challenges and Recommendations for Human Rights Governance Designers

A companion to 'Sizing Up the Garment Industry', we outline five governance challenges created by the industry's complex structure. If new laws, regulations, collective bargaining systems and other governance tools can overcome these challenges, they will be far more effective in the years to come. We offer some recommendations to support these new governance initiatives.

Working Paper 3: Trade Realities: Using Trade Data to Strengthen the Design of Supply Chain Governance

We use trade data to explore how the effectiveness of new forms of supply chain governance – like mandatory due diligence laws or enforceable brand agreements – may be influenced by trade flows, now and in the future. We then identify several options for strengthening the design of governance efforts so they can compensate for trade flow effects.

Working Paper 3 Annex: 'Group of 30' Garment Export Infographics

In this companion to 'Trade Realities', we present country-by-country garment export trade data for the 30 major non-EU garment-exporting economies.

Working Paper 3 Graphics Pack

The *Trade Realities* graphics and analysis are offered under a Creative Commons license (see Acknowledgments for details). We invite civil society organisations to use the graphics in presentations or publications on a non-commercial basis. The visuals can be downloaded as .png files in this graphics pack.

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EXECUTIVE SUMMARY

Momentum is growing for a Just Transition in global value chains, to industries that operate within planetary boundaries while providing a living wage and social security for the billions of people who currently work in low-wage jobs. However, designing the regulatory and policy interventions needed to transform global industries will require better data. One major knowledge gap facing policymakers and civil society is the lack of reliable, industry-level employment data. Without a solid baseline understanding of how many people work in an industry, where, and at what jobs, it will be impossible to design effective Just Transition regulation – and the risk of unintended consequences will be unacceptably high.

Using the global garment industry as a test case, this paper presents a model of the worldwide workforce that is consistent across a wide range of countries and clearly defines which workers and value chain stages are included. We then populated that model using the best publicly-accessible data available to create our 2024 estimate of the global garment workforce. **At least 72 million people are involved in the manufacture of garments, footwear, leather and textile products; and yarn, fabric and leather components**, with likely several million more missing from official statistics. Given that some published estimates are as low as 40 million, the need for evidence-based estimates is clear.

Just as important as this topline number, however, is data that is disaggregated by key characteristics, including gender, value chain stage, and home-based worker status. The insights this kind of detailed information can provide is essential for effective value chain governance and regulation. Working conditions in value chains are heavily influenced by decisions made in both trade partner countries, and countries with competing industries, so disaggregated data will be critical for good policymaking that addresses both the local and global root causes of poor working conditions.

The quality and availability of employment data varies enormously from country to country, and major information gaps remain. While we believe our estimate is a significant improvement over the status quo, we are transparent about the need for better data, and echo the recommendations of many labour statisticians in this area.

Concrete examples of how the global but disaggregated employment data presented here can improve policymaking include: coming to grips with the sheer size of the industry and the resources needed to change it; clearer understanding of how local and global dynamics both affect workers; avoiding employment shocks in the development of a circular economy; and planning for shifts in production and consumption locations in the future.

INTRODUCTION

The lack of clarity about the size and composition of the global garment workforce is a major knowledge gap that weakens Just Transition efforts for the industry. This paper was designed to help address this knowledge gap in two ways:

1) To create a model of the global garment workforce that is consistent across a wide range of countries, and clearly defines which parts of the workforce are counted and which are not

2) To populate that model with credible data to generate the best estimate we can in 2024 of the global garment workforce – disaggregated by some key characteristics that are essential for effective value chain governance and regulation

It is important to distinguish between the model and the estimate that it generates. The model defines what is included and excluded, and how the information is organized. It can be updated with new and/or better data in the future; and can serve as a basis for similar models for other industries. The estimate it produces is a snapshot in time and provides a baseline that can inform policy decisions. The model/estimate distinction allows us to be transparent about the limitations of the available data, and to suggest improvements in the way data is collected and reported in the future.

WHY IS THIS RESEARCH NEEDED?

Momentum is growing for a Just Transition in global value chains. Long-overdue regulations such as the EU Corporate Sustainability Due Diligence Directive (CSDDD) represent first steps towards restructuring the globalised economy that has developed over the last 25 years. If designed and implemented well, global value chain regulation can help to bring production in line with planetary boundaries, and to finally provide living wages and social protection to billions of workers.

We hope this paper will support these complimentary policy priorities by:

1. Helping policymakers and civil society actors to consider new ways to think about and use global industry workforce data to support effective regulation for a Just Transition.

2. Providing labour statisticians and other data professionals with observations on the data needs for emerging efforts to govern global supply chains.

If civil society and progressive policymakers want to transform industries like garments so that they provide better working conditions and operate within planetary boundaries, we need to understand where we are starting from if we hope to propose effective solutions, track change over time, and avoid unintended consequences. The fact that published workforce estimates vary enormously also underlines the need for better data. Published estimates of the garment workforce, for example, range anywhere from 40 to 75 million people.

This 4th working paper in Katalyst Initiative's Building Blocks series therefore provides an initial baseline for global employment in the garment industry. It continues our efforts to use the global garment industry as a test case for value chain governance generally. And it provides insights into the ways both new value chain regulations and potential economic and climate-related changes may affect workers in different countries, value chain stages, and types of employment.

The model we present in this working paper, and the estimate we have generated is a step forwards relative to existing estimates. It also serves, however, to highlight areas where improvements and changes to government data collection are needed in order to make well-informed policy choices at state and global levels. We address these issues later in the paper.

NEW FORMS OF REGULATION, NEW DATA NEEDS

Working conditions in global value chains, and their environmental impacts are driven by the interaction of both global and local dynamics.

For example, changes in one garment-exporting country, which add or reduce production capacity can have significant knock-on effects across whole sections of the industry. At the same time global factors – from the COVID 19 pandemic to the emergence of globally-targeted governance efforts like the CSDDD – are increasingly influencing many

WHO GETS COUNTED AS A 'GARMENT WORKER'?

We recognize that in practice there are important distinctions between employees, contractors, day laborers, piece-rate workers, home-based workers and other categories of work. For the sake of simplicity, we use the term 'employment' in this paper to cover all paid work. We have also attempted to capture both line workers and management where the data is available.

We also use the term 'garment worker' as shorthand for a range of jobs across the apparel, textile and leather & footwear sectors. See 'Value Chain Stages' below for a more detailed description of which types of work are included.

We have also attempted to include people working in both export and domestic-market oriented production. Partly this is because the boundaries between the sectors can be blurry, and people may work for both markets at the same time. Workers for domestic markets also face many of the same issues as those in export-oriented jobs, so they will need to be included in any comprehensive plans for the industry.

different parts of the industry at once. And we expect these macro trends – including shifts in consumer preferences, additional regulatory frameworks, and, with any luck, coordinated transnational climate action – will continue to influence garment workers' lives in the years to come.

However, policy discussions often fail to take this complexity into account. Solutions commonly focus on one actor or situation at time – what should one government do, or what should one garment brand do, without taking the larger context into consideration.

We have designed the model so that stakeholders can use employment data to think more easily about the industry as both a global entity, and to consider employment questions at the national level and at different stages of the value chain. The model we present here is one of a series of tools that Katalyst has developed to help stakeholders combine local and global perspectives for policy purposes.

As we will discuss further in the policy implications section, better tools for understanding and managing the interaction between the local and the global will be essential for a successful Just Transition.

THE GLOBAL WORKFORCE MODEL

DESIGN AND STRUCTURE

TYPES OF DATA SOURCES

Wherever possible, we chose to work with original data sources – primarily statistical agency publications – rather than summaries created by other organisations. Consulting original sources often provided us with additional insights, more recent data, and useful extra details.

We have considered two types of data in building our model.

Industrial surveys conducted by governments are the primary source that we have used in this paper. They are generally easier to access and compare, particularly given the time and resource limitations of this project. To oversimplify somewhat, industrial surveys can be thought of as reporting employment data from the perspective of companies.

Labour Force Surveys are another tool, wherein a sample of the population is interviewed about their employment. Labour Force Surveys, broadly speaking, report employment data from the perspective of workers. The numbers reported by these two instruments can differ – e.g. one person can have multiple jobs, or over the course of a year multiple people can work at the same job. Labour force surveys can be a better tool for assessing numbers of informal workers, temporary workers, home-based workers and others who may not be counted by industrial surveys.

However, labour force survey outcomes are often reported in formats that are not easy to integrate into our model. For example, they report data as percentages of the population but do not provide actual figures; or data is aggregated at too general a level to be of use (e.g. 'manufacturing' rather than more detailed value chain stages). Some countries do make the original microdata available, however analysis of such datasets is a much larger undertaking.

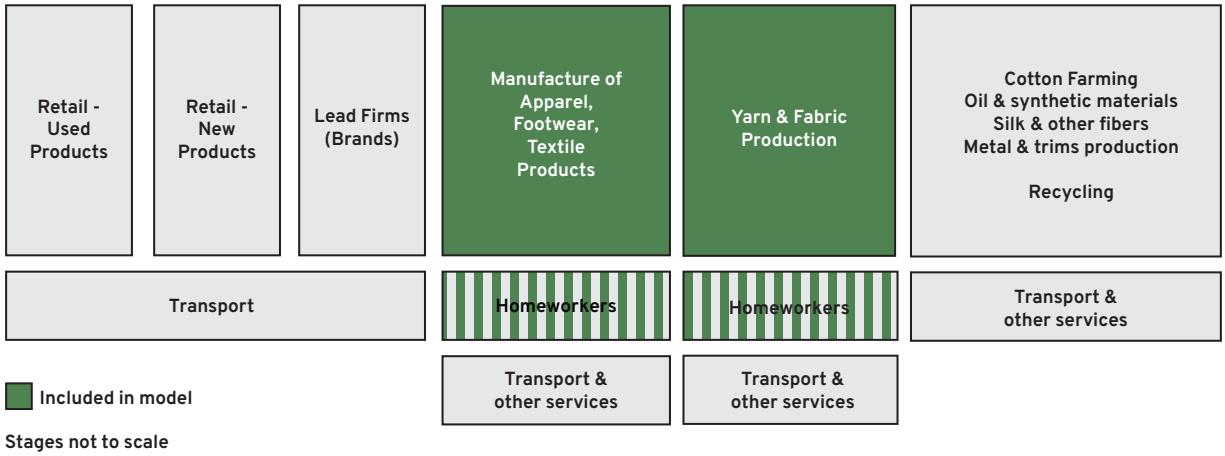
Ideally, a global garment workforce model would include data from both sources and would take steps to reconcile them. The methodological issues of resolving the difference between the two are complex and beyond the scope of this version of the estimate. In a future update, we hope to work with labour statisticians to provide more clarity on this issue. From a policy perspective, it is important to understand both the number of jobs that exist in an industry, as well as the number of people who work in that industry.

Alternative data sources: We also considered alternative data sources based on programmes that collect data on a factory-by-factory basis, such as the Open Supply Hub, ILO Better Work, the Social & Labour Convergence Program, and Mapped in Bangladesh. We will publish an overview of these programmes, and their potential to complement traditional data sources in a forthcoming policy brief.

COUNTRIES

The geographic coverage of this paper includes the 'Group of 30' countries identified in Katalyst's Trade Realities report as being responsible for more than 95% of the world's garment exports. Based on a trade data comparison, they also appear to represent the vast majority of yarn and fabric exports (Harvard Growth Lab 2024) and to the best of our knowledge, the largest domestic-market-oriented industries are also located in this group of countries. Given this paper is designed as a Just Transition baseline, we have also included six countries regularly discussed as potential future garment hubs: Ethiopia, Kenya, Lesotho, Madagascar, Mauritius and South Africa.

FIGURE 1: GARMENT VALUE CHAIN STAGES



VALUE CHAIN STAGES

While it is common to talk about 'The Garment Industry,' in reality there are many sub-industries which together make up garment value chains. One problem with current estimates of the garment industry workforce is that different countries and organizations include different value chain stages in their data. Our model was designed to be clear about what was included and what was not.

Given the time and resources available for this work, we chose to limit the scope to the main manufacturing stages of the garment industry Within those manufacturing stages, we followed the International Standard Industrial Classification of All Economic Activities (ISIC) framework (United Nations 2008). Most countries report employment data using ISIC or a compatible framework, which allowed us to create a global model.

Another advantage of using ISIC Codes is that they form a hierarchy of detail. Some countries report data at a fine level of detail (e.g. "Preparation and Spinning of Textile Fibres") while others report highly-aggregated data (e.g. "Manufacture of Textiles"). Using the ISIC system, as outlined below, we can still compare countries that report at a greater or lesser level of detail.

The chart below shows the value chain stages that were included in the model. As we discuss more in the box on page 14, the ISIC hierarchy does not exactly align with the way value chain stages operate in reality, but it remains the best available tool for organizing this kind of data.

ISIC CODES AND VALUE CHAIN ACTIVITIES INCLUDED IN KATALYST'S GLOBAL GARMENT WORKFORCE MODEL

Value Chain Activities by ISIC Code	Product Example
Division 13 Manufacture of textiles	
131 Spinning, weaving and finishing of textiles	
1311 Preparation and spinning of textile fibres	Yarn & Thread
1312 Weaving of textiles	Woven Fabric
1313 Finishing of textiles	Dyeing, bleaching, etc,
139 Manufacture of other textiles	
1391 Manufacture of knitted and crocheted fabrics	Knit Fabric
1392 Manufacture of made-up textile articles, except apparel	Blankets, bedlinens, towels, sleeping bags, tents, curtains, etc.
1393 Manufacture of carpets and rugs	Carpets & other floor coverings
1394 Manufacture of cordage, rope, twine and netting	Most types of rope & nets
1399 Manufacture of other textiles not elsewhere specified	Felt, lace, embroidery trims, automobile textiles, etc.
Division 14 Manufacture of wearing apparel	
141 Manufacture of wearing apparel, except fur apparel	
1410 Manufacture of wearing apparel, except fur apparel	Most clothing: shirts, pants, hats, jackets, underwear, belts, leather jackets, etc.
142 Manufacture of articles of fur	
1420 Manufacture of articles of fur	Fur coats, hats, etc.
143 Manufacture of knitted and crocheted apparel	
1430 Manufacture of knitted and crocheted apparel	Knit sweaters, cardigans, etc. & hosiery, socks, etc.
Division 15 Manufacture of leather and related products	
151 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur	
1511 Tanning and dressing of leather; dressing and dyeing of fur	Leather hides
1512 Manufacture of luggage, handbags and the like, saddlery and harness	Bags, luggage (including plastic & other materials); other leather goods
152 Manufacture of Footwear	
1520 Manufacture of footwear	Shoes, sneakers/ trainers, most footwear components

Based on International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4 (2008).

VALUE CHAIN STAGES NOT INCLUDED IN THE MODEL

Understanding which workers are *not* included in the model is as important as understanding which workers are. Given the time and resources available, we had to omit the other major supply chain stages noted below, which also employ large numbers of people. Of course any potential regulation or Just Transition policies need to consider impacts on these workers as well. We hope to expand the model and estimate to include them in the future.

Raw material production

Published estimates of employment in cotton farming, production of polyester fibre, silkworm farming, jute farming and the creation of other raw materials run into the tens and sometimes hundreds of millions of people. Understanding and evaluating these estimates is a major project in and of itself, which we hope to undertake as a followup.

Garment Brands and Retailers

Employment at garment brands and intermediaries, and especially at retailers is significant – certainly in the tens of millions – but also complex to quantify. This is particularly true because some of the largest garment retailers, such as Walmart with 2.1 million employees (Walmart 2024), sell many other types of products. This means that many retail workers rely on the garment industry for part of their income, but not all. This also represents another way in which the relationship between number of jobs and number of workers is important to understand.

In other parts of the world, small retailers continue to offer an important source of jobs; it is also important to understand the scope and scale of these jobs and what may happen to them if e.g. if retail becomes more concentrated or automated in emerging economies.

2nd-hand retail and recycling

Used clothing also generates jobs, both in the major garment-importing economies like the EU and the US, but also in countries that either process these garments or are the end recipients of vast quantities of used – and often unusable – clothing. The 2nd-hand clothing market in places like Kenya and Ghana is highly controversial on both economic and environmental fronts (Anami 2022; Besser 2021) and faces accusations of destroying local manufacturing industries and jobs. Employment in the 2nd-hand market is complex and not well-documented, but going forwards it will be critical to understand this part of the value chain better.

ISIC CODES AND VALUE CHAIN 'TIERS'

One of the central concepts of human rights due diligence and value chain governance is the idea of supplier 'tiers.' (We discuss the relationship between HRDD Tiers and emissions Scope levels later in the paper.)

Tier 1 suppliers are those with whom the lead firm in a value chain – e.g. a clothing brand – have a direct business relationship. Generally, Tier 1 suppliers manufacture finished products – garments, shoes, rugs, sheets & towels, etc.

Tier 2 suppliers are one step further away from lead firms – they are suppliers of suppliers. They provide fabric, zippers, button, and other components, or are subcontractors who provide additional productino capacity or specialized services, like embroidery or screenprinting.

Tier 3 suppliers are even further away – suppliers of raw materials like cotton and polyester.

In most value chains, there are multiple suppliers within each tier, so the reality is more complicated, but 'tiers' provide a useful way to think about power, influence and distance questions between suppliers and lead firms.

One of the issues that became clear in the course of developing this paper is that the ISIC reporting system does not necessarily line up with value chain tiers. Given that the ISIC system predates value chain governance and human rights due diligence, and was created for other reasons, this is not surprising, but will need to be addressed going forwards.

This is primarily an issue when data is reported at an aggregated level – e.g. ISIC '2-digit' level (13 Textiles) rather than the more detailed '4-digit' level (e.g. 1393 Carpets and Rugs).

Our point here is that data aggregated as Textiles or Leather & Footwear as cannot be used as a 'shorthand' for Tier 1 or Tier 2 – something we have seen happen in various circumstances.

As we discuss more in Appendix I: Data Policy Recommendations, some changes to the way data is reported by many countries could help provide greater clarity without having to rework whole reporting systems.

FIGURE 2: ISIC FRAMEWORK COMPARED TO VALUE CHAIN TIERS

13 Textiles

1311 Preparation and spinning of textile fibres		Tier 2
1312 Weaving of textiles		
1313 Finishing of textiles		
1391 Knitted and crocheted fabrics		
1392 Made-up textile articles, except apparel		Tier 1
1393 Carpets and rugs		
1394 Cordage, rope, twine and netting		
1399 Other textiles n.e.c.		Tier 2

14 Apparel

1410 Wearing apparel, except fur apparel		Tier 1
1420 Articles of fur		
1420 Knitted and crocheted apparel		

15 Leather &Footwear

1511 Tanning/dressing of leather; dressing of fur		Tier 2
1512 Luggage,handbags,etc.;saddlery/harness		Tier 1
1520 Footwear		

Based on International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4 (2008).

CAPTURING REAL-WORLD COMPLEXITY: DISAGGREGATED DATA

Looking beyond country and value chain stages, our model also attempts to capture several other key characteristics about factories and their workforces, and to present that data in a disaggregated format.

Disaggregated data is extremely important, especially for regulatory systems based on risk assessments such as human rights due diligence. Risks to workers – both in today's industry, and in the future – can vary based on many factors.

Our model and the 2024 estimate includes at least some information on:

- Gender
- Factory Size
- Home-Based Worker Status

Important but currently missing for most or all countries is data on:

- Informal workers
- Migrant workers

We would like to echo the recommendations already endorsed by many labour statisticians about the importance to having good data on these topics (see e.g. ILO Department of Statistics 2023).

Countries vary widely in terms of what disaggregated data they make available. Some provide data beyond these categories, which can be seen in Appendix III, while others provide almost no detail in their published reports. We have designed the model in such a way that any type and level of disaggregation can be included. As we discuss further in the Findings section, this means that we end up with an extremely varied set of disaggregations. However we see real value in a pragmatic model that can reflect national concerns and innovations, while still providing a comprehensive global estimate.

Ultimately, much of this data should be disaggregated in ways that reflect the real-world complexity of risks to workers. For example, migrant workers face one set of risks; women workers face another set of risks; and migrant women workers face yet a third scenario that emerges when two other sets of risks are combined. Where possible we have included data that mirrors these overlapping risk factors – for example by supply chain stage and gender. Unfortunately, however, such detail is often not available with existing data.

Gender: There is an extensive literature documenting how women often face additional risks and challenges working in the garment industry – ranging from sexual harassment and violence at work to lower wages (e.g. Bhattacharjee and Khambay 2022; Janssen and Rossi 2022; Marx 2020). While the specifics vary from country to country, the same issues tend to occur around the world.

Given the global nature of the problems, and the importance of understanding the ways in which Just Transition efforts need to include gender-related issues in their design, gender data is fundamental. Gender balance and risks can vary across different types of work, so it is important that gender data be included nationally, and at different value

chain stages. We have mostly not found gender data for both. Wherever possible, we have however included at least national gender breakdowns in our 2024 estimate.

Factory Size: The relationship between factory size and working conditions continues to be a subject of research and debate (See e.g. Liu 2019 and Li & Kuruvilla 2022), and the impact of factory size may vary across different contexts, and interact with other factors. However, very small or 'micro' factories have been identified as being at greater risk of employing workers on an informal basis (International Labour Office, 2017). Data on employees in micro-enterprises can offer some insights into informality in the industry. See below for more on informal work.

Home-based workers: We find it particularly important to note that this group of workers whose income is dependent on the garment industry, is likely to be in the millions, if not tens of millions. Discussion of living wages and Just Transition planning need to include home-based workers, even though they tend to be 'hidden' in current statistics. The definition of home-based workers is also complex and covers a variety of situations; for a fuller discussion see WIEGO's *Home-based Workers in the World: A Statistical Profile* (Bonnet et al. 2021).

Our model is built primarily on industrial surveys, which ask factories to detail how many workers they employ. This approach tends to omit home-based workers, (and workers in micro-businesses). For a handful of countries, we were able to locate reliable estimates of home-based workers for certain activities, and we have included those where available. But for much of the world, home-based worker numbers have not been included in our 2024 estimate. As such, home-based workers represent an important are where undercounting of workers is very likely.

Informal Workers: The question of informality is an important one when it comes to addressing both living wage and Just Transition. Informal work covers a wide range of situations, but one of the core features is that informal workers do not receive adequate (or any) social protections through work (e.g. social security, legally-mandated insurances, etc.) (ILO Department of Statistics, 2023). Informal work can take place both in unincorporated informal workplaces, but also in more traditional, organised workplaces like factories that do not provide social protection to workers.

It is estimated that 60% of the total global workforce (i.e. not just the garment industry) are informal workers (Chen et al. 2015; Schmidt, et al. 2023). These individuals face much greater risks of poverty and lack of social protection (International Labour Office 2018), both of which are critical issues to address as part of Just Transition and creating greater climate resilience.[1] The growth of non-traditional and highly informalised work relationships, and the failure of governments both practically and conceptually to address these changes will be a major challenge for Just Transition global value chain policy development (Marshall 2019).

1. For an overview of the risks created by informal work, see Asia Floor Wage Alliance's Threaded Insecurity: The Spectrum of Informality in Garment Supply Chains. (Asia Floor Wage Alliance 2024). For an introduction to the links between good data and good policy for the protection of informal workers, see this interview with SEWA's Renana Jhabvala.

As noted by the ILO, accurately assessing levels and types of informality in the garment industry is very difficult (El Achkar Hilal 2022). Statistics are often simply not collected (International Labour Office 2018). Despite the importance of having a measure of informal work in garment supply chains, we have not been able to include any data in the model as of yet. Assuming the garment industry follows global trends, it is likely that much of the garment workforce could be considered informal, to a greater or lesser degree.

Migrant Workers: While there may be overlap between informal workers and domestic or foreign migrant workers, migrant workers face a different set of risks and challenges that make a systemic understanding of migrant workers in the industry important for Just Transition and risk mitigation purposes.

Migrants of any type may face risks due to linguistic and cultural differences, lack of support networks, and numerous other factors. Foreign migrants can face additional legal hurdles that place them at additional risk of exploitation (Global Migration Group 2018; ten Kate and Theuws 2016; Moyce and Schenker 2018).

As with the other groups of workers outlined here, data is currently difficult to access, but will be essential to understand for Just Transition planning purposes.

INDIRECT EMPLOYMENT

The garment industry creates many jobs in transportation and other support services. Yet they are not captured in surveys of garment factories, because these employees work for transportation companies, security firms, financial services and other types of companies. (See El-Rayyes et al. 2023, p. 10 for an example of how other types of jobs which depend on the garment industry has been modelled in Jordan)

In some cases, such jobs are directly dependent on the industry (e.g. companies that specialize in transporting garments from factories to ports) whereas others derive a portion of their total employment from the industry (e.g. cargo ship crews transporting a mix of products from Asia to Europe).

While these types of jobs are not included in our current model, given the sheer scale of the industry, Just Transition planning needs to take people who are indirect employed by the garment industry into account when considering the full impact of possible changes.

FINDINGS: 2024 GARMENT WORKFORCE ESTIMATE

Having developed the garment workforce model's structure, as described in the previous section, we populated it with the best data we could find[2] and created our 2024 estimate of the global garment workforce.

Our estimate is that the global apparel, textile and footwear/leather workforce is at least 72 million people. As we discuss in the box on the following page, data quality varies enormously, and we have reason to believe that official statistics undercount the actual number of workers in the industry by at least a few million – and possibly more – but the scale of the undercount is very difficult to estimate based on the available data. 72 million should therefore be considered as a minimum number of workers in the manufacturing stages of the industry.

There are a few points to keep in mind about the estimate data, with more detailed notes provided in Appendix II.

Jobs vs. workers: As we noted earlier, we relied on industrial surveys, so our estimate is more a reflection of the number of jobs in the industry, rather than the number of people working in the industry. We therefore take jobs numbers as a low estimate, given that some people work part-time, and people enter and leave the industry. This means the total number of individuals who rely on the garment industry for work at some point in a given year is likely larger than our data can show.

Disaggregation: The topline number of 72 million is important in terms of underscoring the scale of the garment industry and its importance to the hundreds of millions of people who rely on garment industry income. To the best of our knowledge, this is the most complete published estimate built up from actual data sources.

However, in terms of policy development, we believe the degree to which we have been able to disaggregate the data in the estimate is even more important – for the reasons outlined in the previous section. The graphics on the following pages illustrate the data.[3] We discuss the policy implications of the model and our findings in the next section.

2. Details on all data sources are provided in Appendix II.

3. The data behind the graphics is provided in Appendix III.

HOW RELIABLE ARE THE DATA SOURCES?

We address this question in greater detail in Appendix II, but the short answer is: it is difficult to know, and it varies from country to country. Many factors can affect how accurately official statistics reflect reality, including: how well surveys are conducted; what size companies are included and excluded; the extent to which companies answer honestly; and the political motivations of certain governments – just to name a few.

As noted elsewhere, we believe that the data likely undercounts the actual number of workers. For example, in several countries only factories above a certain threshold (e.g. 5 or 10 employees) are counted. This means there may be a large number of micro-businesses that are excluded, collectively representing a significant number of workers. As also noted above, home-based workers are also missing from many countries, and can represent large numbers of workers.

As far as possible, we have relied on official industrial survey data, but we are also unable to assess how reliable those figures are. The quality of government data collection remains an important 'X' factor, and likely varies from country to country. The resource challenges facing many national statistical agencies have been documented by a range of observers (e.g OECD 2017; ILO WORKQUALITY 2023). A variety of arguments have been made over the years for the importance of well-resourced statistical agencies; the emergence of global value chain governance and its data needs should add additional weight to those arguments, and may provide a source of new resources as companies are increasing held responsible for knowing what is happening in their value chains.

Given how research into other types of government-reported data, such as trade statistics, finds problems with regard to reliability (Linsi, Burgoon, and Mügge 2023), we would also argue it would be prudent to assume similar issues with employment data, at least in some countries.

It is also unclear the degree to which businesses accurately report their workforce data in surveys. The widespread use of temporary or informal labour is an important methodological issue which may skew the numbers. In some countries widespread unauthorized subcontracting takes place, often to skirt tax and employment law and associated expenses – especially to irregular or poorly-documented workshops (see e.g. Salmivaara 2021). The owners of those factories would then have incentives not to report the full workforce.

Stakeholder consultations – with trade unions and labour NGOs – to request a reliability check were beyond the project scope, given the 30+ countries covered. However, this is a point on which we would welcome input for future revisions of the estimate.

We also want to acknowledge the ongoing work of the many labour statisticians who are attempting to improve the reliability of data collection.

Timeframe: We have used the most recent data available for each country, mostly from 2021 to 2023. While this introduces some variability across countries and sometimes across value chain stages, this approach is the most pragmatic way we could find to generate an estimate given the mix of data sources. With the notable exception of countries going through a crisis – such as Myanmar, Ethiopia or Sri Lanka – the number of garment workers in any given country does not tend to change radically from one year to the next. See Appendix III for details.

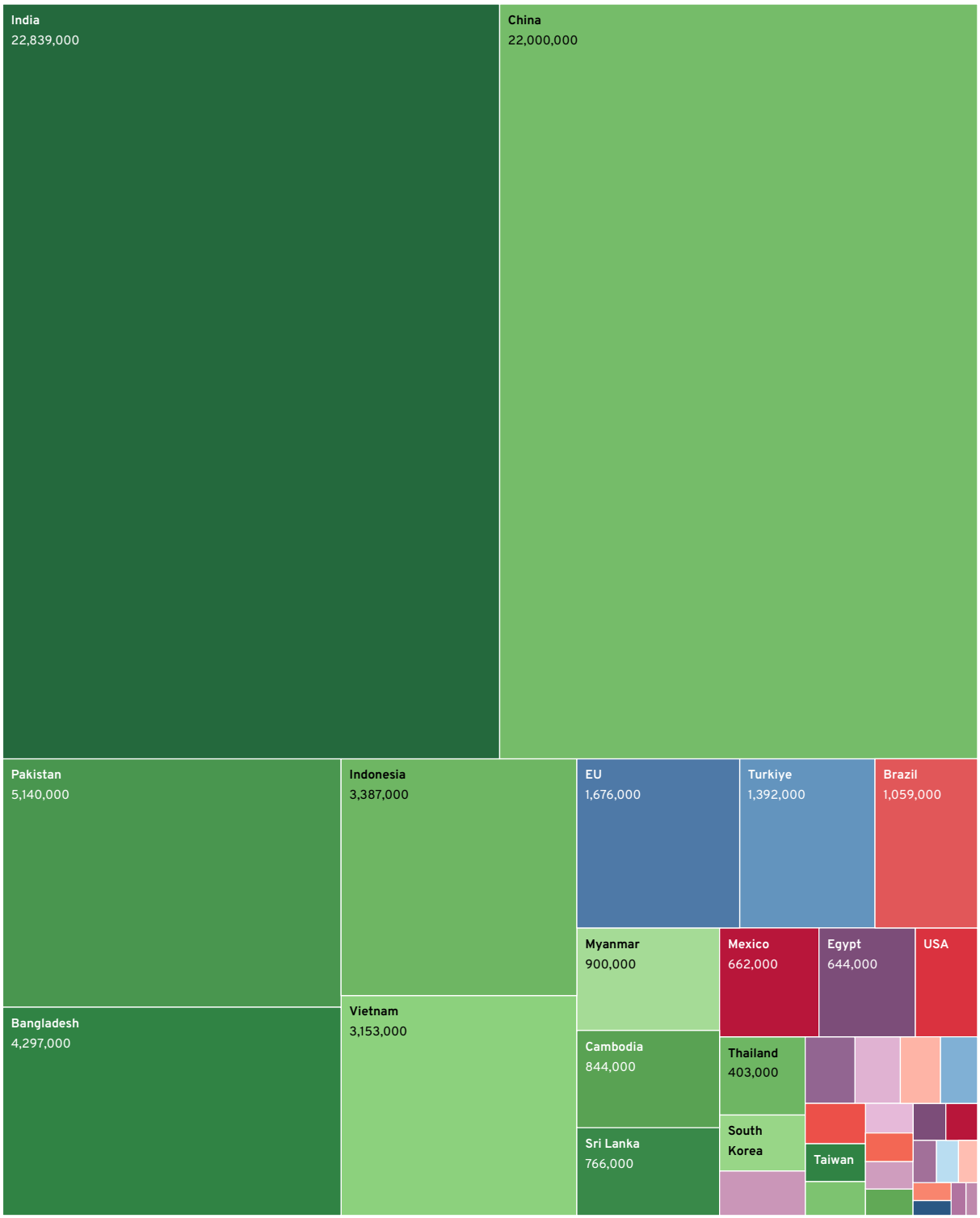
COVID Impacts: In reviewing data across many countries, it appears that 2020 was the worst year for employment losses, and that by 2022 or 2023 employment had largely recovered to pre-pandemic levels. Nonetheless, COVID impacts like mean our 2024 estimate is still on the low side compared to 'normal' years, and it may be a year or two before enough post-COVID data is available to understand ongoing impacts.

Some sources (e.g., EuroCham Myanmar, 2023) also indicate that employment figures during COVID shutdowns include workers who were on furlough or were underemployed. It is also worth noting that some organisations like WIEGO, which focus on home-based workers, are reporting significant post-COVID underemployment among home-based workers well into 2024, which indicates that the full story is likely more complex than statistical data based on industrial surveys may indicate.

GLOBAL WORKFORCE DATA

Figure 3 is the simplest version of our estimate, disaggregated only by country, and arranged in descending order of workforce size. Colours indicate the continents: Africa (Purple), Americas (Red) Asia (green) Europe (Blue)

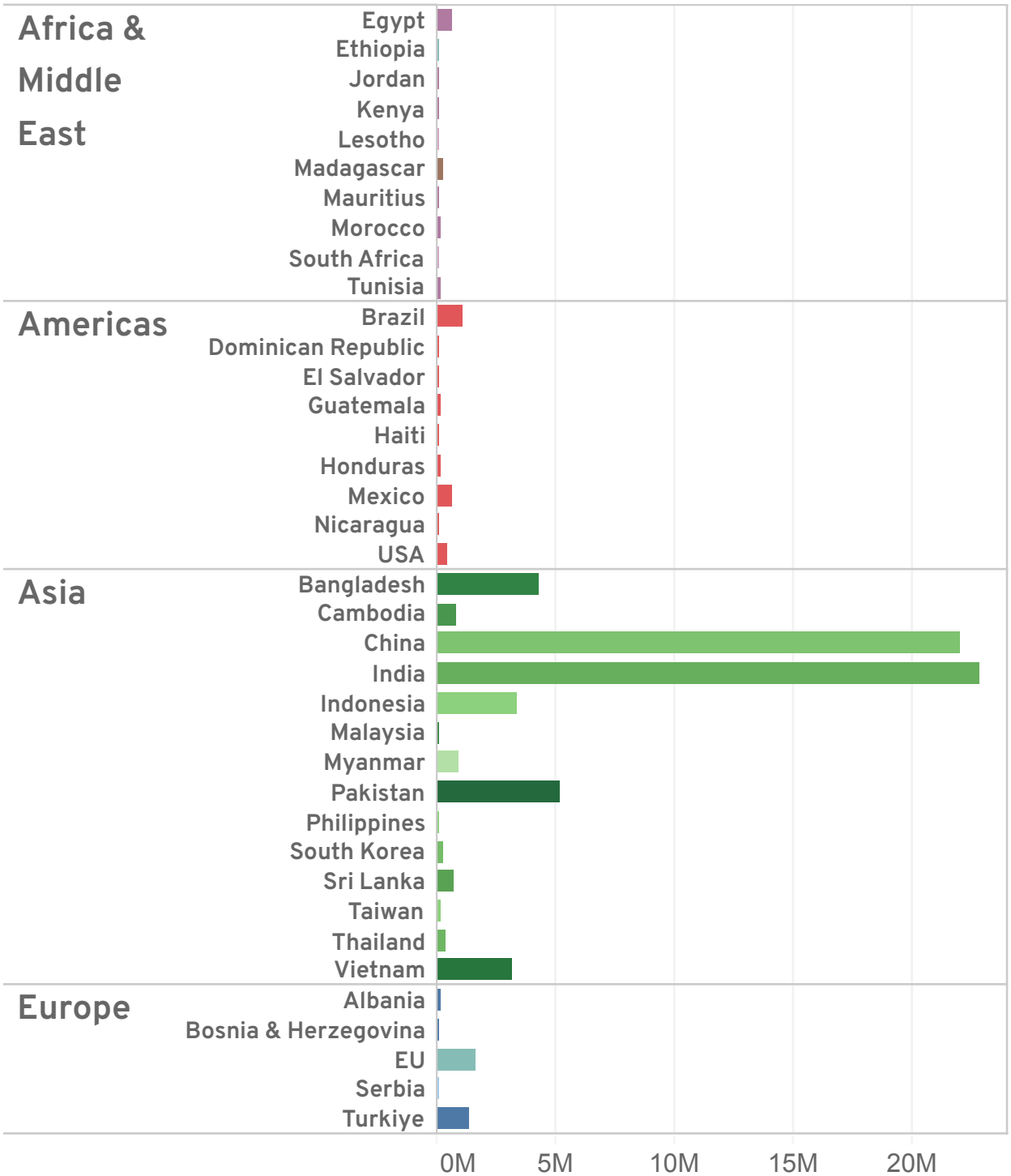
FIGURE 3: 2024 GLOBAL GARMENT WORKFORCE ESTIMATE BY CONTINENT & COUNTRY TOTAL: ±72,000,000



Top 30 Garment-Exporting Countries + Possible future hubs
ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

Figure 4 Shows the same data, but grouped by continent. As is clearly illustrated, Asia remains by far the largest source of garment industry jobs.

FIGURE 4: 2024 GLOBAL GARMENT WORKFORCE ESTIMATE BY CONTINENT & COUNTRY TOTAL: ±72,000,000



Top 30 Garment-Exporting Countries + Possible future hubs
ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

REGIONAL WORKFORCE DATA & DISAGGREGATION DETAILS

Figures 5 through 8 illustrate data for each continent.

In addition to providing national workforce size comparisons, the model is designed to include as many types of disaggregation as each country provides.

For this first estimate, we thought it may be of interest for readers to gain a sense of the different ways in which disaggregated data is reported.

Size limitations mean not all detail is visible in the graphics, however the underlying data is provided in Appendix III for those interested in additional information.

HOW TO READ THE ESTIMATE GRAPHICS

Each square in the graphics represents a group of workers whose jobs have a set of characteristics in common. The charts follow the same structure:

1. Country: Country remains the primary organising principle for the model. Within each country, however, there are a number disaggregations and data sources available

2. Number of workers for the particular subset of workers

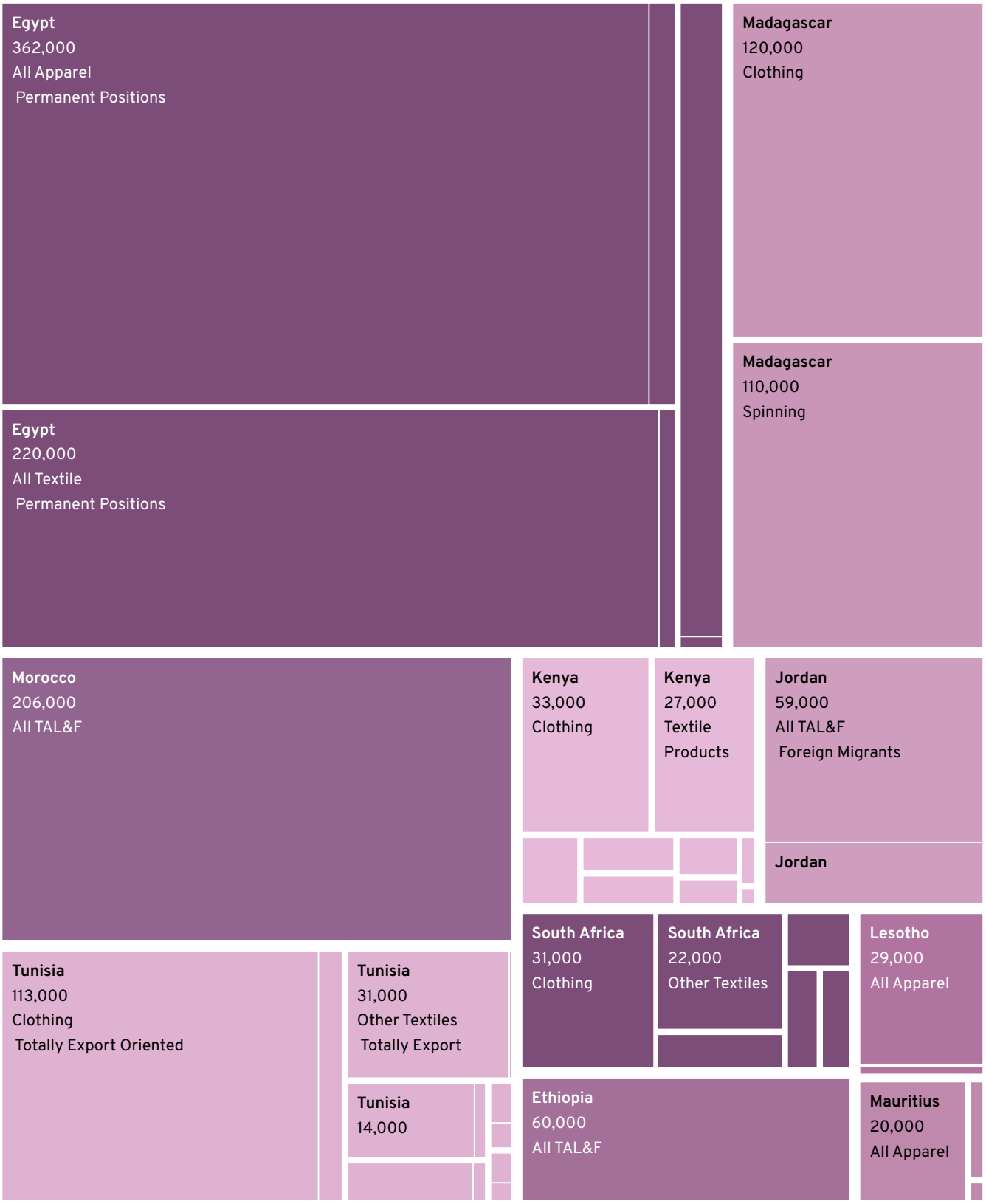
3. Supply Chain Stage(s) following the ISIC system structure. We have simplified the names to save space in the graphics. As shown on page 12, data can be reported at greater or lesser levels of detail, so this may vary from 'All ATL&F' (Apparel, Textile, Leather & Footwear) where a single number is reported for all industry areas; to highly detailed data such as 'Crocheted and knit fabrics'

4. Factory Size (if available): Countries vary enormously in whether they report on factory size, and the thresholds they use for divisions between size groups. Nonetheless, it is the next most common data type provided after gender.

Other disaggregation (if available): The final slot is used for any additional disaggregation details that were available. This may include information such as:

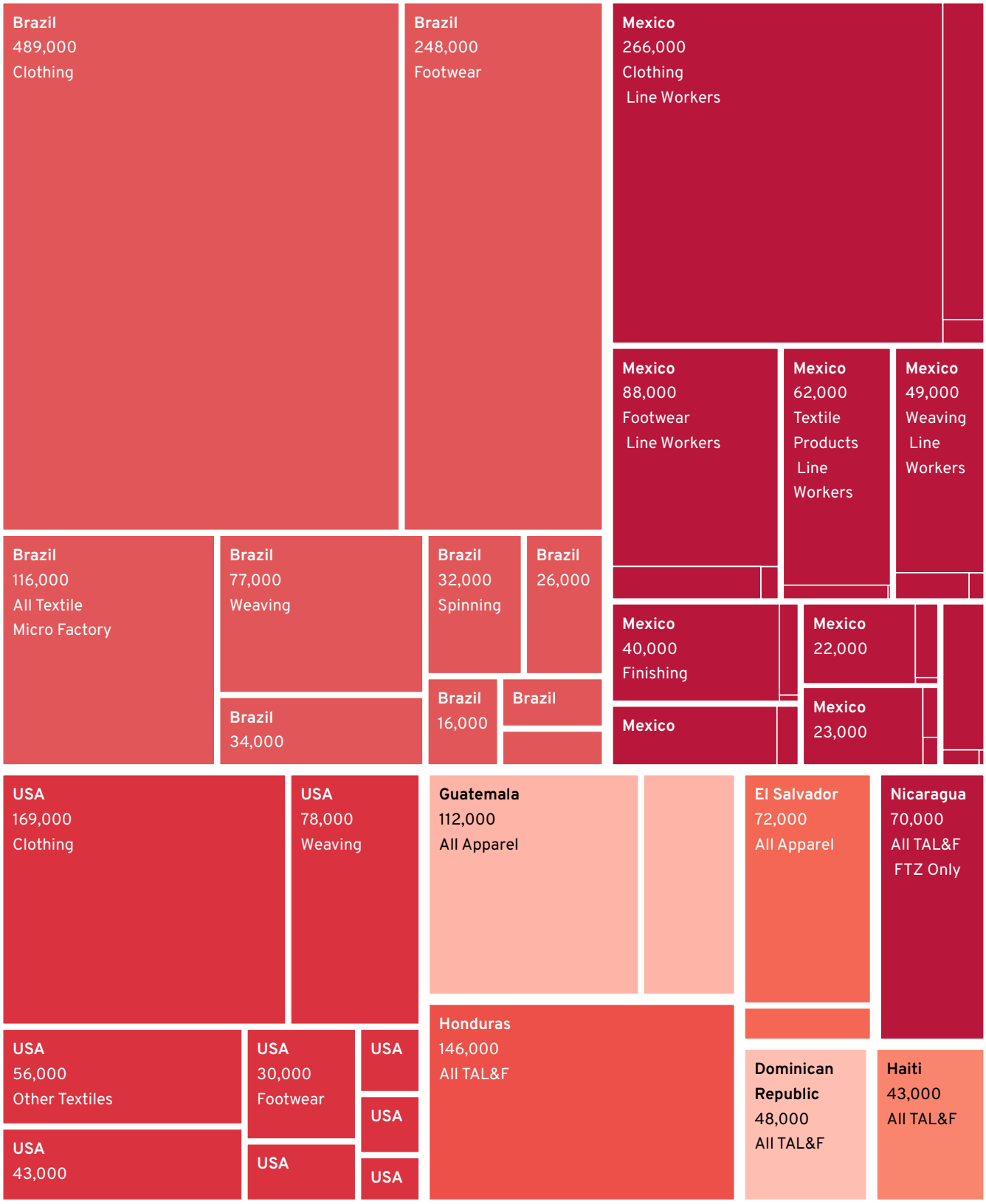
- Work location (Home-based vs. factory)
- Migrant Status (Domestic workers vs. Foreign migrants)
- Job Type (Management, worker, temporary worker)
- Market Orientation (Export-oriented vs. domestic-oriented)

FIGURE 5: 2024 GARMENT WORKFORCE ESTIMATE FOR AFRICA & THE MIDDLE EAST TOTAL: ±1,600,000



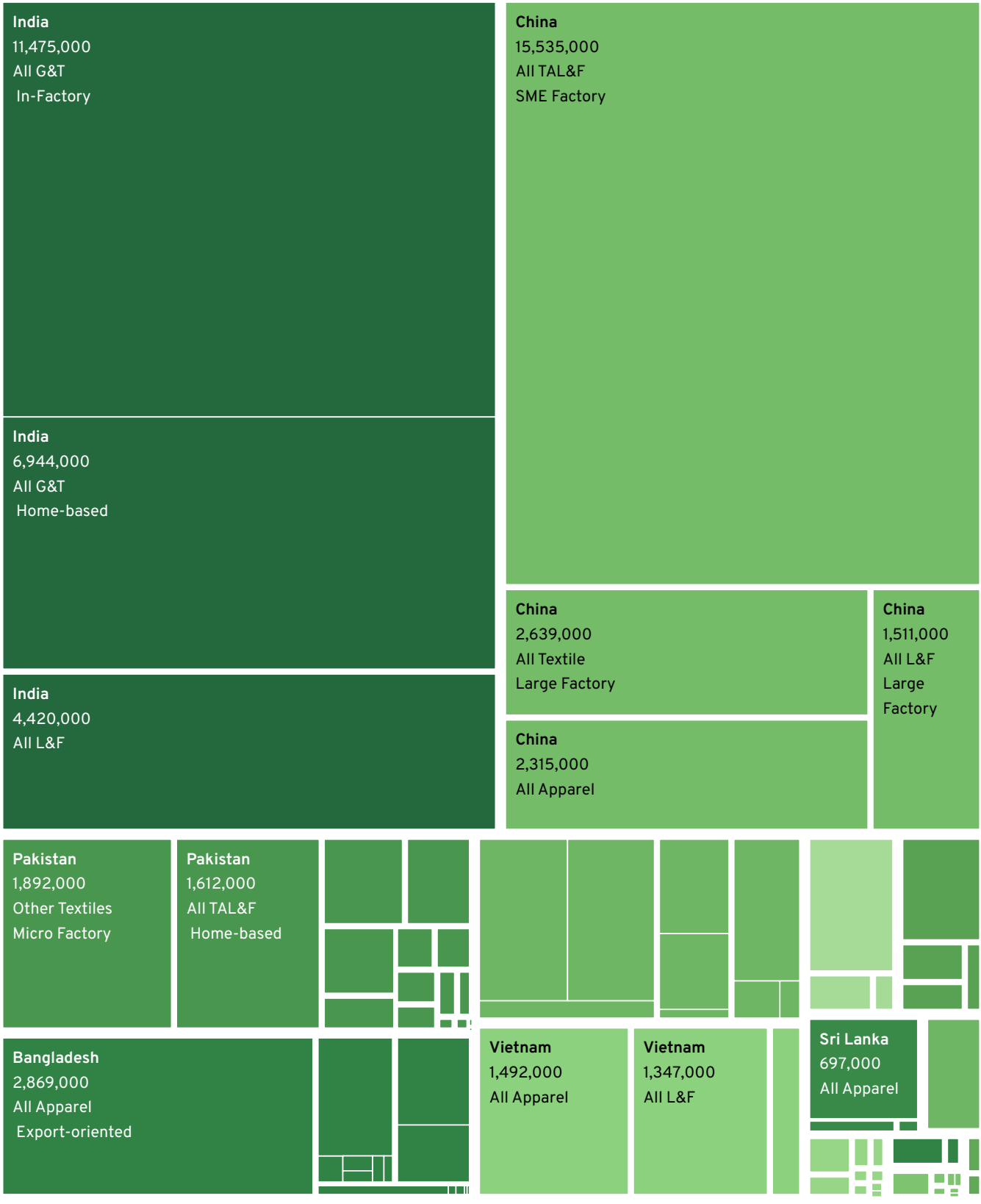
ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

FIGURE 6: 2024 GARMENT WORKFORCE ESTIMATE FOR THE AMERICAS TOTAL: ±2,700,000



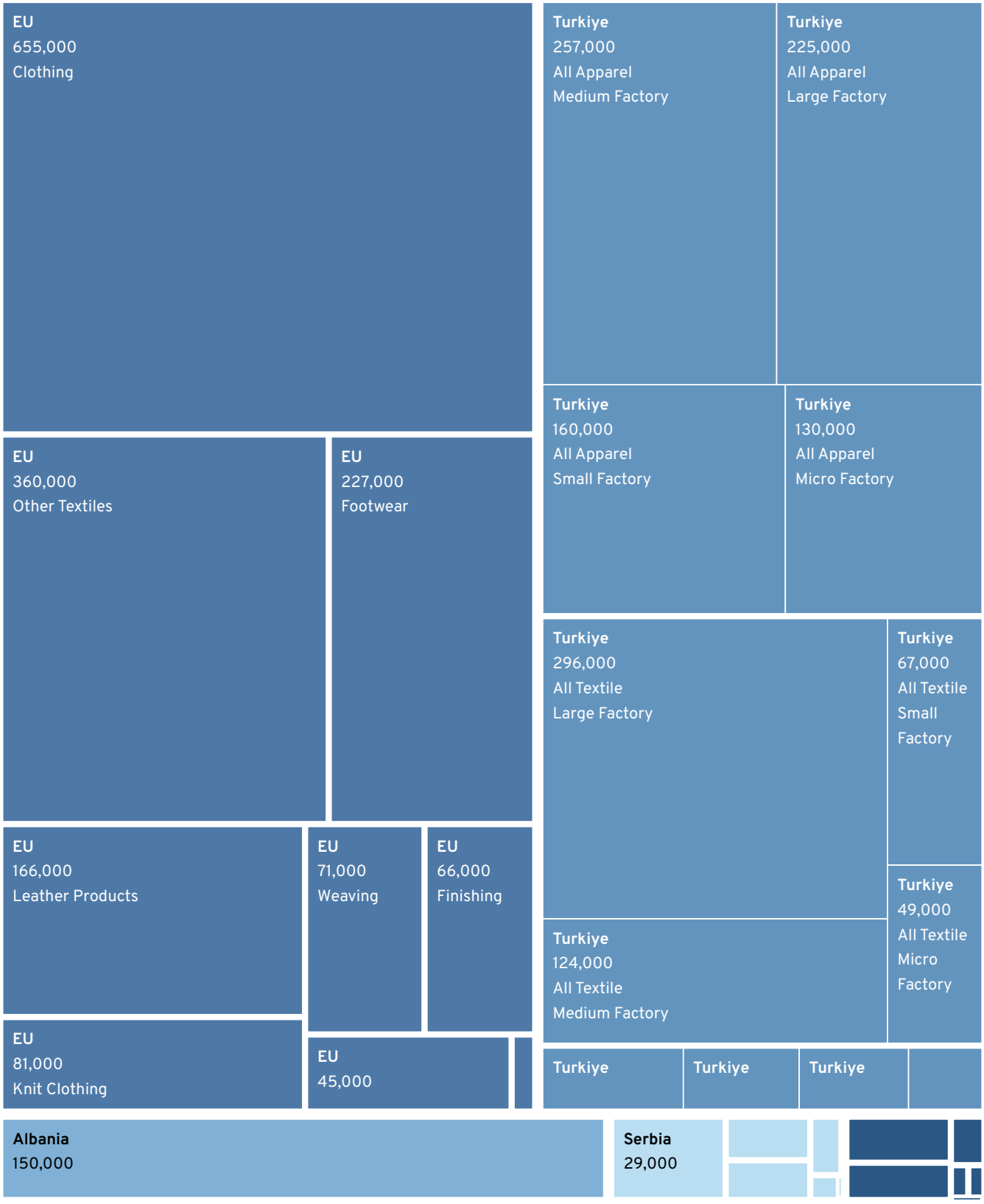
ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

FIGURE 7: 2024 GARMENT WORKFORCE ESTIMATE FOR ASIA TOTAL: ±64,000,000



ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

FIGURE 8: 2024 GARMENT WORKFORCE ESTIMATE FOR EUROPE TOTAL: ±3,300,000

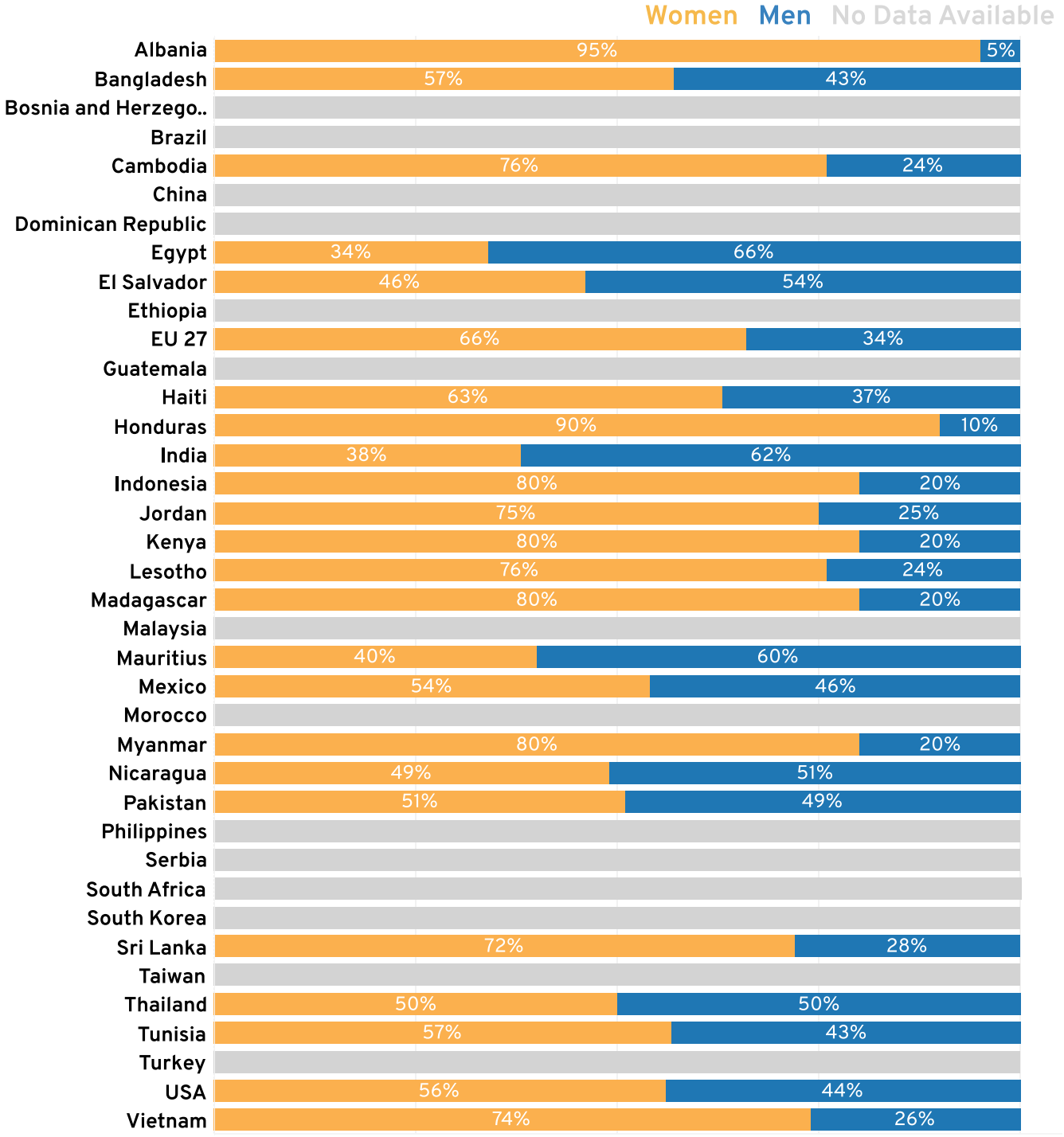


ISIC Codes 13 (Textile) 14 (Apparel) 15 (Leather & Footwear)

GENDER DISAGGREGATED WORKFORCE DATA

Given the data gaps in some key countries, it is difficult to estimate the global gender breakdown in the garment industry. Nonetheless, it is clear from **Figure 9** that women make up a significant portion of the workforce in most countries. It is worth noting that some national statistics have changed over time – for example, Bangladesh is commonly cited as country with a workforce that is more than 80% female, which at one time was true. However, current estimates by Mapped in Bangladesh and others place that number closer to 50-60%.

FIGURE 9: 2024 GARMENT WORKFORCE ESTIMATED GENDER BREAKDOWN BY COUNTRY



POLICY USES & IMPLICATIONS

Both our 2024 workforce estimate and our model of the global workforce both offer insights relevant to a range of policy issues. In this section, we illustrate some of the ways a better understanding of the global garment workforce can lead to better policies for workers and support for a Just Transition.

POLICY DECISIONS NEED TO BE BASED ON A NUMBER – AND EVERYONE NEEDS TO UNDERSTAND THAT NUMBER IS VERY LARGE

As we have noted in the introduction, it is important to have a baseline from which policymakers, civil society and industry actors can start planning for possible changes in the industry while preventing unintended consequences. So, if policymakers are considering new legislation aiming to improve conditions for workers in garment value chains, understanding the sheer scale – a *minimum* of 72 million people in manufacturing stages alone – is essential.

In our experience, many stakeholders underestimate just how large and complex the garment industry workforce is. As with other papers in this series, one objective of this paper is to clarify the scale of the industry, and to challenge policymakers and stakeholders to think carefully about the process of implementing proposed solutions, and the resources that will be needed for them to succeed.

ENVISIONING HOW GLOBAL AND LOCAL DYNAMICS INTERACT TO PUT WORKERS AT RISK

Nearly all garment industry stakeholders have a limited sphere of influence – be they governments, trade unions, brands, factories, industry associations, etc. And, understandably, very few stakeholders tend to look beyond their own sphere of influence when designing policy, law or strategy. We would argue, however, that this is a critical weakness when it comes to designing governance and regulation for value chains, and particularly when it comes to Just Transition efforts that aim to transform the industry.

The root causes of climate and labour violations are often located in multiple places at once: brand purchasing practices *and* factory management practices *and* export country government policies *and* import country government policies. Rarely are all of these factors integrated into policy plans.

Katalyst Initiative, its partners, and many others are working to map the drivers of climate and labour violations in value chains and to explore how they interact – looking at buyer-supplier connections, trade agreements and trade flows, industry ownership patterns, and more. The Global Workforce Model is a complement to these efforts and makes it possible to foreground the garment workforce *at scale* in transnational policy development. By offering estimates disaggregated by country, gender, and selected value chain stages, the model allows stakeholders to see more easily how many workers and of what type are likely to be impacted by changes in a given country, region, or value chain stage.

BETTER DATA MEANS A BETTER UNDERSTANDING OF THE LIVES THAT VALUE CHAIN REGULATIONS WILL IMPACT

As we noted earlier, Katalyst does not position itself as a labour statistics organization. Rather, we hope to offer insights into the data that civil society and policymakers need to develop effective value chain governance. In developing the Global Workforce Model we hope to connect ongoing global policy dialogues on value chain regulation to efforts to improve better data collection at national and global levels.

Labour statisticians have been making arguments for the need for better data for a variety of good reasons; we hope this paper will add to that list and help leverage value chain governance resources to support better data collection.

Appendix I contains more detailed suggestions and observations, but the overall point we wish to underline here is that given the complexity and scale of global value chains, accurate, comparable data about global workforces will be essential for a Just Transition.

USING DISAGGREGATED DATA TO SUPPORT VALUE CHAIN POLICY SEGMENTATION

Throughout this paper we have highlighted the importance of having big-picture data that is disaggregated into finer detail, so that policies can simultaneously address the global and local dynamics that shape conditions in global value chains.

In other papers in this series, we have discussed the idea of 'policy segmentation': the ability to understand how the pieces of large and complex systems – like global value chains – fit together, so that large problems can be broken down into more manageably-sized ones, and so that specific interventions can be designed that will be effective in different parts of the system.

As we explore more in the following examples, policy segmentation will be critical to developing effective value chain governance in different contexts around the world; but is heavily reliant good quality disaggregated data.

JUST TRANSITION EXAMPLES WHERE DATA FROM THE GLOBAL WORKFORCE MODEL CAN BE USEFUL

To help make the policy implications we outlined more concrete, we briefly discuss here four examples of how the Global Workforce Model and access to better workforce data can support better Just Transition policy development.

A. Making living wages, social protection, and Just Resilience more actionable.

The importance of living wages and social protection systems to achieve a Just Transition cannot be overstated. The arguments for a living wage – not just in terms of human dignity and preventing suffering, but also as a cornerstone to prevent child labour, excessive overtime, and a host of other common violations – are well established. There is, however, also a growing recognition that a living wage – and the resilience it can provide – will be foundational to helping people adapt to climate change.

The COVID-19 pandemic dramatically highlighted the importance of social protection systems (see e.g. ILO 2020) and how weak they are in many countries. Building on Sustainable Development Goal (SDG) target 1.3 on ending poverty, and SDG target 3.8 on achieving universal health coverage, there have been growing calls for properly-funded social protection systems – for health care, unemployment, retirement and other "basic social security guarantees to all residents and all children, and should allow life in dignity." (Schwarzer et al. 2024)

A variety of proposals have been made to increase access to social protection – some national and government-based, some industry-specific agreements, some developed via sectoral collective bargaining. (Judd, Kuruvilla, and Jackson 2022).

Similarly, climate change is creating risks for workers across most, if not all, the countries included in this report. The recent *Higher Ground* paper, for example, outlined heat and flood risks in the coming years that threaten workers and most national industries (Judd et al. 2023). Similar risks are being seen further down supply chains, as with cotton farmers (Cotton Connect 2020). The related idea of 'Just Resilience' (Bouwman 2023) – that steps must be taken to provide additional help to increase vulnerable populations' resilience to climate change – is also part of the social protection debate. For workers on very low wages, it is clear that we need to design policies that deliver a 'Just Resilience' as a key component of Just Transition.

The challenge, of course, is that living wages and social protection will cost money. It is estimated that a living wage in most garment-exporting countries would require a wage increase of two to four times current wages. (Wageindicator, 2022). A recent ILO paper on the Financing Gap for Social Protection (Schwarzer et al. 2024) estimates that low-income countries – many of which feature in our model – would collectively need to increase spending on social protection by an extraordinary 2,737% to provide universal social protection.

Where discussions have started about providing for living wages, social protections and Just Resilience as a matter of fairness, the resounding

question is: *Who will cover these costs?* As the ILO financing gap paper notes, two potential mechanisms are raising taxes and cutting fossil fuel subsidies. But the behaviour of global value chains will impact the feasibility of both of those policy options, as anything that raises prices in one country creates pressure for value chains to move elsewhere.

Given how much of the global economy is now part of value chains, there is an inescapable role for them in helping to pay for living wages, social protection, and Just Resilience in one way or another – via taxes, transnational collective bargaining agreements, Accord-like efforts or other mechanisms.

However designing policies to eliminate 'race to the bottom' strategies, that enable stakeholders to plan for the impact of cost increases without damaging the viability of the industry, and that ensure support is targeted where it is needed most all require global workforce data, disaggregated at the level of country, gender and supply chain segment. A shared understanding between policymakers, industry, labour and civil society of how many people need help and where they are, is foundational for negotiating social protections, living wage and climate resilience support.

B. Preventing employment shocks in the transition to a circular economy.

Stark questions remain about how exactly the garment industry could become circular at scale, given the lack of mature fabric recycling technologies (Dissanayake & Weerasinghe 2021) and weak industry uptake of the technologies which do exist (Hu 2024). Circularity will be necessary to remain within planetary boundaries. However, dramatic changes in the industry's business model could have profound consequences for the location and types of jobs in the future. What impact would fabric recycling at scale have on cotton farmers? Where will the recycling take place, and under what working conditions? Will it be economically feasible to, for example, ship recycled fabric from Europe to Asia for garment manufacturing, and then from Asia back to Europe for sale?

If the industry does become more circular, there will be knock-on effects across many countries that will include job losses, job shifts, and job gains. It is vital that policymakers understand the current employment situation and are able to model what the employment consequences will be for existing jobs. This is key if we are to find ways to ensure that violations common today are not replicated in new supply chain stages in the future.

C. Aligning Scope 3 emissions policies with worker protection policies

From the perspective of nearly all garment brands – who, collectively, drive the shape of the global garment industry – the supply chain stages covered by the Global Workforce Model fall under their 'Scope 3' emissions.[4]

4. A quick refresher: **Scope 1** emissions are created by a firm's own activities: **Scope 2** emissions are created in generating the energy used by the firm; and **Scope 3** emissions are generated by other businesses in the value chain – particularity suppliers.

Greater clarity on which value chain activities – as described by the ISIC codes used in the model – have greater GHG and other climate impacts is important for developing strategies to combat climate change. However, it will be critical to understand the workforce characteristics of those activities to ensure that workers are protected during efforts to reduce climate impacts.

Overlaying emissions data and workforce data can help not only to prevent unintended consequences, but can also help to identify which groups of workers should be involved in negotiations about the future of different value chain stages – for example, on how to help redesign parts of the industry to reduce climate impacts while preserving employment.

D. Planning ahead for shifts in population, geo-political dynamics and production locations

Katalyst's Trade Realities report showed that China represents around half of global garment exports – far more than any other country. The employment figures we present here also show China and India to employ millions more people in the garment industry than other countries.

Considering this state of affairs as the baseline for Just Transition planning, several important questions emerge when considering the future of value chain governance. A recent report by SOMO & China Labour Bulletin highlights the impacts Chinese workers are facing as some companies shift production away from China, and raises a number of questions regarding due diligence for companies doing business in China, and what HRDD-based regulation should require (Rozenzwieg, 2024).

However, looking at our 2024 workforce model and the *Trade Realities* data, further questions come into focus. If production in China decreases significantly, either due to geopolitical tensions – or if someday China follows the lead of the US and Europe, and offshores its garment industry – where will all that production go? And under what kind of working conditions? If China becomes a major garment importer, what impact will that have on EU or US-based value chain governance efforts like the CSDDD?

The issues we outline here, in a very cursory way, point towards a whole host of questions that a better understanding of employment in today's and tomorrow's garment industry will help answer. Questions about the future of the industry in China are perhaps the most obvious example, but far from the only one.

APPENDIX I:
DATA POLICY RECOMMENDATIONS

Two major points emerged during the development of this paper that we hope may be of use to governments and INGOs working on employment data.

ACKNOWLEDGE CIVIL SOCIETY'S NEED FOR GOOD DATA

Employment data may be seen as a topic primarily of interest and use to governments, however as policy development on Just Transition develops, it will be increasingly important that civil society can access the data they need to help inform government policy. Ease of access and compatibility across countries is particularly important given the limited time and resources available to civil society organisations.

Our model provides a number of examples of the types of disaggregated data needed for global value chain governance, and we hope it will help inform the discussion about **what data should be reported**.

We are sure that labour statisticians have already considered questions of **how data should be reported**, but as our experience with this paper has shown, the lack of standards – both in terms of data structure, and in terms of something as simple as file formats – also makes it very difficult to access the data needed to understand industries and their value chains. We would encourage any efforts to standardize reporting, and to make access easier.

ALIGN EMPLOYMENT REPORTING WITH DUE DILIGENCE TIERS

As we described in Figure 2, the current hierarchy of ISIC codes does not, at least for the garment industry, align well with supply chain tiers. Assuming that governments collect data at a reasonably detailed level, this could be addressed relatively easily by adjusting the way data is aggregated in government reports – rather than having to make changes to the ISIC structure. One option is to always report as a 4-digit level of detail; or if aggregated data is useful in some circumstances, to group, for example, those parts of the 'Textile' ISIC group that are typically Tier 1 or Tier 2 supplier with each other.

APPENDIX II:
DATA SOURCES AND NOTES

CAVEATS AND LIMITATIONS:

Given gaps and inconsistencies in data, we have had to draw on a range of sources, provided at various levels of detail and covering different time periods. We have tried as much as possible to use post-Covid data, but in some cases such data was not available. The reporting years are included in the detailed data in Appendix III.

A better – but imperfect – approach

We believe the model we have developed is an improvement over the status quo. Currently, estimates of the global garment workforce float between 40 and 75 million people, but with little data to support them, and no clarity about what supply chain stages and types of companies they include. Our model and estimate of 72 million garment workers was designed to be clear about what is included and what is not. It also reflects ideas and input from the many people noted in the Acknowledgements section, particularly from the Clean Clothes Campaign global network. We also found some recent ILO work on labour data in the Asian garment industry (El Achkar Hilal 2022) to have arrived at some similar conclusions to our own, which reassured us that our model was largely on the right track.

Nevertheless, we believe that estimate we have developed is, at best, only a partial success. There are still many gaps and areas where more detailed data is needed. And we are not in a position to comment on how accurately the reported data reflects the reality of employment in the industry. Given the issues with counting home-based workers, informal workers and migrant workers, and given that many countries do not include small factories in their statistics, we do believe that the data in our model most likely undercounts the number of workers.

As a final note, we remind readers that we use the garment industry here as a test case for developing global workforce models. The principles – and challenges – we outline here are applicable to any globalised industry, and so we hope they can be of use to stakeholders working for a Just Transition in a range of other industries as well[5].

5 The recent *Jobs and Supply Chains in Southeast Asia* paper by the ILO (Viegelahn et al. 2023) illustrates just how interconnected global value chains and global employment have become.

DATA SOURCES

We have provided detailed references to our data sources in an effort to make it easier for other civil society actors to locate and use employment data, and so that interested readers can understand how our estimate was assembled.

Albania: Workforce size and gender breakdown estimate based on an Invest in Albania fact sheet. (Invest in Albania 2019) Unlike some neighbouring countries, data on Albania is not included in Eurostat figures.

Bangladesh: Our Bangladesh estimate combines data from multiple sources. In order to combine them successfully we have had to make some extrapolations that may lessen the overall accuracy, but still provide an important sense of scale when looking at some key information.

The most recent total industry survey data available was the Bangladesh Bureau of Statistics Survey of Manufacturing Industries 2019. Table-7: Employment costs by major industry (BSIC 2 digits) employment category and sex. Pages 121-123. (Bangladesh Bureau of Statistics 2020)

This survey provides data on different types of jobs and gender breakdown, but only reports employment data at 2-digit ISIC level.

Mapped in Bangladesh have created a detailed database of export-oriented RMG factories located outside Export Processing Zones. MiB data covers more than half of the garment workforce in Bangladesh, and is updated into 2024, so we have used their data in our estimate (Mapped in Bangladesh 2024).

We have used the difference between the BBS data and the MIB data as a very rough estimate of garment industry employment inside Export Processing Zones. This appears to broadly align with estimates published by the Bangladesh Export Processing Zones Authority (Bangladesh Export Processing Zones Authority 2022) which indicate about 500,000 jobs across all industries, with more than half being in garment and textiles.

Home-based worker estimates are based on figures developed by WIEGO with assistance from ILO staff (WIEGO 2024), and track closely with published ILO estimates (El Achkar Hilal 2022)

We do not have an estimate for domestic-market oriented production.

NOTES ON INDSTAT

UNIDO's INDSTAT database (United Nations Industrial Development Organization 2024) provides a central repository for employment estimates, which is commonly cited for workforce estimates, and it was the first place we checked for data. However for the purposes of this paper we have largely used other sources, for several reasons.

- At time of writing, the most recent available data was from 2019 or 2020 in the middle of the COVID crisis and accompanying industry shutdowns. As much as possible, we wanted this model to reflect post-COVID developments, so we consulted national statistical data which is generally more recent.
- Around 1/3 of the countries included in this model (given that we treat the EU as a single unit) are either missing from INDSTAT, have not reported data since the mid 2010s, or the reported data is so far out of line with other estimates that we felt uncomfortable using the INDSTAT numbers.
- By consulting the direct statistical sources, it is easier to understand what different countries include in their estimates (e.g. some only include companies above a certain size). We have also found a number of countries provide additional data disaggregations that the INDSTAT system is not designed to accommodate; e.g. attempts to measure micro-enterprises, or categories of employment, which are useful for policy development.

The gender breakdown is extrapolated from data on RMG factories shared with us by Mapped in Bangladesh. In other supply chain stages, the gender balance is likely somewhat different, however, we have not been able to locate detailed information, so have used the MiB data as a proxy for the industry overall.

Bosnia & Herzegovina: Estimate based on Eurostat data. (Eurostat 2024b) The spreadsheet download available from this Eurostat page provides detailed data.

We were unable to locate data on gender breakdown.

Brazil: Statistics are drawn from two sources at the Instituto Brasileiro de Geografia e Estatística.

The main source is the Annual Survey of Industry – Enterprise Table 1.4 which counts employment at businesses with at least 5 employees at 4-digit ISIC level (IBGE 2022b). See files in: Empresa 2021 – tabelas_2021_xls_20230704.zip – 02 Simples -01 empresa -01 resultado

The second data source, from the Annual Survey of Industry-Enterprise Table 1.1 provides data on businesses with 1 or more employee, though only at 2-digit detail. By considering the difference between the two, we can estimate the number of micro-enterprises (less than 5 employees). This data is from 2020, however, so COVID impacts likely mean an undercount compared to other years. (IBGE 2022a) Empresa 2021 – tabelas_2021_xls_20230704.zip – 02 Simples -01 empresa -01 resultado

Texbrasil also estimates approximately 1.34 million employees in the textile, garment and footwear sectors (Texbrasil 2023)

Cambodia: The most recent workforce and gender data we could locate were available from the Textile, Apparel, Footwear & Travel Goods Association in Cambodia 2023 report. (TAFAC 2023) See p. 10.

Home-based worker estimates are based on figures developed by WIEGO with assistance from ILO staff (WIEGO 2024), and track closely with published ILO estimates (El Achkar Hilal 2022)

China: The China Statistical Yearbook provides aggregate employment data for the textile, garment and footwear/leather sectors, but only for companies with revenue greater than ¥100 Million/€13 Million. See Table 13-2. This data omits the sizable SME sector.

A recent ILO report estimates the textile & garment workforce at 22-23 million (El Achkar Hilal 2022); the China National Garment Association (China National Garment Association 2024) estimates there to be around 20 million workers in the sector. We have used the difference between the ILO estimate of 22 million and the Statistical Yearbook figure for large companies as an extremely rough estimate for the SME workforce.

We have been unable to find reliable estimates of the gender breakdown of the garment workforce in China.

Dominican Republic: Based on tax records, reported by the Ministero de Industria, Comerico y Mipymes the 2022 Perfil Económico de la Industria de Productos Textiles Y Prendas de Vestir en República Dominicana, p. 6. (Guzmán 2022).

Egypt: The most recent official statistics for workforce size and gender breakdown are from the Results of the Fifth Economic Census 2017/2018. Table (1 – 9) Number of Establishments and Average No. of Employees During the Year by Degree of Stability, Sex and Economic Activity. p.85 (Egypt Statistics 2020)

El Salvador: Estimate based on data from the Salvadoran Social Security Institute, as reported in the Sector Guide – Textile and Apparel published by the Government of El Salvador (Invest in El Salvador 2023). We did not find a reliable source for gender breakdown data.

Ethiopia: It has been difficult to locate recent data on employment in Ethiopia, in light of the outbreak of war in 2020, and the 2022 revocation of preferential US market access under the African Growth and Opportunity Act. Prior to these events, employment was estimated at 86,000 people in the export-oriented sector (Hardy, et al. 2024), however at least 20,000 jobs have been lost according to local trade unions. (IndustriALL, 2023). Lacking other data, we have estimated 60,000 jobs remaining in the export-oriented sector, however this estimate is essentially guesswork. Data on domestic market data and gender breakdown was not available.

European Union: Estimate based on Eurostat Enterprise Statistics data Enterprise statistics by size class and NACE Rev.2 activity (from 2021 onwards) (Eurostat 2024b). The spreadsheet download available from this Eurostat page provides detailed data. The figures for 2022 were provisional

at time of publication, but align closely to prior year figures, so we assume will be close to final numbers.

Gender breakdown is not reported in Enterprise Statistics data, so we have extrapolated based on the percentages reported in the Labor Force Survey table: Employment by sex, age and detailed economic activity (from 2008 onwards, NACE Rev. 2 two digit level) – 1 000 (Eurostat 2024a).

Guatemala: The most recent figures we could locate were from 2019, provided by the Programa Nacional de Competitividad del Ministerio de Economía in a factsheet La Industria de Vestuario y Textiles en Guatemala, p. 2. (PRONACOM 2024). We were unable to locate data on gender breakdown.

Haiti: Workforce and gender estimates are based on Better Work Haiti's 2023 Synthesis Report. (Better Work Haiti 2023). All factories exporting to the US – which represents more than 80% of Haitian garment exports – are required to join the programme. The number of factories not included under Better Work is unclear, but we assume to be small. These figures do not represent the effects of the unrest and violence in Haiti seen in 2024.

Honduras: Official statistics from the Instituto Nacional de Estadística Honduras report around 97,000 people working in garment & textile maquiladoras in 2020, however The Asociacion Hondureña de Maquiladores website quotes a number of 146,000. Assuming that the 2020 number represents COVID impacts, we have used the AHM number in our estimate – although the INE numbers are consistently lower over several years.

India: There is a widely-quoted estimate of 45 million workers in India's garment and textile industry. We have struggled to identify the composition of this figure, but based on some of the sub-industries included in e.g. Ministry of Textiles reports (Ministry of Textiles 2023), it appears to include several industries like silk production which employ millions, but which fall outside of the supply chain stages covered in our model.

The Annual Survey of Industries Summary Results for Factory Sector Statement 5A: Estimate of Some Principal Characteristics by 2-digit Level of NIC (Arranged in Descending Order of GVA) p. S4-4 (National Statistical Office 2024) reports a relatively low total of 3.3 million workers across the included ISIC codes, which we assume is attributable to scope or methodological limits. We have relied on WIEGO estimates developed with ILO assistance (WIEGO 2024) of around 18 million people in the Textile & Apparel industries, including home-based workers. These figures do not include all ISIC codes, so we assume the actual number is somewhat higher. For leather and footwear, we have relied on an estimate of 4.42 million workers, 40% of whom are women, from the Council for Leather Exports. (Council for Leather Exports 2023)

For the remaining gender data, we have extrapolated from the gender breakdown included in the Annual Survey of Industries Table 3: Estimate of (i) employment, (ii) mandays employed and (iii) emoluments paid in the factory sector by their type for each 4-digit industry class (NIC-2008) (National Statistical Office 2022). Given that gender breakdown is only provided for direct employees and for the subset of factories covered by the survey, the estimate of 38% female/62% male should be treated with some caution. It broadly aligns with WIEGO estimates that indicate a majority of factory-based workers are male, however this is offset by a majority of home-based workers being women.

Indonesia: Estimates are based on data in the Statistical Yearbook of Indonesia 2024. The yearbook breaks down employment numbers in two tables; Table7.1.1 Number of Establishments, Workers Engaged, Labor Costs, and The Value of Change in Fixed Capital of Large and Medium Manufacturing Industry, 2021–2023 (Badan Pusat Statistik 2024a), and Table 7.2.1 Number of Establishments, Workers Engaged, and Labor Cost of Micro and Small Manufacturing Industry, 2020–2022. (Badan Pusat Statistik 2024b). These tables do not include gender breakdowns, so we have relied on figures from Better Work (Better Work Indonesia 2022) and IndustriALL (IndustriALL 2022) which both estimate 80% of the garment workforce to be women.

Jordan: Statistics on worker number and gender were drawn from a joint report by Better Work Jordan and the Jordan Chamber of Industry (El-Rayyes et al. 2023, p.3). Jordan is one of the few countries with published data on the number of migrant workers in the industry.

Kenya: Estimates based on Kenya's Statistical Abstract 2022 Table 3.1: Number of Employees by Industry and Employment Groups, 2021. (KNBS: 2022).

IndustriALL (IndustriALL 2018) estimates that 80% of women working in garments and textiles are women.

Lesotho: Estimate based on data from the Lesotho Bureau of Statistics Quarterly Statistical Report.

(Lesotho Bureau of Statistics 2024).

Garment & textile jobs represent 85% of all manufacturing jobs, so we have extrapolated the Statistical Bureau's gender breakdown of 76% female workers for all manufacturing jobs to the garment industry.

Malaysia: The most recent statistics we could find were 2020 reports to INDSTAT (United Nations Industrial Development Organization 2024). The Malaysian Investment Development Authority 2019 estimate of 68,000 workers (Asia Garment Hub 2024a) was relatively close, though somewhat lower. We have been unable to find reliable estimates of women workers in the industry.

Madagascar: We were unable to locate official statistics, and have relied on a 2020 ILO Report (Rasolonjatovoarivelo 2020) as the most detailed source available for both employment and gender data.

Mauritius: Employment and gender estimates based on data from the Digest of Industrial Statistics Table 24 – Employment by product group and sex in the EOE sector, December 2021 – December 2022 (Statistics Mauritius 2023).

Mexico: Employment estimates based on Cuentas de Bienes y Servicios *Sistema de Cuentas Nacionales de México. Cuenta de Bienes y Servicios. Año Base 2018.* Sheets CBS 12, CBS 37 and CBS 39. (INEGI 2022b)

Gender data is drawn from an INEGI industry report. (INEGI 2022a) Due to differences in the way data is reported, we have used a 54% estimate for the entire sector; however in reality there are differences between various sub-sectors, as noted in the source report.

Morocco: Employment estimate based on the Annuaire Statistique du Maroc. (Haut-Commissariat du Plan du Maroc 2022) Table 6 – 4 Evolution de l'emploi industriel par grands secteurs.

We were unable to find a source for gender data for the industry.

Myanmar: It has been difficult to find recent and well-documented data on the employment situation in Myanmar, following the impacts of COVID, Cyclone Mocha and the 2021 coup and its aftereffects. Published estimates for the export-oriented apparel production workforce were around 480,000 (EuroCham Myanmar, 2023) to 500,000 workers (World Bank, 2023) in 2022/23. ILO reports (International Labour Organization 2023) indicate significant loss of jobs since peak employment in the late 2010s. SMART Factories Myanmar, an EU-supported project, provides rough conservative estimates – including production for local markets, and micro and home-based workers – of around 150,000 people working in textiles, 700,000 in apparel and 50,000 in footwear and leather. Given the lack of survey data, they note the margin of error in their estimates may be significant. (SMART Factories Myanmar 2024)

Similarly, recent workforce gender estimates have been difficult to obtain, so we have used a 2021 ILO estimate (ILO Liaison Office in Myanmar 2021) of 80% women workers, though SMART Factories and others note that in export-oriented factories, women represent something closer to 90% of the workforce.

Nicaragua: Data on both worker numbers and gender breakdown is drawn from the Anuario Estadístico (INIDE, 2022), but available statistics only include employment in free trade zones (zonas francas).

Pakistan: Pakistan conducts industrial surveys every 10 years. Unfortunately, at time of writing we are close to the end of the cycle, so data available is from 2015. We assume there has likely been some growth in the sector, so numbers for Pakistan may be on the low side.

Pakistan produces two reports which we have used here: The Census of Manufacturing Industries (Pakistan Bureau of Statistics 2016) which reports on companies with 10 or more employees; and the Small and Household Manufacturing Industries Survey (Pakistan Bureau of Statistics 2021) which reports on smaller businesses.

We have used an average gender breakdown based on the data provided in the two reports, but it is important to note that this average does hide variations across different supply chain stages. We also expect that the percentage of women workers is actually higher due to higher numbers of women home workers.

Philippines: Estimated based on the 2021 Annual Survey of Philippine Business and Industry (ASPBI). Table 1. Summary Statistics for Manufacturing Section by Industry Group: Philippines, 2021 (Philippine Statistics Authority 2022).

We have been unable to find reliable statistics on gender the specifically focus on the garment industry.

Serbia: Workforce data was drawn from Eurostat (Eurostat 2024b) and aligns closely with estimates provided by the Chamber of Commerce and Industry of Serbia (Chamber of Commerce and Industry of Serbia 2022). We have been unable to locate reliable estimates of the gender breakdown of the workforce in Serbia.

South Africa: South Africa is unusual in that it publishes quarterly employment and labour force survey reports. The main Quarterly Employment Survey (Statistics South Africa 2024b) report is accompanied by a detailed datasheet (Statistics South Africa 2024a) which includes disaggregated employment data and historical data for comparison. The survey covers companies with more than R300,000 (€15,000) in revenue so microbusinesses are not reflected in the data.

South Korea: Estimate is based on data from Statistics Korea's online database, section Number of Workers by Industry. (Statistics Korea 2022). We were only able to locate gender statistics at the aggregate 'manufacturing' level.

Sri Lanka: Estimate is based on the Industry Data Book 2022: Manufacturing Industry Sectors. Table 2.1.2: Textile Sector Manufacturing Establishments; Table 2.2.2: Manufacturing Establishments of Wearing Apparel Industry (Ministry of Industries 2022) and Table 3.2: Leather, Footwear and Leather Products Manufacturing Establishment. The most recent data available was from 2019, and so does not reflect the impacts of Covid or the 2022 political crisis.

The gender breakdown is extrapolated from tables in each industry chapter which provided a gender breakdown for companies employing more than 25 people. We have used the estimate for the Apparel sector generally.

Taiwan: Estimate based on figures from the Directorate General of Budget, Accounting and Statistics, as reported by the Taiwan Textile Federation. (Taiwan Textile Federation 2023:2). Gender data was not reported.

Thailand: We have had difficulty located recent statistics on the Thai garment industry, and have relied on estimates provided by Asia Garment Hub (Asia Garment Hub 2024b) based on Labour Force Survey data for both employment and gender data.

Tunisia: Estimates based on a sector overview published by the Agency for the Promotion of Industry and Innovation. Gender breakdown is an average across the three ISIC codes as reported in the Enquête Emploi et Salaires auprès des Entreprises en 2022, Tableau 17 Répartition des salariés permanents à la fin de l'année 2022 par genre et par division d'activité (Statistiques Tunisie 2024)

Turkiye: Estimate based on Basic indicators by size class and economic activity, 2022 (Turkish Statistical Institute 2023). This file distinguishes between number of workers (which was used for this paper) and number of employees, which we take to indicate some inclusion of temporary or outsourced workers in the overall 'workers' number.

We have not been able to locate data on gender breakdown in the industry.

United States: Employment & gender estimates based on Labor Force Statistics from the Current Population Survey: 18 Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity. (US Bureau of Labor Statistics, 2022)

Viet Nam: Estimates based on Statistical Yearbook of Viet Nam (General Statistics Office of Viet Nam, Statistical Publishing House 2022) Tables 154 and 157.

APPENDIX III:

2024 GLOBAL WORKFORCE MODEL ESTIMATE DETAILED DATA

All data rounded to the nearest thousand. Totals may vary due to rounding. Users should keep in mind that the data provided here are estimates which should be assumed to have a significant margin of error, even the in best of circumstances. We have used simplified descriptions of ISIC value chain stages here. *All TAL&F* = All Textile, Apparel, Leather & Footwear. This used when the entire industry (ISIC Codes 13, 14 and 15) are reported as a single number.

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
Albania	2024	*	All TAL&F			**150,000**
Bangladesh	2019	13	All Textile		Admin	18,000
					Family helper	20,000
					Mgmt	27,000
					Owner	14,000
					Production & related	552,000
					Temporary	39,000
	2024	14	All Apparel		Export-oriented	2,869,000
	2019	15	All L&F		Admin	2,000
					Mgmt	6,000
					Owner	2,000
					Production & related	99,000
					Temp Workers	6,000
	2019	*	All TAL&F		EPZ	388,000
	2017				Home-Based	255,000
					Total	**4,297,000**
Bosnia & Herzegovina	2022	139	Other Textiles			5,000
		151	Leather Products			2,000
		1410	Clothing			12,000
		1430	Knit Clothing			2,000
		1520	Footwear			15,000
					Total	**36,000**
Brazil	2020	13	All Textile	Micro		116,000

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
		14	All Apparel	Micro		9,000
		15	All L&F	Micro		34,000
	2021	1311	Spinning			32,000
		1312	Weaving			77,000
		1313	Finishing			26,000
		1410	Clothing			489,000
		1430	Knit Clothing			12,000
		1512	Bags			16,000
		1520	Footwear			248,000
					Total	**1,059,000**
Cambodia	2022	14	All Apparel			507,000
		15	All L&F			151,000
		1392	Textile Products			113,000
	2019	*	All TAL&F		Home-Based	73,000
					Total	**844,000**
China	2022	13	All Textile	Large		2,639,000
		14	All Apparel	Large		2,315,000
		15	All L&F	Large		1,511,000
	2018	*	All TAL&F	SME		15,535,000
					Total	**22,000,000**
Dominican Republic	2021	*	All TAL&F			**48,000**
Egypt	2018	13	All Textile		Permanent	220,000
					Temporary	5,000
		14	All Apparel		Permanent	362,000
					Temporary	14,000
		15	All L&F		Permanent	42,000
					Temporary	1,000
					Total	**644,000**
El Salvador	2022	13	All Textile			11,000
		14	All Apparel			72,000
					Total	**83,000**
Ethiopia	2022	*	All TAL&F			**60,000**
EU	2022	139	Other Textiles			360,000
		151	Leather Products			166,000
		1311	Spinning			45,000
		1312	Weaving			71,000
		1313	Finishing			66,000
		1410	Clothing			655,000
		1420	Fur			5,000
		1430	Knit Clothing			81,000

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
		1520	Footwear			227,000
					Total	**1,676,000**
Guatemala	2019	13	All Textile			51,000
		14	All Apparel			112,000
					Total	**163,000**
Haiti	2023	*	All TAL&F			**43,000**
Honduras	2022	*	All TAL&F			**146,000**
India	2024	15	All L&F			4,420,000
	2023	*	All TAL&F		Home-Based	6,944,000
					In-Factory	11,475,000
					Total	**22,839,000**
Indonesia	2023	13	All Textile	Large & Medium		328,000
	2022			Micro		409,000
	2022			Small		40,000
	2023	14	All Apparel	Large & Medium		832,000
	2022			Micro		849,000
	2022			Small		184,000
	2023	15	All L&F	Large & Medium		585,000
	2022			Micro		111,000
	2022			Small		49,000
					Total	**3,387,000**
Jordan	2022	*	All TAL&F		Foreign Migrant Workers	59,000
					Jordanian Workers	20,000
					Total	
Kenya	2021	139	Other Textiles			4,000
		1311	Spinning			6,000
		1391	Knit Fabric			5,000
		1392	Textile Products			27,000
		1394	Rope			3,000
		1410	Clothing			33,000
		1511	Leather Mfg			1,000
		1520	Footwear			4,000
					Total	**83,000**
Lesotho	2023	14	All Apparel			29,000
		15	All L&F			1,000
					Total	**30,000**

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
Madagascar	2020	1311	Spinning			110,000
		1410	Clothing			120,000
					Total	**230,000**
Malaysia	2020	14	All Apparel			47,000
		131	Textile Mfg			29,000
					Total	**76,000**
Mauritius	2022	13	All Textile			3,000
		14	All Apparel			20,000
		15	All L&F			1,000
					Total	**24,000**
Mexico	2022	1311	Finishing		Admin	2,000
					Line Workers	27,000
		1312	Weaving		Admin	5,000
					Line Workers	49,000
					Outsourced Workers	1,000
		1313	Finishing		Admin	2,000
					Line Workers	13,000
		1392	Textile Products		Admin	4,000
					Line Workers	62,000
		1393	Carpets		Admin	4,000
					Line Workers	22,000
		1410	Clothing		Admin	31,000
					Line Workers	266,000
					Outsourced Workers	2,000
		1430	Knit Clothing		Admin	3,000
					Line Workers	25,000
		1511	Leather Mfg		Admin	2,000
					Line Workers	23,000
					Outsourced Workers	1,000
		1512	Bags		Admin	1,000
					Line Workers	16,000
		1520	Footwear		Admin	12,000
					Line Workers	88,000
					Outsourced Workers	1,000
					Total	**662,000**
Morocco	2019	*	All TAL&F			**206,000**
Myanmar	2024	13	All Textile			150,000

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
		14	All Apparel			700,000
		15	All L&F			50,000
					Total	**900,000**
Nicaragua	2022	*	All TAL&F		FTZ Only	**70,000**
Pakistan	2015	131	Textile Mfg	Micro		40,000
		139	Other Textiles	10+		77,000
				Micro		1,055,000
		1311	Spinning	10+		324,000
				Micro		12,000
		1312	Weaving	10+		271,000
				Micro		17,000
		1313	Finishing	10+		51,000
				Micro		12,000
		1391	Knit Fabric	Micro		2,000
		1392	Textile Products	10+		26,000
				Micro		70,000
		1393	Carpets	10+		3,000
				Micro		143,000
		1394	Rope	10+		2,000
				Micro		81,000
		1399	Other Textiles	Micro		760,000
		1410	Clothing	10+		241,000
				Micro		172,000
		1430	Knit Clothing	10+		30,000
				Micro		24,000
		1511	Leather Mfg	10+		13,000
				Micro		1,000
		1512	Bags	10+		7,000
				Micro		4,000
		1520	Footwear	10+		34,000
				Micro		56,000
	2019	*	All TAL&F		Home-Based	1,612,000
					Total	**5,140,000**
Philippines	2021	131	Textile Mfg			4,000
		139	Other Extiles			4,000
			Other Textiles			12,000
		1410	Apparel Mfg			7,000
			Clothing			73,000
		1430	Footwear			9,000

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
		1511	Leather Mfg			18,000
					Total	**127,000**
Serbia	2022	139	Other Textiles			10,000
		151	Leather Products			2,000
		1410	Clothing			29,000
		1430	Knit Clothing			5,000
		1520	Footwear			11,000
					Total	**57,000**
South Africa	2023	131	Spinning			7,000
		139	Other Textiles			22,000
		151	Leather Products			5,000
		1410	Clothing			31,000
		1430	Knits			5,000
		1520	Footwear			5,000
					Total	**75,000**
South Korea	2022	139	Other Textiles			29,000
		1311	Spinning			15,000
		1312	Weaving			62,000
		1313	Finishing			38,000
		1391	Knit Fabric			6,000
		1410	Clothing			104,000
		1420	Fur			1,000
		1430	Knit Clothing			7,000
		1512	Bags			16,000
		1520	Footwear			15,000
					Total	**293,000**
Sri Lanka	2019	13	All Textile	6 to 25		13,000
				25+		41,000
		14	All Apparel	5 to 25		12,000
				25+		685,000
		15	All L&F	7 to 25		6,000
				25+		9,000
					Total	**766,000**
Taiwan	2022	13	All Textile			109,000
		14	All Apparel			32,000
					Total	**141,000**
Thailand	2023	*	All TAL&F			**403,000**
Tunisia	2023	139	Other Textiles		Totally Export Oriented	31,000
		1311	Spinning		Domestic/Mixed	1,000
					Totally Export Oriented	1,000

Country	Data Year	ISIC Code	Value Chain Stage	Factory Size	Other Data	Number of Workers
		1312	Weaving		Domestic/Mixed	1,000
					Totally Export Oriented	2,000
		1313	Finishing		Domestic/Mixed	1,000
					Totally Export Oriented	8,000
		1410	Clothing		Domestic/Mixed	9,000
					Totally Export Oriented	113,000
		1430	Knit Clothing		Domestic/Mixed	1,000
					Totally Export Oriented	14,000
					Total	**182,000**
Turkiye	2022	13	All Textile	Large		296,000
				Medium		124,000
				Micro		49,000
				Small		67,000
		14	All Apparel	Large		225,000
				Medium		257,000
				Micro		130,000
				Small		160,000
		15	All L&F	Large		14,000
				Medium		22,000
				Micro		21,000
				Small		27,000
					Total	**1,392,000**
USA	2023	139	Other Textiles			56,000
		1311	Spinning			9,000
		1312	Weaving			78,000
		1313	Finishing			10,000
		1393	Carpets			43,000
		1410	Clothing			169,000
		1430	Knit Clothing			7,000
		1512	Bags			16,000
		1520	Footwear			30,000
					Total	**418,000**
Vietnam	2021	13	All Textile			314,000
		14	All Apparel			1,492,000
		15	All L&F			1,347,000
					Total	**3,153,000**
Grand Total						**71,982,000**

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ADDITIONAL DATA AND FUTURE UPDATES

Suggestions for additional data for future updates to our estimate are very welcome, particularly from trade unions and other civil society actors, and from nation statistical agencies. Please contact us at buildingblocks@katalystinitiative.org

ABOUT KATALYST INITIATIVE

Katalyst Initiative was founded by veterans of the business & human rights civil society network. The aim is to help civil society – trade unions, NGOs, academics and activists – and government policymakers to develop new forms of human rights governance in supply chains, using the garment industry as a model.

Katalyst sees close links between the root causes of human rights violations and environmental and climate risks, and aims to support closer ties between the human rights and environmental communities. Please feel free to contact us at: **buildingblocks@katalystinitiative.org**

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